



## Institutional Effectiveness, Research, & Planning

### Student Athlete Team Tutoring Room Report Fall 2016

March 3, 2017

This report examines the relationship between visiting Cerritos College’s Student Athlete Team tutoring room and academic outcomes of student athletes who visited the facility during fall 2016 school year. The report also compares academic outcomes between students who chose to visit the student athlete team tutoring room and those who did not visit.

#### EXECUTIVE SUMMARY

- Student athletes who visited the student athletic team tutoring room had a higher level of persistence than all students who did not attend tutoring.
- Student athletes who visited the team room and student athletes who visited the student success room had similar levels of success, retention, and persistence. Location does not influence outcomes.
- There were statistically significant differences in ethnicity in student success among students who visited the student athlete team room for tutoring.

#### Details of the Data

This report examines data from an Equity intervention, which piloted the Student Athlete Tutoring Room. The pilot program involved two teams of student athletes (one male team, the other female) who visited the Team Room facility during Fall 2016. The room had a capacity of 30 students and served two subject areas, math and English.

#### **Comparing Team Room Tutoring Versus No Tutoring Groups**

The first two research questions compared the success, retention, and persistence of athletes who went to the team tutoring room versus the same outcomes for students who did not use tutoring. Persistence is defined as completing a term, and attending the term immediately following.

1. What were the success, retention, and persistence rates in Math courses for students who used the tutoring services in the team room location in Fall 2016 compared with students who did not use any form of tutoring (in any location) for Fall 2016?

#### **Math Success**

Table 1 displays the math success rates for students who visited team room tutoring and for students who did not visit tutoring. The groups had similar rates of success in their math courses. A chi-square test indicated that there was no statistically significant difference in student success between the two groups,  $\chi^2(1) = .04, p = n.s.$

*Table 1. Math Success Rates for Team Room Tutoring and No Tutoring Groups*

Group	Total Count	Success Rate
Team Room Tutoring	131	46%
No Tutoring	4364	47%

### Math Retention

Table 2 shows the math retention rates for students who visited team room tutoring and for students who did not visit tutoring. The majority of students in both groups completed their math courses. A chi-square test indicated that there was no statistically significant difference in retention between the two groups,  $\chi^2(1) = .45, p = n.s.$

*Table 2. Math Retention Rates for Team Room Tutoring and No Tutoring Groups*

Group	Total Count	Retention Rate
Team Room Tutoring	131	68%
No Tutoring	4364	71%

### Persistence

Table 3 shows the persistence rates for math students who visited team room tutoring and for students who did not visit tutoring. The overwhelming majority of students in both groups persisted the next semester. However, students who visited the team tutoring room had a 15-percentage point advantage in persistence. A chi-square test indicated that this difference was statistically significant,  $\chi^2(1) = 27.84, p < .001.$

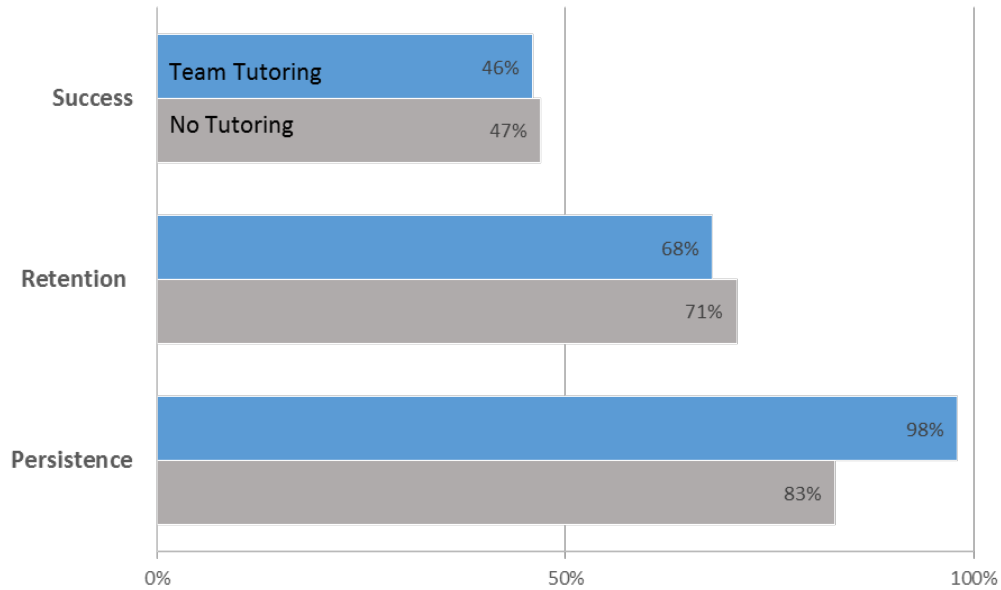
*Table 3. Math Persistence Rates for Team Room Tutoring and No Tutoring Groups*

Group	Total Count	Persistence Rate
Team Room Tutoring	180	98%
No Tutoring	6885	83%

### Conclusion

Figure 1 shows that the groups had similar levels of math success and retention. Student athletes using the team room tutoring had significantly higher levels of persistence than the no tutoring group (regardless of location).

Figure 1. Math Success, Retention, and Persistence for Team Tutoring and No Tutoring Groups



- Success, retention, and persistence rates in English courses for student athletes who used the tutoring services in the team room location in Fall 2016 compared with students who did not use any form of tutoring (in any location) for Fall 2016.

**English Success**

Table 4 displays the English success rates for student athletes who visited team room tutoring and for student athletes who did not visit tutoring. A majority of students in each group achieved success in their English courses. A chi-square test showed that there was no statistically significant group difference in English success,  $\chi^2(1) = .48, p = n.s.$

Table 4. English Success Rates for Team Room Tutoring and No Tutoring Groups

Group	Total Count	Success Rate
Team Room Tutoring	141	67%
No Tutoring	5210	65%

**English Retention**

Table 5 shows the English retention rates for student athletes who visited team room tutoring and for student athletes who did not visit tutoring. Over eighty percent of students in both groups completed their English courses. A chi-square test indicated that there was no statistically significant group difference in English retention,  $\chi^2(1) = .06, p = n.s.$

*Table 5. English Retention Rates for Team Room Tutoring and No Tutoring Groups*

Group	Total Count	Retention Rate
Team Room Tutoring	141	82%
No Tutoring	5210	81%

### Persistence

Table 6 shows the persistence rates for math; student athletes who visited team room tutoring and for student athletes who did not visit tutoring. The overwhelming majority of students in both groups persisted the next semester. However, students who visited the team tutoring room had an 18-percentage point advantage in persistence. A chi-square test indicated that this difference was statistically significant,  $\chi^2(1) = 53.25, p < .001$ .

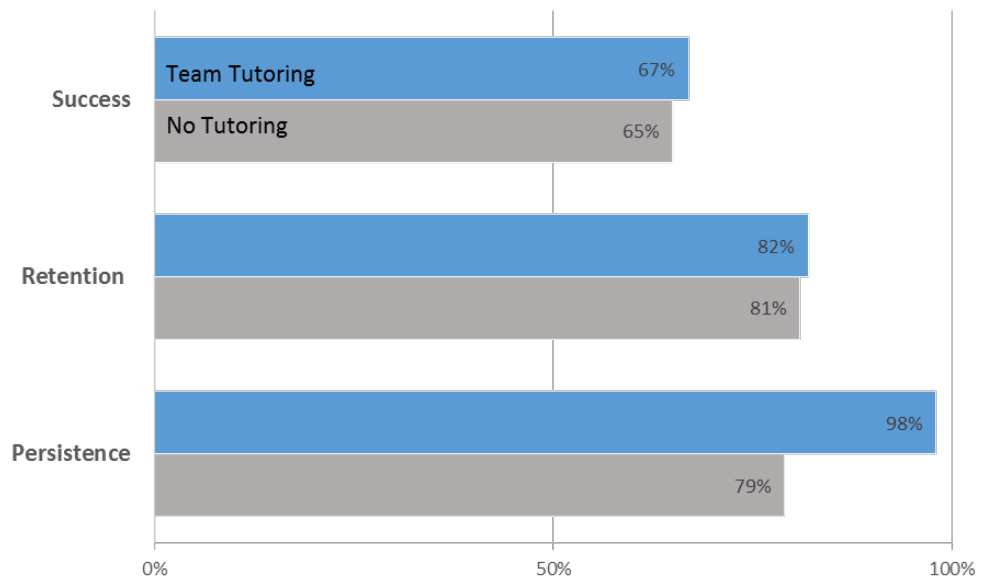
*Table 6. English Persistence Rates for Team Room Tutoring and No Tutoring Groups*

Group	Total Count	Persistence Rate
Team Room Tutoring	242	98%
No Tutoring	11376	79%

### Conclusion

Figure 2 shows that the groups had similar levels of English success and retention. The team room tutoring group had a significantly higher level of persistence than the no tutoring group.

*Figure 2. English Success, Retention, and Persistence for Team Tutoring and No Tutoring Groups*



### Comparing Student Athletes in Team Room Tutoring Versus Athletes in Success Center Tutoring

The second set of research questions compared the success, retention, and persistence of athletes who visited the team tutoring room versus the same outcomes for athletes who visited success center tutoring. Student athletes who visited both rooms were assigned to the team room group.

3. Success, retention, and persistence rates in Math courses for student athletes who used the Success Center LRC location compared with athletes who used the Success Center Team Room location.

#### Math Success

Table 7 displays the Math success rates for student athletes who visited team room tutoring and for student athletes who visited success center tutoring. Less than half of the students in each group achieved success in their Math courses. A chi-square test showed that there was no statistically significant group difference in Math success,  $\chi^2(1) = 3.11, p = n. s.$

*Table 7. Math Success Rates for Team Room and Success Center Tutoring Groups*

Group	Total Count	Success Rate
Team Room	98	45%
Success Center	104	49%

#### Math Retention

Table 8 shows the retention rates for student athletes who visited team room tutoring and for student athletes who visited success center tutoring. Most students in both groups completed their Math courses. A chi-square test revealed that there was no statistically significant group difference in Math retention,  $\chi^2(1) = .02, p = n.s.$

*Table 8. Math Retention Rates for Team Room and Success Center Tutoring Groups*

Group	Total Count	Retention Rate
Team Room	98	67%
Success Center	104	66%

#### Persistence

Table 9 shows the persistence rates for math; student athletes who visited team room tutoring and for student athletes who visited the success center. The overwhelming majority of students in both groups persisted the next semester. A chi-square test showed no statistically significant difference between the groups,  $\chi^2(1) = 3.11, p = n.s.$

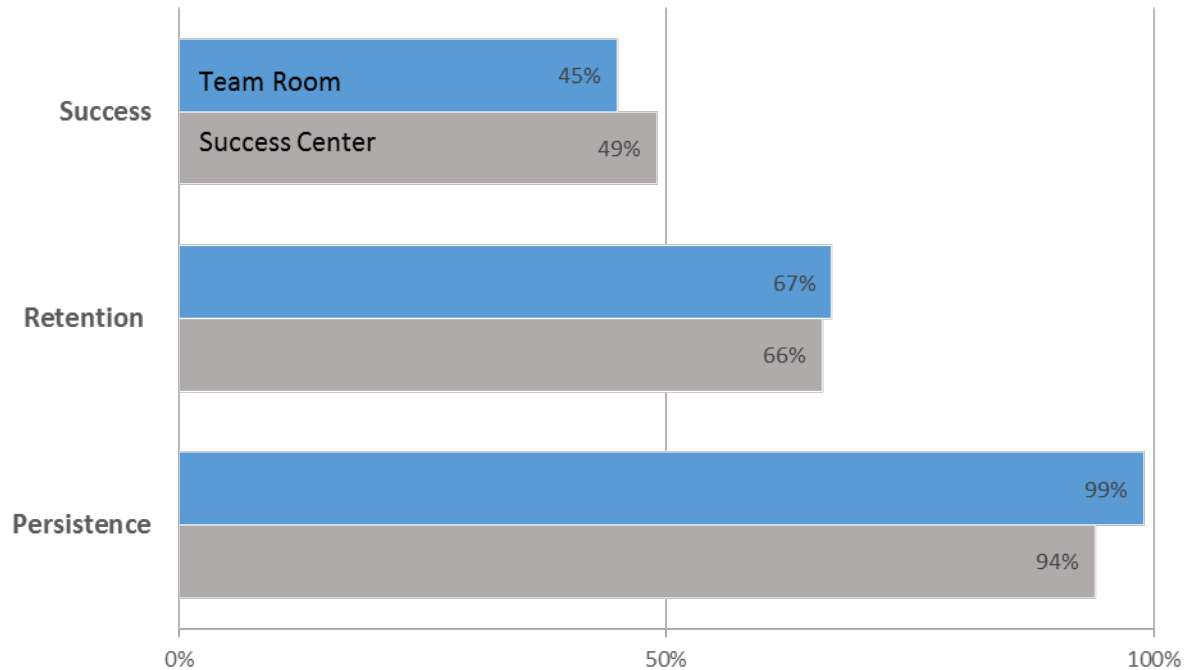
Table 9. Math Persistence Rates for Team Room and Success Center Tutoring Groups

Group	Total Count	Persistence Rate
Team Room	137	99%
Success Center	131	95%

### Conclusion

Figure 3 shows that the groups had similar levels of English success, retention, and persistence.

Figure 3. Math Success, Retention, and Persistence for Athletes in the Team Room and Success Center Groups



- Success, retention, and persistence rates in English courses for student athletes who used the Success Center LRC location compared with student athletes who used the Success Center Team Room location.

### English Success

Table 10 displays the English success rates for student athletes who visited team room tutoring and student athletes who visited the Student Success Center. A majority of students in each group achieved success in their English courses. Although students in the team room had a slightly higher success rate, a chi-square test showed that this difference was not statistically significant,  $X^2(1) = .28, p = n.s.$

*Table 10. English Success Rates for Team Room and Success Center Tutoring Groups*

Group	Total Count	Success Rate
Team Room	119	71%
Success Center	82	67%

### English Retention

Table 11 shows the English retention rates for student athletes who visited team room tutoring and student athletes who visited the Student Success Center. Over eighty percent of students in both groups completed their English courses. A chi-square test indicated that there was no statistically significant group difference in English retention,  $\chi^2(1) = .67, p = n.s.$

*Table 11. English Retention Rates for Team Room and Success Center Tutoring Groups*

Group	Total Count	Retention Rate
Team Room	119	85%
Success Center	82	81%

### Persistence

Table 12 shows the persistence rates for student athletes who visited team room tutoring and student athletes who visited the Student Success Center. The overwhelming majority of students in both groups persisted the next semester. A chi-square test confirmed that students who visited the team room had a higher persistence rate than students who only visited the Success Center,  $\chi^2(1) = 1.99, p = n.s.$

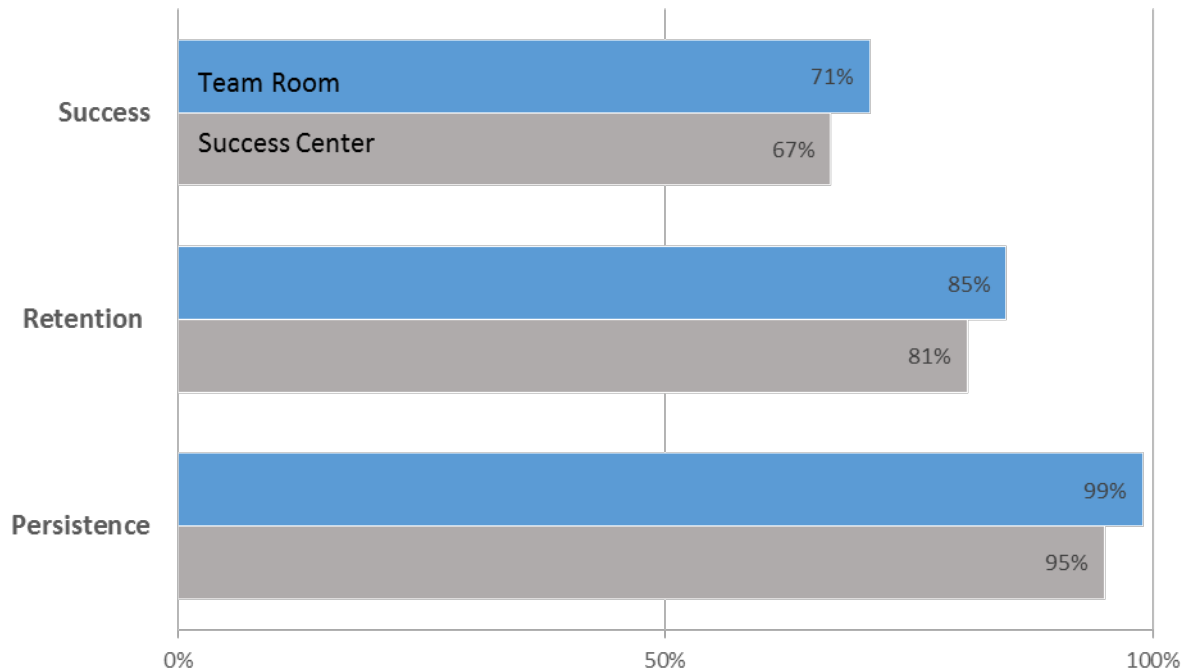
*Table 12. English Persistence Rates for Team Room and Success Center Tutoring Groups*

Group	Total Count	Persistence Rate
Team Room	200	99%
Success Center	145	94%

### Conclusion

Figure 4 shows that the groups had similar levels of English success and retention. The team room tutoring group had significantly higher levels of persistence than the no tutoring group.

Figure 4. English Success, Retention, and Persistence for Student Athletes in the Team Room and Success Center Groups



#### Demographic Differences in Team Room Tutoring Outcomes

The next section describes gender and ethnic differences in success, retention, and persistence among students who visited the athletic team tutoring room.

- Demographic breakdown for student athletes who used the team room tutoring location, along with success, retention, and persistence for each group.

**Gender.** We compared success, retention, and persistence by gender.

**Success.** Table 13 displays success rates for student athletes who visited team room tutoring by gender. A majority of female and male students achieved success in their courses. A chi-square test showed that there was no statistically significant group difference in success,  $X^2(1) = 1.48, p = n.s.$

Table 13. Success Rates by Gender for Student Athletes Visiting the Team Room

Gender	Total Count	Success Rate
Female	118	56%
Male	144	59%
Unknown	10	40%
Total	272	57%

**Retention.** Table 14 displays retention rates for student athletes who visited team room tutoring by gender. Approximately three-quarters of female and male students completed their



courses. A chi-square test showed that there was no statistically significant group difference in retention,  $\chi^2(1) = 1.35, p = n.s.$

*Table 14. Retention Rates by Gender for Student Athletes Visiting the Team Room*

Gender	Total Count	Retention Rate
Female	118	75%
Male	144	76%
Unknown	10	60%
Total	272	75%

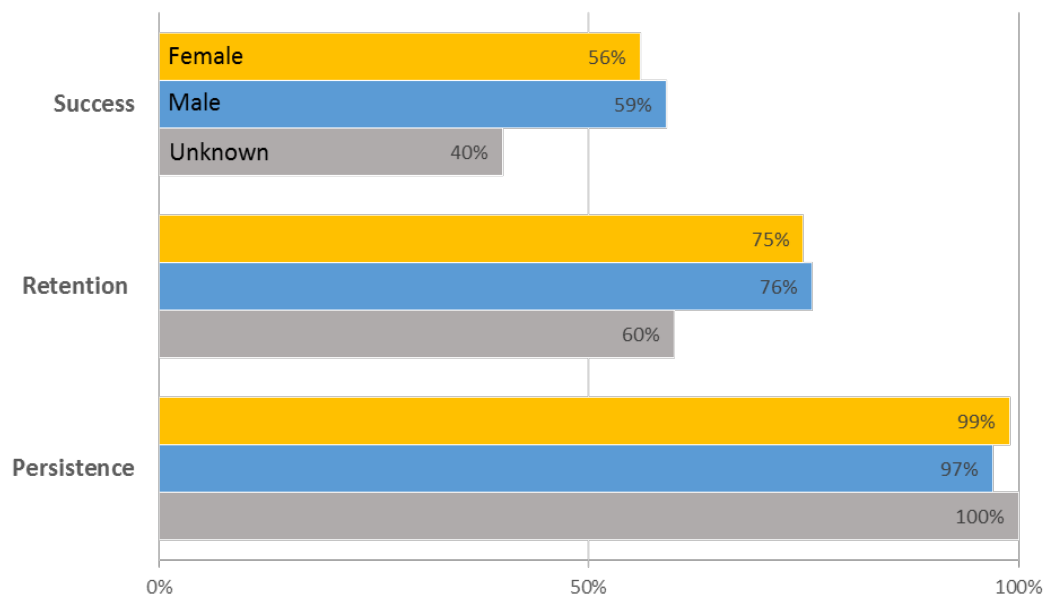
**Persistence.** Table 15 displays persistence rates for student athletes who visited team room tutoring by gender. Nearly all of the female and male students persisted to the next semester. A chi-square test showed that there was no statistically significant group difference in persistence,  $\chi^2(1) = 2.48, p = n.s.$

*Table 15. Retention Rates by Gender for Student Athletes Visiting the Team Room*

Gender	Total Count	Persistence Rate
Female	180	99%
Male	214	97%
Unknown	19	100%
Total	413	98%

**Conclusion.** Figure 5 shows that success, retention, and persistence rates were similar for each gender.

*Figure 5. Success, Retention, and Persistence by Gender for Student Athletes in the Team Room Tutoring*



**Ethnicity.** We compared success, retention, and persistence by ethnicity.

**Success.** Table 16 displays success rates for student athletes who visited team room tutoring by ethnicity. A majority of students of all ethnicities achieved success in their courses. However, Fisher's exact test indicated significant ethnic variation in the degree of student success,  $\chi^2(1) = 13.36, p = .01$ .

*Table 16. Success Rates by Ethnicity for Student Athletes Visiting the Team Room*

Ethnicity	Total Count	Success Rate
Asian	35	74%
Black	5	100%
Latino	140	57%
White	6	17%
Other	86	50%
Total	272	57%

**Retention.** Table 17 displays retention rates for student athletes who visited team room tutoring by ethnicity. Most students regardless of ethnicity, completed their courses. Fisher's exact test showed no statistically significant ethnicity variation in student retention,  $\chi^2(1) = 7.55, p = n.s.$

*Table 17. Retention Rates by Ethnicity for Athletes Visiting the Team Room*

Ethnicity	Total Count	Retention Rate
Asian	35	89%
Black	5	100%
Latino	140	75%
White	6	50%
Other	86	71%
Total	272	75%

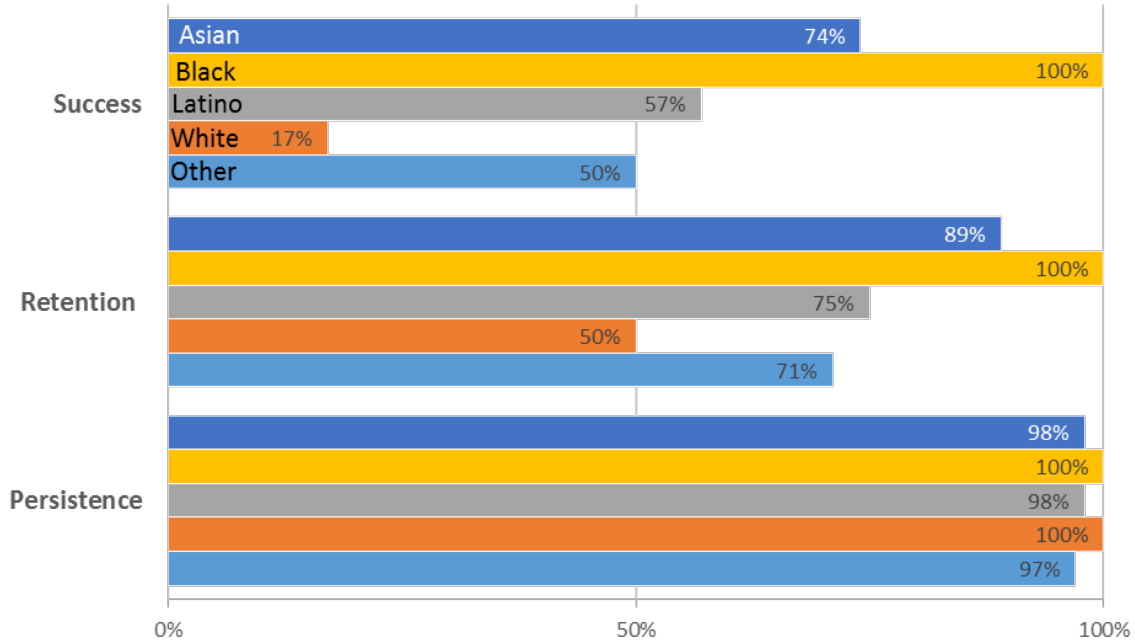
**Persistence.** Table 18 displays persistence rates for student athletes who visited team room tutoring by ethnicity. Nearly all of the students persisted to the next semester. Fisher's exact test showed that there was no statistically significant ethnic group difference in persistence,  $\chi^2(1) = 1.07, p = n.s.$

*Table 18. Persistence Rates by Ethnicity for Student Athletes Visiting the Team Room*

Ethnicity	Total Count	Persistence Rate
Asian	52	98%
Black	6	100%
Latino	205	98%
White	15	100%
Other	144	97%
Total	422	98%

**Conclusion.** Figure 6 shows success, retention, and persistence by ethnicity for student athletes who visited team room tutoring. Because of the small sample sizes, these differences should be interpreted with caution.

Figure 6. Success, Retention, and Persistence by Ethnicity for Student Athletes in the Team Room Tutoring



**Additional Analysis on Selected Students**

The last set of questions concerned a group of students meeting three criteria:

- Was a student athlete;
- Used the Team Tutoring Room in Spring 2016;
- Was enrolled in an English (52 or 72) or math (40, 60, or 75) basic skills course during Spring 2016.

6. Longitudinal data: in Spring 2016, some students used the team tutoring room who were in Basic Skills classes. Two students took Math 40, 9 students took Math 60, 1 student took Math 75, 9 students took English 52, and 3 students took English 72. Questions include:

**a. Did they continue to use tutoring, either in the Team Room or in the Success Center LRC location?**  
 34 students fit all three criteria. Of these 34 students, 12 (35%) visited the tutoring facilities during the fall semester.

**b. Did their success increase?**

Table 19 shows the success rates for English and math courses by term. The fall success rate was slightly lower than the spring rate.

Table 19. Success Rates by Term for Selected Students

Term	Total Count	Success Rate
Spring 2016	58	43%
Fall 2016	32	34%

**c. Did they persist?**

Table 20 shows the persistence rate by term. The persistence rate was similar for both terms.

*Table 20. Persistence Rates by Term for Selected Students*

Term	Total Count	Persistence Rate
Fall 2016	34	88%
Spring 2017	34	85%

**d. What level of Math or English have they now completed or are enrolled in?**

Table 21 lists the Math and English courses that these students enrolled in Fall 2016 and Spring 2017. It also shows enrollment counts for each course. English 103 and Math 112 were the two most popular courses.

*Table 21. English and Math Course Counts for Selected Students*

Course		2016-17 Term Counts	
Subject	Catalog Number	Fall	Spring
English	52	4	2
	72	2	2
	100	9	6
	102	1	0
	103	12	7
Math	60	8	0
	75	1	2
	80	6	4
	80A	1	0
	112	6	5
	114	1	3