



2014 Freshman Cohort Retention Report

Executive Summary

This report summarizes the one-year retention of 2,030 students in the University of South Alabama (USA) 2014 first-time full-time baccalaureate degree-seeking freshman cohort. The one-year retention rate for the 2014 freshman cohort was 73%.

Results indicated retention of students who are male, older, from the Florida service area or Mississippi service 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. The importance of freshman scholarships was also clear; therefore, additional USA freshman scholarships should be considered in order to continue to attract top students to attend the institution.

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. In addition, 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.

Results also showed students who received a JagAlert during the Fall 2014 semester in multiple courses for lack of attendance and/or poor academic performance and students who were placed on probation after the Fall 2014 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 a JagAlert 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 2,030 first-time full-time baccalaureate degree-seeking freshmen students in the University of South Alabama (USA) 2014 freshman cohort. Retention in the context of this report is defined as whether freshmen students returned and enrolled one year later in the Fall 2015 semester. Similar to reports written by Institutional Research about the 2007 through 2013 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.

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.

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 two outcome variables known after the end of the Fall 2014 semester⁴. The fourth model and fifth model tested a different outcome variable known after the end of the Summer 2015 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 2,030 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 both sets of outcome variables (after Fall 2014 and after Summer 2015) are reported.

Input Variable Cross Tabular Results

For the input variables included in this analysis (see Table 1), female students (76%) returned at a higher rate than male students (69%). The mean difference between retention of female students compared to male students was statistically significant (see Appendix: Independent T-Test Tables). In terms of race/ethnicity, White (72%), African-American (72%), and Hispanic (71%) students 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 and African-American race/ethnicity subgroups was statistically significant (see Appendix: ANOVA Tables).

² Input variables: Gender, race/ethnicity, age, region, high school GPA, and ACT Composite score.

³ Environmental variables: College, USA freshman scholarship, other scholarship, Pell Grant, housing, learning community, Freshman Seminar, USA Day attendance, and orientation session attended.

⁴ Outcome variables after Fall 2014: Number of courses received a JagAlert and probation status.

⁵ Outcome variables after Summer 2015: USA hours earned (model 4) and USA GPA (model 5).

Table 1: Comparison of Input Variables to 2014 Cohort Retention Rate

Variable	Retention Rate >= 73%	Count	Retention Rate < 73%	Count
*Gender				
	*Female (76%)	1,136	Male (69%)	894
*Race/Ethnicity				
	*Asian (86%)	65	White (72%)	1,174
	Non-Resident Alien (81%)	80	African-American (72%)	541
	Multiracial (78%)	65	Hispanic (71%)	58
	Other (77%)	47		
*Age				
	17 years old or younger (78%)	144	20 years old or older (68%)	93
	18 years old (74%)	1,632	*19 years old (61%)	161
Region				
	International (81%)	80	Rest of United States (69%)	158
	Mobile or Baldwin County (74%)	828	Mississippi Service Area (68%)	136
	Rest of Alabama (74%)	698	Florida Service Area (65%)	130
*High School GPA				
	*3.51-4.0 (83%)	937	3.01-3.5 (68%)	534
			2.51-3.0 (58%)	377
			2.5 or lower (48%)	73
*ACT Composite Score				
	28-29 (85%)	130	22-23 (70%)	307
	*30 or higher (84%)	143	20-21 (69%)	351
	26-27 (80%)	191	19 or lower (68%)	415
	24-25 (75%)	300		
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 68%) returned at a lower rate than younger students. The mean difference between retention of 19-year-old students compared to younger students was statistically significant (see Appendix: ANOVA Tables). Comparisons based on what region the student came from showed that international students (81%), students from the Mobile County or Baldwin County area (74%), and students from outside the local area from elsewhere in Alabama (74%) returned at a higher rate than the overall cohort (73%).

Finally, 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 returned at a lower rate than the overall cohort (73%). Similarly, students who had an ACT Composite score of 22-23 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 all other high school GPA groups was statistically significant (see Appendix: ANOVA Tables). The mean difference between retention of students with an ACT Composite score of 30 or higher in comparison to students with an ACT Composite score of 22-23 or lower was also statistically significant (see Appendix: ANOVA Tables).

Environmental Variable Cross Tabular Results

For the environmental variables included in this analysis, retention comparisons based on the college housing the major the student initially selected (see Table 2) showed Allied Health (75%), Nursing (75%), and Business (75%) students returned at a higher rate than the overall cohort (73%). However, no college based comparison was statistically significant (see Appendix: ANOVA Tables).

Table 2: Comparison of Environmental Variables to 2014 Cohort Retention Rate

Variable	Retention Rate >= 73%	Count	Retention Rate < 73%	Count
<i>College⁶</i>				
	Allied Health (75%)	453	Engineering (72%)	298
	Nursing (75%)	282	Arts & Sciences (71%)	642
	Business (75%)	156	Computing (66%)	82
	Education (73%)	115		
<i>*USA Freshman Scholarship</i>				
	*Yes (78%)	1,072	No (68%)	958
<i>Other Scholarship</i>				
	Yes (76%)	298	No (72%)	1,732
<i>*Pell Grant</i>				
	No (75%)	1,156	*Yes (71%)	874
<i>Housing</i>				
	On campus (74%)	1,229	Off campus (72%)	801
<i>*Learning Community</i>				
	*Yes (76%)	1,162	No (69%)	868
<i>Freshman Seminar</i>				
	Yes (73%)	1,306		
	No (73%)	724		
<i>*USA Day Attendance</i>				
	Attended 1 USA Day (78%)	619	*Did Not Attend (71%)	1,395
			Attended 2 USA Days (63%)	16
<i>*Orientation Session</i>				
	Freshman Session 2 (83%)	146	Freshman Session 6 (72%)	148
	Freshman Session 3 (81%)	161	Freshman Session 5 (71%)	138
	International Orientation (80%)	81	Freshman Session 12 (66%)	161
	May Orientation (80%)	40	Freshman Session 9 (64%)	142
	Freshman Session 1 (79%)	165	August/Other Orientation (61%)	125
	Freshman Session 4 (79%)	154	*Freshman Session 11 (59%)	157
	Freshman Session 7 (76%)	160		
	Freshman Session 8 (76%)	149		
	Freshman Session 10 (73%)	103		
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 rate comparisons illustrated that receiving scholarships positively affected retention. Students receiving a USA freshman scholarship (78%) or some other type of scholarship⁷ (76%) returned at a higher rate than the cohort retention rate (73%). Additionally, 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).

On the other hand, students receiving a Pell Grant (71%) 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).

Students who lived on campus (74%) or participated in a learning community (76%) returned at a higher rate than the overall cohort (73%). In addition, the mean difference between retention of students who

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

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

participated in a learning community and students who did not participate in a learning community was statistically significant (see Appendix: Independent T-Test Tables). However, a comparison of students who took a freshman seminar (73%) to students who did not take a freshman seminar (73%) showed no difference in retention.

Results related to attending a USA Day were mixed. Students who attended just one USA Day (78%) returned at a higher rate than the overall cohort (73%). However, the 16 students who attended USA Day twice (63%) returned at a lower rate than students who did not attend a USA Day (71%). When using students who did not attend a USA Day as a comparison group, there was a significant mean difference between students who did not attend a USA Day and students who attended just one USA Day (see Appendix: ANOVA Tables).

Finally, in terms of the orientation session attended, the retention rate of students who attended the May Orientation session, International Orientation session, or one of the first four freshman summer orientation sessions was at least 79%. Retention rates based on the orientation session attended ranged from a high of 83% for students who attended the Freshman Session 2 orientation session to a low of 59% for students who attended the Freshman Session 11 orientation session. When using the Freshman Session 11 orientation session as a comparison group, there was a significant mean difference between the Freshman Session 11 group in comparison to the first four freshman summer orientation sessions and the International Orientation session (see Appendix: ANOVA Tables).

Outcome Variable After Fall 2014 Cross Tabular Results

Outcome variables incorporated into this analysis included whether the student received a JagAlert during Fall 2014 and whether the student was placed on probation after Fall 2014 (see Table 3). Students who did not receive a JagAlert or who only received a JagAlert in one course during Fall 2014 returned at a higher rate (at least 74%) than the overall cohort (73%). The mean difference for students who did not receive a JagAlert during Fall 2014 compared to students who received a JagAlert during Fall 2014 in one or multiple courses was statistically significant (see Appendix: ANOVA Tables).

Table 3: Comparison of Outcome Variables After Fall 2014 to 2014 Cohort Retention Rate

Variable	Retention Rate \geq 73%	Count	Retention Rate $<$ 73%	Count
<i>*Number of Courses with JagAlert during Fall 2014</i>				
	*No JagAlert (80%)	962	Multiple Course JagAlert (58%)	484
	1 Course JagAlert (74%)	584		
<i>*Probation Status after Fall 2014</i>				
	*No (76%)	1,788	Yes (51%)	242
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 2014 returned at a much higher rate (76%) compared to students who were placed on probation after the Fall 2014 semester ended (51%). The mean difference between students who were not on probation compared to students who were placed on probation was statistically significant (see Appendix: Independent T-Test Tables).

Outcome Variable After Summer 2015 Cross Tabular Results

Outcome variables incorporated into this analysis also included the number of hours earned after Summer 2015 at USA and the USA GPA after Summer 2015 (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 2015 to 2014 Cohort Retention Rate

Variable	Retention Rate \geq 73%	Count	Retention Rate < 73%	Count
<i>*USA Hours Earned after Summer 2015</i>				
	*30.5 or more (94%)	707	18.5-24 (72%)	298
	24.5-30 (89%)	540	12.5-18 (42%)	164
			6.5-12 (27%)	142
			0-6 (7%)	163
<i>*USA GPA after Summer 2015</i>				
	3.51-4.0 (93%)	444	*2.0 or lower (35%)	482
	3.01-3.5 (87%)	429		
	2.51-3.0 (83%)	396		
	2.01-2.5 (76%)	263		
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 2015 returned at a higher rate (at least 72%) 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 2015 returned at a much higher rate (at least 76%) compared to students with a USA GPA of 2.0 or lower (35%). 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 two outcome variables known after the Fall 2014 semester: 1) whether the student received a JagAlert during Fall 2014 and 2) whether the student was placed on probation after Fall 2014 to see what happened when these outcomes were used as predictors of retention. The fourth and fifth models tested a different outcome variable known after the Summer 2015 semester. The fourth model tested the number of USA hours earned after Summer 2015 and the fifth model tested the USA GPA after Summer 2015 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, typically high school GPA and/or 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 1,820 students for the first and second models to a high of 2,030 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 1,808. The retention rate for this subset

of 1,808 students was 74%. With a similar retention rate (74% compared to 73%) and 1,808 students representing 89% 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 three steps (see Table 5). The final step (step 3) of the first model showed the model correctly classified students in this cohort who *returned* 97.7% of the time and students who did not return 7.6% of the time for an overall classification rate of 73.6%.

Table 5: Input Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	32	454	6.6
		Yes	26	1308	98.1
	Overall Percentage				73.6
Step 2	Returned	No	32	454	6.6
		Yes	26	1308	98.1
	Overall Percentage				73.6
Step 3	Returned	No	37	449	7.6
		Yes	31	1303	97.7
	Overall Percentage				73.6

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=2.5 or lower, 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, gender, and region were significant in the final step (step 3) 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 three higher high school GPA comparison groups (2.51-3.0=1.815, 3.01-3.5=2.548, and 3.51-4.0=6.067) than for a student with a high school GPA of 2.5 or lower. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the three higher high school GPA comparison groups than for a student with a high school GPA of 2.5 or lower since the confidence intervals for the three 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 1 ^a HS GPA 2.5 or lower			101.072	3	.000			
HS GPA 2.51-3.0	.613	.286	4.586	1	.032	1.846	1.053	3.236
HS GPA 3.01-3.5	.957	.280	11.641	1	.001	2.603	1.503	4.510
HS GPA 3.51-4.0	1.804	.279	41.950	1	.000	6.073	3.519	10.484
Constant	-.208	.264	.618	1	.432	.812		
Step 2 ^b Female	.281	.111	6.413	1	.011	1.324	1.065	1.645
HS GPA 2.5 or lower			91.705	3	.000			
HS GPA 2.51-3.0	.579	.287	4.063	1	.044	1.784	1.016	3.133
HS GPA 3.01-3.5	.901	.282	10.212	1	.001	2.461	1.417	4.275
HS GPA 3.51-4.0	1.725	.281	37.808	1	.000	5.613	3.239	9.728
Constant	-.305	.267	1.302	1	.254	.737		
Step 3 ^c Female	.269	.112	5.790	1	.016	1.309	1.051	1.630
Florida Service Area			12.848	5	.025			
Mobile/Baldwin County	.433	.221	3.835	1	.050	1.543	1.000	2.381
Rest of Alabama	.561	.224	6.253	1	.012	1.753	1.129	2.721
Mississippi Service Area	-.059	.281	.044	1	.834	.943	.543	1.635
Rest of United States	.275	.291	.895	1	.344	1.317	.744	2.331
International	.147	1.342	.012	1	.913	1.158	.083	16.061
HS GPA 2.5 or lower			96.794	3	.000			
HS GPA 2.51-3.0	.596	.289	4.249	1	.039	1.815	1.030	3.198
HS GPA 3.01-3.5	.935	.284	10.856	1	.001	2.548	1.461	4.445
HS GPA 3.51-4.0	1.803	.284	40.423	1	.000	6.067	3.480	10.576
Constant	-.747	.337	4.908	1	.027	.474		

a. Variable(s) entered on step 1: HS GPA.

b. Variable(s) entered on step 2: Gender.

c. Variable(s) entered on step 3: Region.

In addition, the final step (step 3) of the first model showed the odds (Exp *B*) of a student *returning* was greater for a female (1.309) than for a male. The confidence interval (95%) also indicated the odds of a student *returning* was greater for a female than for a male since the confidence interval did not encompass an odds value less than one.

Also, except for the Mississippi service area, the final step (step 3) of the first model showed the odds (Exp *B*) of a student *returning* was greater for a student from all other regions (Mobile/Baldwin County=1.543, rest of Alabama=1.753, rest of United States=1.317, and international=1.158) than for a student from the Florida service area. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student from both the local area of Mobile County or Baldwin County and from the rest of Alabama than for a student from the Florida service area 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 (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, 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=no, which college housed the major the student selected at initial enrollment=Arts & Sciences, and orientation session attended=either the August Orientation session, a transfer orientation session, or an unknown orientation session).

The second model consisted of three steps (see Table 7). In comparison to the first model, the correct classification rate for the second model decreased to 96.0% for *returning* students while the classification rate for the second model increased to 13.2% for students who did not return. The overall correct classification rate for the second model was 73.9%.

Table 7: Input and Environmental Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	64	422	13.2
		Yes	53	1281	96.0
Overall Percentage					73.9

a. The cut value is .500

Once again, high school GPA, gender, and region were significant in the final step (step 1) of the second model (see Table 8). In addition, the orientation session attended by the student was significant in the final step (step 1) 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 1 ^a Female	.299	.114	6.862	1	.009	1.349	1.078	1.687
Florida Service Area			14.445	5	.013			
Mobile/Baldwin County	.459	.226	4.141	1	.042	1.583	1.017	2.463
Rest of Alabama	.623	.229	7.384	1	.007	1.864	1.190	2.921
Mississippi Service Area	-.049	.286	.030	1	.863	.952	.544	1.666
Rest of United States	.321	.297	1.167	1	.280	1.378	.770	2.466
International	22.033	40193	.000	1	1.000	3703998653	.000	.
HS GPA 2.5 or lower			78.215	3	.000			
HS GPA 2.51-3.0	.657	.296	4.924	1	.026	1.930	1.080	3.449
HS GPA 3.01-3.5	.970	.291	11.091	1	.001	2.639	1.491	4.671
HS GPA 3.51-4.0	1.765	.292	36.462	1	.000	5.843	3.295	10.363
August/Other Orientation			38.385	14	.000			
May Orientation	1.399	.597	5.501	1	.019	4.052	1.258	13.046
Freshman Session 1	.506	.318	2.528	1	.112	1.658	.889	3.093
Freshman Session 2	.950	.334	8.093	1	.004	2.586	1.344	4.976
Freshman Session 3	.873	.326	7.159	1	.007	2.395	1.263	4.541
Freshman Session 4	.687	.321	4.560	1	.033	1.987	1.058	3.731
Freshman Session 5	.237	.315	.567	1	.451	1.268	.684	2.349
Freshman Session 6	.340	.310	1.200	1	.273	1.404	.765	2.579
Freshman Session 7	.529	.313	2.866	1	.090	1.697	.920	3.132
Freshman Session 8	.485	.314	2.389	1	.122	1.625	.878	3.007
Freshman Session 9	-.094	.305	.095	1	.758	.910	.500	1.656
Freshman Session 10	.591	.337	3.072	1	.080	1.806	.932	3.498
Freshman Session 11	-.152	.297	.261	1	.610	.859	.480	1.539
Freshman Session 12	.208	.301	.476	1	.490	1.231	.682	2.222
International Orientation	-21.427	40193	.000	1	1.000	.000	.000	.
Constant	-1.205	.419	8.263	1	.004	.300		

a. Variable(s) entered on step 1: Orientation session attended.

The final step (step 1) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student in the three higher high school GPA comparison groups (2.51-3.0=1.930, 3.01-3.5=2.639, and 3.51-4.0=5.843) than for a student with a high school GPA of 2.5 or lower. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the three higher high school GPA comparison groups than for a student with a high school GPA of 2.5 or lower since the confidence intervals for the three higher high school GPA comparison groups did not encompass an odds value less than one.

Once again the final step (step 1) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a female (1.349) than for a male. The confidence interval (95%) also indicated the odds of a student *returning* was greater for a female than for a male since the confidence interval did not encompass an odds value less than one.

The final step (step 1) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student from the local area of Mobile County or Baldwin County (1.583), from the rest of Alabama (1.864), and from the rest of the United States (1.378) than for a student from the Florida service area. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student from both the local area of Mobile County or Baldwin County and from the rest of Alabama than for a student from the Florida service area since the confidence intervals did not encompass an odds value less than one.

In addition, the final step (step 1) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student who attended nearly any of the other orientation sessions (May Orientation=4.052, Freshman Session 1=1.658, Freshman Session 2=2.586, Freshman Session 3=2.395, Freshman Session 4=1.987, Freshman Session 5=1.268, Freshman Session 6=1.404, Freshman Session 7=1.697, Freshman Session 8=1.625, Freshman Session 10=1.806, Freshman Session 12=1.231) than for a student who attended either the August Orientation session, a transfer orientation session, or an unknown orientation session. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student who attended the orientation sessions held earlier in the summer (May Orientation, Freshman Session 2, Freshman Session 3, and Freshman Session 4) than for a student who attended either the August Orientation session, a transfer orientation session, or an unknown orientation session since the confidence intervals did not encompass an odds value less than one.

Model 3, Model 4, and Model 5: Logistic Regression Outcome 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 of interest at two different points in time after the Fall 2014 semester had already begun. The third model included outcomes known after the Fall 2014 semester ended (number of courses the student received a JagAlert during Fall 2014 and probation status after Fall 2014). The fourth model (number of hours earned after Summer 2015) and fifth model (USA GPA the student attained after Summer 2015) included a different outcome variable known after the Summer 2015 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 2014 semester (third model) or Summer 2015 semester (fourth and fifth models) ended.

Model 3: Logistic Regression with Outcome Variables After Fall 2014

The third model included outcome variables known after Fall 2014. For each outcome variable included in the third model a comparison group was selected (JagAlert during Fall 2014=received a JagAlert in multiple courses and whether the student was placed on probation=yes).

The third model (see Table 9) consisted of two steps. In comparison to the first and second model, the correct classification rate for the third model decreased to 95.5% for *returning* students. In comparison to the second model, the classification rate for the third model slightly decreased to 11.1% for students who did not return even though this snapshot included data known after the end of the Fall 2014 semester instead of pre-Fall 2014 semester data. The overall correct classification rate for the third model was 72.7%.

Table 9: End of Fall 2014 Outcome Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	0	549	.0
		Yes	0	1481	100.0
	Overall Percentage				73.0
Step 2	Returned	No	61	488	11.1
		Yes	67	1414	95.5
	Overall Percentage				72.7

a. The cut value is .500

In the final step (step 2) of the third model, the JagAlert and probation status variables were significant (see Table 10). The final step of the third model showed the odds (Exp *B*) of a student *returning* was greater for a student who did not receive a JagAlert (2.427) and for a student who received a JagAlert in only one course (1.853) than for a student who received a JagAlert in multiple courses during Fall 2014. The confidence intervals (95%) also supported this finding because the odds for a student *returning* who did not receive a JagAlert or who received a JagAlert in only one course did not encompass an odds value less than one.

Table 10: End of Fall 2014 Outcome 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	Multiple Course JagAlert During Fall 2014			77.171	2	.000			
	No JagAlert During Fall 2014	1.066	.122	75.946	1	.000	2.903	2.284	3.689
	1 Course JagAlert During Fall 2014	.728	.132	30.506	1	.000	2.071	1.599	2.681
	Constant	.317	.092	11.835	1	.001	1.373		
Step 2 ^b	Multiple Course JagAlert During Fall 2014			49.359	2	.000			
	No JagAlert During Fall 2014	.887	.127	48.434	1	.000	2.427	1.891	3.115
	1 Course JagAlert During Fall 2014	.617	.135	21.004	1	.000	1.853	1.424	2.413
	Not On Probation After Fall 2014	.830	.147	32.033	1	.000	2.292	1.720	3.055
Constant		-.287	.142	4.109	1	.043	.750		

a. Variable(s) entered on step 1: Received JagAlert During Fall 2014.

b. Variable(s) entered on step 2: Probation Status After Fall 2014.

The final step (step 2) of the third model also showed the odds (Exp *B*) of a student *returning* was greater for a student who was not on probation (2.292) than for a student who was placed on probation after Fall 2014. The confidence interval (95%) also supported this finding because the odds for a student *returning* who was not on probation did not encompass an odds value less than one.

Model 4: Logistic Regression with USA Hours Earned After Summer 2015 Outcome Variable

The fourth model included the USA hours earned after the end of the Summer 2015 semester. The comparison group selected for the fourth model was zero to six hours earned after the end of the Summer 2015 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 (91.9%) 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 (65.4%) since this snapshot included data known after the end of the Summer 2015 semester instead of pre-Fall 2014 semester data. The overall correct classification rate for the fourth model was 84.9%.

Table 11: USA Hours Earned Outcome Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	349	185	65.4
		Yes	120	1360	91.9
Overall Percentage					84.9

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=4.765, 12.5-18=9.139, 18.5-24=32.595, 24.5-30=102.586, 30.5 or more=194.310) than for a student with six or fewer hours earned at the end of Summer 2015 (see Table 12). Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the five higher USA hours earned comparison groups than for a student with zero to six USA hours earned since the confidence intervals for the five higher USA hours earned comparison groups did not encompass an odds value less than one.

Table 12: USA Hours Earned After Summer 2015 Outcome 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			501.401	5	.000			
USA Hours Earned 6.5-12	1.561	.354	19.451	1	.000	4.765	2.381	9.535
USA Hours Earned 12.5-18	2.213	.339	42.580	1	.000	9.139	4.702	17.764
USA Hours Earned 18.5-24	3.484	.327	113.820	1	.000	32.595	17.186	61.822
USA Hours Earned 24.5-30	4.631	.330	196.757	1	.000	102.586	53.714	195.927
USA Hours Earned 30.5 or more	5.269	.339	242.048	1	.000	194.310	100.045	377.396
Constant	-2.532	.300	71.290	1	.000	.079		

a. Variable(s) entered on step 1: USA Hours Earned After Summer 2015.

Model 5: Logistic Regression with USA GPA After Summer 2015 Outcome Variable

The fifth model included the USA GPA after the end of the Summer 2015 semester. The comparison group selected for the fifth model was an USA GPA of 2.0 or lower after the end of the Summer 2015 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 (88.6%) was lower than the other four models. The correct classification rate for the fifth model for students who did not return (58.8%) was higher than the first, second, and third models, but lower than the fourth model. The overall correct classification rate for the fifth model was 80.7%.

Table 13: USA GPA Outcome Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	314	220	58.8
		Yes	168	1312	88.6
Overall Percentage					80.7

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=5.933, 2.51-3.0=9.015, 3.01-3.5=12.449, 3.51-4.0=23.278) than for a student with an USA GPA of 2.0 or lower at the end of Summer 2015 (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 2015 Outcome 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			410.837	4	.000			
USA GPA 2.01-2.5	1.781	.173	105.650	1	.000	5.933	4.225	8.332
USA GPA 2.51-3.0	2.199	.164	179.807	1	.000	9.015	6.537	12.433
USA GPA 3.01-3.5	2.522	.172	214.278	1	.000	12.449	8.882	17.449
USA GPA 3.51-4.0	3.148	.205	236.592	1	.000	23.278	15.587	34.764
Constant	-.625	.096	42.810	1	.000	.535		

a. Variable(s) entered on step 1: USA GPA After Summer 2015.

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 68% for the 2012 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 freshman cohort.

Table 15: Five-Year Retention Rate Peer Comparisons * Ranked by 2012 Cohort Retention Rate * High to Low

Institution Name	2012 Cohort Retention	2011 Cohort Retention	2010 Cohort Retention	2009 Cohort Retention	2008 Cohort Retention
Florida International University	84	82	82	83	81
University of North Florida	82	83	81	83	83
Old Dominion University	80	80	80	80	80
Florida Atlantic University	77	78	79	80	79
Texas State University	77	76	79	79	79
University of Massachusetts-Boston	77	79	75	75	77
University of Memphis	76	76	77	78	76
University of Nebraska at Omaha	75	72	73	73	72
University of North Texas	75	76	78	78	76
University of Montana	73	74	72	74	73
Indiana University-Purdue University-Indianapolis	72	72	72	74	72
University of Texas at Arlington	71	72	71	70	65
University of South Alabama	68	66	65	66	67
University of New Orleans	67	65	67	64	69

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, male students, older students, and students from the Florida service area or Mississippi service 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 2014 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.

Previous Institutional Research studies have looked at the contribution of USA freshman scholarships to meeting recruitment and retention goals. As with earlier studies, the importance of awarding USA freshman scholarships for students was clear. Additional USA freshman scholarships should be considered in order to attract top students to the institution since the data suggests students with USA freshman scholarships are more likely to return to continue their studies at USA the following year.

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.

Finally, results showed students who received a JagAlert during the Fall 2014 semester in multiple courses for lack of attendance and/or poor academic performance were unlikely to return to USA one year later. A JagAlert is recorded in the middle of the semester which allows time to intervene before the semester concludes. As a result, interventions to assist students who receive a JagAlert are also important, because students who were placed on probation after the Fall 2014 semester ended (51%) or who had a USA GPA of 2.0 or lower due to poor academic performance after the Summer 2015 semester was completed (35%) were less likely to return to USA one year later than students who received a JagAlert in multiple courses during the Fall 2014 semester (58%).

Future Retention Research

This report is the first of two one-year retention studies about the 2014 freshman cohort that will be completed by the Office of Institutional Research during the Fall 2015 semester. The second retention study will use National Student Clearinghouse data to explore the issue of “Where did non-returning freshmen in the 2014 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

Gender * Group Statistics

Gender T-Test		N	Mean	Std. Deviation	Std. Error Mean
Returned	Male	894	.69	.464	.016
	Female	1136	.76	.426	.013

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	54.372	.000	-3.758	2028	.000	-.074	.020	-.113	-.036
	Equal variances not assumed			-3.720	1835.812	.000	-.074	.020	-.114	-.035

USA Freshman Scholarship * Group Statistics

Freshman Scholarship		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	958	.68	.467	.015
	Yes	1072	.78	.418	.013

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	94.889	.000	-4.923	2028	.000	-.097	.020	-.135	-.058
	Equal variances not assumed			-4.892	1931.502	.000	-.097	.020	-.135	-.058

Other Scholarship * Group Statistics

Other Scholarship		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1732	.72	.447	.011
	Yes	298	.76	.429	.025

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	6.516	.011	-1.213	2028	.225	-.034	.028	-.088	.021
	Equal variances not assumed			-1.249	415.874	.212	-.034	.027	-.087	.019

Pell Grant * Group Statistics

Pell Grant		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1156	.75	.435	.013
	Yes	874	.71	.456	.015

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	16.933	.000	2.083	2028	.037	.041	.020	.002	.080
	Equal variances not assumed			2.070	1831.575	.039	.041	.020	.002	.081

Housing * Group Statistics

Housing		N	Mean	Std. Deviation	Std. Error Mean
Returned	Off Campus	801	.72	.451	.016
	On Campus	1229	.74	.440	.013

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	4.410	.036	-1.060	2028	.289	-.021	.020	-.061	.018
	Equal variances not assumed			-1.055	1679.310	.292	-.021	.020	-.061	.018

Learning Community * Group Statistics

Learning Community		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	868	.69	.463	.016
	Yes	1162	.76	.428	.013

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	46.075	.000	-3.468	2028	.001	-.069	.020	-.108	-.030
	Equal variances not assumed			-3.429	1784.505	.001	-.069	.020	-.108	-.030

Freshman Seminar * Group Statistics

Took Freshman Seminar		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	724	.73	.444	.016
	Yes	1306	.73	.445	.012

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	.028	.867	.084	2028	.933	.002	.021	-.039	.042
	Equal variances not assumed			.084	1494.799	.933	.002	.021	-.039	.042

Probation After Fall 2014 * Group Statistics

Probation After Fall 2014		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1788	.76	.428	.010
	Yes	242	.51	.501	.032

Probation After Fall 2014 * 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	88.169	.000	8.234	2028	.000	.247	.030	.188	.305
	Equal variances not assumed			7.305	290.566	.000	.247	.034	.180	.313

ANOVA Tables

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	.002	.023	1.000	-.07	.07
	Asian	-.143*	.045	.035	-.28	-.01
	Hispanic	.012	.062	1.000	-.18	.20
	Multiracial	-.066	.053	.876	-.23	.10
	Non-Resident Alien	-.094	.046	.396	-.23	.04
	Other	-.047	.064	.989	-.24	.15
African-American	White	-.002	.023	1.000	-.07	.07
	Asian	-.144*	.047	.045	-.29	.00
	Hispanic	.010	.063	1.000	-.18	.20
	Multiracial	-.067	.055	.881	-.23	.10
	Non-Resident Alien	-.095	.048	.430	-.24	.05
	Other	-.049	.065	.989	-.25	.15
Asian	White	.143*	.045	.035	.01	.28
	African-American	.144*	.047	.045	.00	.29
	Hispanic	.155	.074	.369	-.07	.38
	Multiracial	.077	.067	.912	-.12	.28
	Non-Resident Alien	.049	.062	.985	-.14	.23
	Other	.096	.076	.868	-.13	.32
Hispanic	White	-.012	.062	1.000	-.20	.18
	African-American	-.010	.063	1.000	-.20	.18
	Asian	-.155	.074	.369	-.38	.07
	Multiracial	-.078	.079	.957	-.32	.16
	Non-Resident Alien	-.106	.075	.792	-.33	.12
	Other	-.059	.087	.993	-.32	.20
Multiracial	White	.066	.053	.876	-.10	.23
	African-American	.067	.055	.881	-.10	.23
	Asian	-.077	.067	.912	-.28	.12
	Hispanic	.078	.079	.957	-.16	.32
	Non-Resident Alien	-.028	.068	1.000	-.23	.17
	Other	.019	.081	1.000	-.22	.26
Non-Resident Alien	White	.094	.046	.396	-.04	.23
	African-American	.095	.048	.430	-.05	.24
	Asian	-.049	.062	.985	-.23	.14
	Hispanic	.106	.075	.792	-.12	.33
	Multiracial	.028	.068	1.000	-.17	.23
	Other	.047	.076	.996	-.18	.28
Other	White	.047	.064	.989	-.15	.24
	African-American	.049	.065	.989	-.15	.25
	Asian	-.096	.076	.868	-.32	.13
	Hispanic	.059	.087	.993	-.20	.32
	Multiracial	-.019	.081	1.000	-.26	.22
	Non-Resident Alien	-.047	.076	.996	-.28	.18

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

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	-.100	.060	.339	-.26	.05
	18 years old	-.063	.050	.592	-.19	.07
	19 years old	.069	.062	.687	-.09	.23
17 years or younger	20 years or older	.100	.060	.339	-.05	.26
	18 years old	.038	.036	.731	-.06	.13
	19 years old	.169*	.052	.007	.03	.30
18 years old	20 years or older	.063	.050	.592	-.07	.19
	17 years or younger	-.038	.036	.731	-.13	.06
	19 years old	.132*	.040	.007	.03	.24
19 years old	20 years or older	-.069	.062	.687	-.23	.09
	17 years or younger	-.169*	.052	.007	-.30	-.03
	18 years old	-.132*	.040	.007	-.24	-.03

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

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	-.007	.023	1.000	-.07	.06
	Mississippi Service Area	.053	.043	.819	-.07	.18
	Florida Service Area	.083	.045	.432	-.05	.21
	Rest of United States	.047	.040	.850	-.07	.16
	International	-.076	.047	.581	-.21	.06
Rest of Alabama	Mobile or Baldwin County	.007	.023	1.000	-.06	.07
	Mississippi Service Area	.060	.043	.739	-.06	.18
	Florida Service Area	.090	.045	.351	-.04	.22
	Rest of United States	.054	.040	.770	-.06	.17
	International	-.069	.047	.684	-.21	.07
Mississippi Service Area	Mobile or Baldwin County	-.053	.043	.819	-.18	.07
	Rest of Alabama	-.060	.043	.739	-.18	.06
	Florida Service Area	.030	.058	.995	-.14	.20
	Rest of United States	-.006	.054	1.000	-.16	.15
	International	-.129	.059	.259	-.30	.04
Florida Service Area	Mobile or Baldwin County	-.083	.045	.432	-.21	.05
	Rest of Alabama	-.090	.045	.351	-.22	.04
	Mississippi Service Area	-.030	.058	.995	-.20	.14
	Rest of United States	-.036	.056	.987	-.20	.12
	International	-.159	.061	.099	-.33	.02
Rest of United States	Mobile or Baldwin County	-.047	.040	.850	-.16	.07
	Rest of Alabama	-.054	.040	.770	-.17	.06
	Mississippi Service Area	.006	.054	1.000	-.15	.16
	Florida Service Area	.036	.056	.987	-.12	.20
	International	-.123	.057	.273	-.29	.04
International	Mobile or Baldwin County	.076	.047	.581	-.06	.21
	Rest of Alabama	.069	.047	.684	-.07	.21
	Mississippi Service Area	.129	.059	.259	-.04	.30
	Florida Service Area	.159	.061	.099	-.02	.33
	Rest of United States	.123	.057	.273	-.04	.29

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

High School GPA * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) HS GPA	(J) HS GPA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2.5 or lower	2.51-3.0	-.104	.064	.370	-.27	.06
	3.01-3.5	-.198*	.062	.010	-.36	-.04
	3.51-4.0	-.352*	.060	.000	-.51	-.19
2.51-3.0	2.5 or lower	.104	.064	.370	-.06	.27
	3.01-3.5	-.094*	.032	.020	-.18	-.01
	3.51-4.0	-.248*	.028	.000	-.32	-.18
3.01-3.5	2.5 or lower	.198*	.062	.010	.04	.36
	2.51-3.0	.094*	.032	.020	.01	.18
	3.51-4.0	-.153*	.024	.000	-.21	-.09
3.51-4.0	2.5 or lower	.352*	.060	.000	.19	.51
	2.51-3.0	.248*	.028	.000	.18	.32
	3.01-3.5	.153*	.024	.000	.09	.21

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

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	-.005	.034	1.000	-.10	.10
	22-23	-.018	.035	.998	-.12	.08
	24-25	-.065	.034	.479	-.17	.04
	26-27	-.114*	.037	.037	-.22	.00
	28-29	-.172*	.039	.000	-.29	-.06
	30 or higher	-.157*	.038	.001	-.27	-.04
20-21	19 or lower	.005	.034	1.000	-.10	.10
	22-23	-.014	.036	1.000	-.12	.09
	24-25	-.060	.035	.616	-.16	.04
	26-27	-.109	.038	.068	-.22	.00
	28-29	-.167*	.040	.001	-.29	-.05
	30 or higher	-.153*	.040	.003	-.27	-.04
22-23	19 or lower	.018	.035	.998	-.08	.12
	20-21	.014	.036	1.000	-.09	.12
	24-25	-.046	.036	.863	-.15	.06
	26-27	-.095	.039	.188	-.21	.02
	28-29	-.154*	.041	.004	-.27	-.03
	30 or higher	-.139*	.040	.012	-.26	-.02
24-25	19 or lower	.065	.034	.479	-.04	.17
	20-21	.060	.035	.616	-.04	.16
	22-23	.046	.036	.863	-.06	.15
	26-27	-.049	.039	.864	-.16	.07
	28-29	-.107	.040	.107	-.23	.01
	30 or higher	-.092	.040	.235	-.21	.03
26-27	19 or lower	.114*	.037	.037	.00	.22
	20-21	.109	.038	.068	.00	.22
	22-23	.095	.039	.188	-.02	.21
	24-25	.049	.039	.864	-.07	.16
	28-29	-.058	.043	.823	-.18	.07
	30 or higher	-.043	.042	.949	-.17	.08
28-29	19 or lower	.172*	.039	.000	.06	.29
	20-21	.167*	.040	.001	.05	.29
	22-23	.154*	.041	.004	.03	.27
	24-25	.107	.040	.107	-.01	.23
	26-27	.058	.043	.823	-.07	.18
	30 or higher	.015	.044	1.000	-.12	.14
30 or higher	19 or lower	.157*	.038	.001	.04	.27
	20-21	.153*	.040	.003	.04	.27
	22-23	.139*	.040	.012	.02	.26
	24-25	.092	.040	.235	-.03	.21
	26-27	.043	.042	.949	-.08	.17
	28-29	-.015	.044	1.000	-.14	.12

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

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	-.037	.027	.870	-.12	.05
	BU	-.037	.039	.982	-.16	.08
	CS	.055	.056	.975	-.12	.23
	ED	-.017	.045	1.000	-.16	.12
	EG	-.005	.032	1.000	-.10	.09
	NU	-.038	.031	.925	-.13	.06
	CE	-.287*	.018	.000	-.34	-.23
AH	AS	.037	.027	.870	-.05	.12
	BU	.001	.040	1.000	-.12	.12
	CS	.092	.056	.732	-.08	.27
	ED	.020	.046	1.000	-.12	.16
	EG	.032	.033	.977	-.07	.13
	NU	-.001	.033	1.000	-.10	.10
	CE	-.249*	.020	.000	-.31	-.19
BU	AS	.037	.039	.982	-.08	.16
	AH	-.001	.040	1.000	-.12	.12
	CS	.091	.063	.833	-.10	.29
	ED	.020	.054	1.000	-.15	.19
	EG	.032	.043	.996	-.10	.16
	NU	-.002	.043	1.000	-.13	.13
	CE	-.250*	.035	.000	-.36	-.14
CS	AS	-.055	.056	.975	-.23	.12
	AH	-.092	.056	.732	-.27	.08
	BU	-.091	.063	.833	-.29	.10
	ED	-.072	.067	.962	-.28	.13
	EG	-.060	.059	.972	-.24	.12
	NU	-.093	.059	.756	-.27	.09
	CE	-.341*	.053	.000	-.51	-.18
ED	AS	.017	.045	1.000	-.12	.16
	AH	-.020	.046	1.000	-.16	.12
	BU	-.020	.054	1.000	-.19	.15
	CS	.072	.067	.962	-.13	.28
	EG	.012	.049	1.000	-.14	.16
	NU	-.021	.049	1.000	-.17	.13
	CE	-.270*	.042	.000	-.40	-.14
EG	AS	.005	.032	1.000	-.09	.10
	AH	-.032	.033	.977	-.13	.07
	BU	-.032	.043	.996	-.16	.10
	CS	.060	.059	.972	-.12	.24
	ED	-.012	.049	1.000	-.16	.14
	NU	-.034	.037	.984	-.15	.08
	CE	-.282*	.026	.000	-.36	-.20
NU	AS	.038	.031	.925	-.06	.13
	AH	.001	.033	1.000	-.10	.10
	BU	.002	.043	1.000	-.13	.13
	CS	.093	.059	.756	-.09	.27
	ED	.021	.049	1.000	-.13	.17
	EG	.034	.037	.984	-.08	.15
	CE	-.248*	.026	.000	-.33	-.17

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

USA Day * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Number USA Days Attended	(J) Number USA Days Attended	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Did Not Attend	Attended 1 USA Day	-.074*	.021	.001	-.12	-.03
	Attended 2 USA Days	.083	.126	.791	-.24	.41
Attended 1 USA Day	Did Not Attend	.074*	.021	.001	.03	.12
	Attended 2 USA Days	.157	.126	.446	-.17	.48
Attended 2 USA Days	Did Not Attend	-.083	.126	.791	-.41	.24
	Attended 1 USA Day	-.157	.126	.446	-.48	.17

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

Orientation * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Orientation Logistic	(J) Orientation Logistic	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
August/Transfer/Unknown Orientation	May Orientation	-.192	.078	.471	-.46	.08
	Freshman Session 1	-.180	.054	.069	-.37	.01
	Freshman Session 2	-.221*	.054	.005	-.41	-.04
	Freshman Session 3	-.199*	.054	.020	-.38	-.02
	Freshman Session 4	-.184	.055	.060	-.37	.00
	Freshman Session 5	-.102	.059	.917	-.30	.10
	Freshman Session 6	-.115	.057	.793	-.31	.08
	Freshman Session 7	-.148	.056	.329	-.34	.04
	Freshman Session 8	-.150	.056	.326	-.34	.04
	Freshman Session 9	-.033	.060	1.000	-.24	.17
	Freshman Session 10	-.120	.062	.834	-.33	.09
	Freshman Session 11	.016	.059	1.000	-.19	.22
	Freshman Session 12	-.057	.058	1.000	-.25	.14
	International Orientation	-.194	.062	.123	-.41	.02
Freshman Session 11	August/Transfer/Unknown Orientation	-.016	.059	1.000	-.22	.19
	May Orientation	-.208	.075	.291	-.47	.06
	Freshman Session 1	-.196*	.051	.012	-.37	-.02
	Freshman Session 2	-.236*	.050	.000	-.41	-.06
	Freshman Session 3	-.215*	.050	.002	-.39	-.04
	Freshman Session 4	-.200*	.051	.010	-.38	-.02
	Freshman Session 5	-.118	.055	.712	-.31	.07
	Freshman Session 6	-.131	.054	.501	-.32	.05
	Freshman Session 7	-.164	.052	.108	-.34	.01
	Freshman Session 8	-.166	.053	.110	-.35	.01
	Freshman Session 9	-.048	.056	1.000	-.24	.14
	Freshman Session 10	-.136	.059	.592	-.34	.07
	Freshman Session 12	-.072	.054	.992	-.26	.11
	International Orientation	-.210*	.059	.037	-.41	-.01

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

JagAlert Fall 2014 * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Received JagAlert	(J) Received JagAlert	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No JagAlert	1 Course w/ JagAlert	.060*	.022	.021	.01	.11
	Multiple Courses w/ JagAlert	.221*	.026	.000	.16	.28
1 Course w/ JagAlert	No JagAlert	-.060*	.022	.021	-.11	-.01
	Multiple Courses w/ JagAlert	.161*	.029	.000	.09	.23
Multiple Courses w/ JagAlert	No JagAlert	-.221*	.026	.000	-.28	-.16
	1 Course w/ JagAlert	-.161*	.029	.000	-.23	-.09

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

USA Hours Earned * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) USA Hours Earned	(J) USA Hours Earned	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-6 hours	6.5-12 hours	-.201*	.043	.000	-.32	-.08
	12.5-18 hours	-.347*	.044	.000	-.47	-.22
	18.5-24 hours	-.648*	.033	.000	-.74	-.55
	24.5-30 hours	-.817*	.025	.000	-.89	-.75
	30.5 or more hours	-.866*	.022	.000	-.93	-.80
6.5-12 hours	0-6 hours	.201*	.043	.000	.08	.32
	12.5-18 hours	-.146	.054	.076	-.30	.01
	18.5-24 hours	-.447*	.046	.000	-.58	-.32
	24.5-30 hours	-.616*	.040	.000	-.73	-.50
	30.5 or more hours	-.665*	.039	.000	-.78	-.55
12.5-18 hours	0-6 hours	.347*	.044	.000	.22	.47
	6.5-12 hours	.146	.054	.076	-.01	.30
	18.5-24 hours	-.301*	.047	.000	-.43	-.17
	24.5-30 hours	-.470*	.041	.000	-.59	-.35
	30.5 or more hours	-.518*	.040	.000	-.63	-.40
18.5-24 hours	0-6 hours	.648*	.033	.000	.55	.74
	6.5-12 hours	.447*	.046	.000	.32	.58
	12.5-18 hours	.301*	.047	.000	.17	.43
	24.5-30 hours	-.169*	.029	.000	-.25	-.09
	30.5 or more hours	-.218*	.028	.000	-.30	-.14
24.5-30 hours	0-6 hours	.817*	.025	.000	.75	.89
	6.5-12 hours	.616*	.040	.000	.50	.73
	12.5-18 hours	.470*	.041	.000	.35	.59
	18.5-24 hours	.169*	.029	.000	.09	.25
	30.5 or more hours	-.048*	.016	.033	-.09	.00
30.5 or more hours	0-6 hours	.866*	.022	.000	.80	.93
	6.5-12 hours	.665*	.039	.000	.55	.78
	12.5-18 hours	.518*	.040	.000	.40	.63
	18.5-24 hours	.218*	.028	.000	.14	.30
	24.5-30 hours	.048*	.016	.033	.00	.09

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

USA GPA * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) USA GPA	(J) USA GPA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2.0 or lower	2.01-2.5	-.412*	.034	.000	-.51	-.32
	2.51-3.0	-.480*	.029	.000	-.56	-.40
	3.01-3.5	-.521*	.027	.000	-.60	-.45
	3.51-4.0	-.577*	.025	.000	-.65	-.51
2.01-2.5	2.0 or lower	.412*	.034	.000	.32	.51
	2.51-3.0	-.068	.032	.227	-.16	.02
	3.01-3.5	-.109*	.031	.004	-.19	-.02
	3.51-4.0	-.165*	.029	.000	-.25	-.09
2.51-3.0	2.0 or lower	.480*	.029	.000	.40	.56
	2.01-2.5	.068	.032	.227	-.02	.16
	3.01-3.5	-.041	.025	.468	-.11	.03
	3.51-4.0	-.097*	.023	.000	-.16	-.04
3.01-3.5	2.0 or lower	.521*	.027	.000	.45	.60
	2.01-2.5	.109*	.031	.004	.02	.19
	2.51-3.0	.041	.025	.468	-.03	.11
	3.51-4.0	-.056*	.021	.049	-.11	.00
3.51-4.0	2.0 or lower	.577*	.025	.000	.51	.65
	2.01-2.5	.165*	.029	.000	.09	.25
	2.51-3.0	.097*	.023	.000	.04	.16
	3.01-3.5	.056*	.021	.049	.00	.11

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