

The Relationship Between Social and Emotional Learning Skills and Resource Use for First-Year Outcomes of Hispanic First Generation College Students

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This study found that Hispanic FGCS typically performed worse on first-year academic outcomes than Hispanic non-FGCS, including lower first-year GPAs and being less likely to be on-track than Hispanic non-FGCS. However, the FGCS differences disappeared after controlling for other salient factors.

Previous research has shown that high school GPA (HSGPA) and ACT[®] Composite score are predictive of first-year outcomes, such as first-year college GPA and retention,¹ even among racial/ethnic groups such as Hispanic students.² In the present study, we accounted for these variables and sought to examine whether *other* student characteristics, such as social and emotional learning (SEL) skills and resource use, help to predict which Hispanic students struggle in college. Of particular interest were Hispanic first generation college students (FGCS), the racial/ethnic group with the greatest proportion of future FGCS.³ FGCS were defined as students whose parents had not completed a bachelor's degree or higher, consistent with the *Higher Education Act* definition.⁴

The first set of characteristics of interest, SEL skills, include qualities such as emotional control, academic self-discipline, college commitment, and social engagement. ACT Engage[®],⁵ an assessment that measures SEL skills, has been shown to predict college GPA⁶ and retention,⁷ even after controlling for institution, demographic characteristics, and prior academic achievement.

The second characteristic, on-campus resource use, has been theorized to increase the likelihood that a student remains in college.⁸ To test this, Robbins et al. (2009)⁹ investigated the association of various types of resource use (i.e., academic, social, recreational, and advising) with first-year GPA and retention. Results indicated that the utilization of all resource types was positively associated with first-year GPA and retention.

Purpose

The purpose of the present study was to examine how student FGCS status, demographic characteristics,¹⁰ prior academic achievement,¹¹ SEL skills (ACT Engage scale scores [see Appendix A for scales]), and resource use predict the following outcomes among first-year Hispanic college students:

1. first-year college GPA
2. first-to-second year retention
3. on-track status at the end of the first year (i.e., having earned at least 24 credit hours by the end of the first year, including college credits they may have earned in high school)

The resource types examined in this study were academic, career, and wellness (see Appendix B for more information). We also investigated whether Hispanic FGCS and Hispanic non-FGCS differed in their first-year outcomes.

Data on 685 Hispanic students were available from the 2012 first-year cohort from a Hispanic-serving institution in the Southern United States.¹² Within the sample, 42% were female, and 60% were FGCS. Bivariate analyses were used to compare first-year outcomes between Hispanic FGCS and Hispanic non-FGCS. Regression models that controlled for ACT Composite score and HSGPA were used to determine which student characteristics were related to Hispanic students' likelihood of success during their first year.

Findings

From the bivariate analyses, we found that Hispanic FGCS tended to have lower first-year GPAs than Hispanic non-FGCS on average (2.57 vs. 2.87; see Figure 1)¹³ and were less likely to be on-track by the end of the first year than Hispanic non-FGCS (52% vs. 63%; see Figure 2).¹⁴ There was no significant difference in first-to-second year retention between the two groups (75% vs. 79%).¹⁵ Overall, Hispanic non-FGCS had significantly better performance than Hispanic FGCS on two of the three first-year outcomes measured.

First-Year GPA

Using a multiple-predictor regression model, we found that Academic Discipline (see Figure 3),¹⁶ completing homework in high school,¹⁷ and academic resource use¹⁸ significantly predicted first-year GPA, after statistically controlling for other variables in the model. FGCS status was no longer a significant predictor of GPA once academic resource use was added to the model, though it was nearly significant.¹⁹ The typical first-year GPA was 2.72 for those with low academic resource use, 2.84 for those with moderate use, and 2.92 for those with high use, after setting other predictors in the model to their mean values. Overall, these results suggest that putting effort into school (Academic Discipline), having a history of completing homework, and using academic resources are related to higher first-year GPAs on average for both Hispanic FGCS and Hispanic non-FGCS, even after controlling for prior achievement.

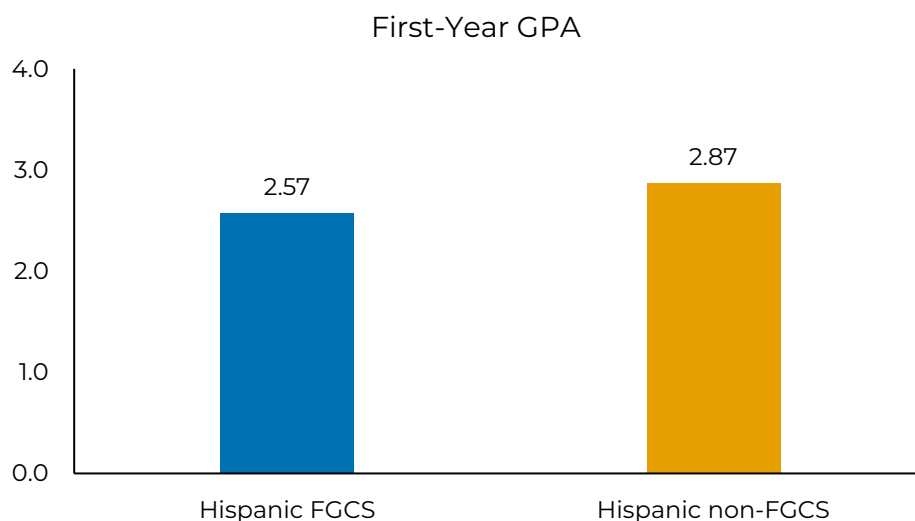


Figure 1. Comparison of first-year GPAs for Hispanic FGCS to Hispanic non-FGCS

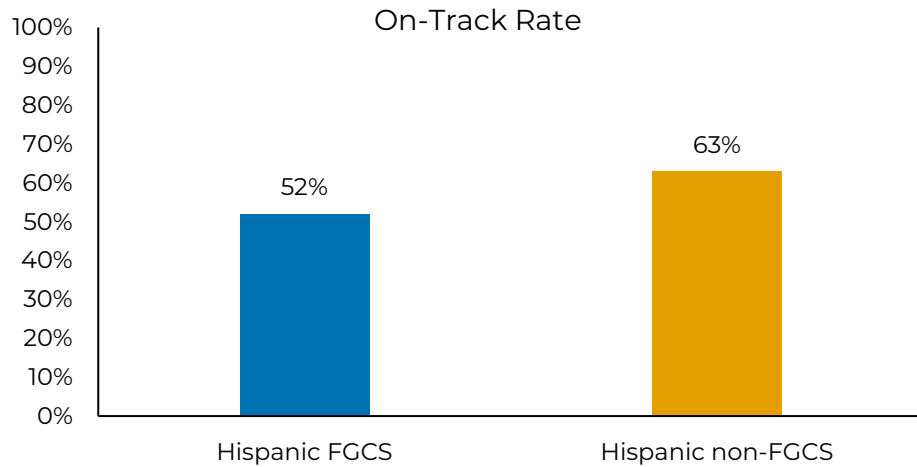


Figure 2. Comparison of on-track rate at end of first year for Hispanic FGCS and Hispanic non-FGCS

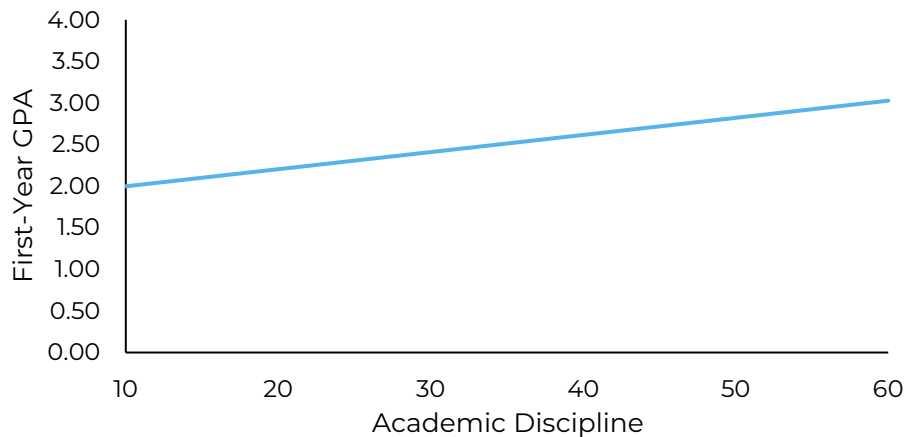


Figure 3. Relationship between Academic Discipline and first-year GPA

First-to-Second Year Retention

From the multiple-predictor logistic regression model, Academic Discipline,²⁰ Social Activity,²¹ and Steadiness²² significantly predicted first-to-second year retention. Neither FGCS status nor any type of resource use was related to first-to-second year retention. As seen in Figure 4, Social Activity had a curvilinear relationship with first-to-second year retention, meaning that Hispanic students who had too little or too much Social Activity were less likely to be retained to their second year at this institution. This same type of relationship was true of Steadiness as well, where Hispanic students who either lacked or exhibited too much Steadiness (i.e., too easily overwhelmed by or too controlling of emotions, such as stress) were less likely to be retained to their second year. Overall, these results suggest that SEL skills were related to returning to the second year of college. Specifically, putting effort into school (Academic Discipline), having a balanced social life (Social Activity), and having balanced emotional control (Steadiness) are linked to the increased likelihood of returning to the second year of college for both Hispanic FGCS and Hispanic non-FGCS.

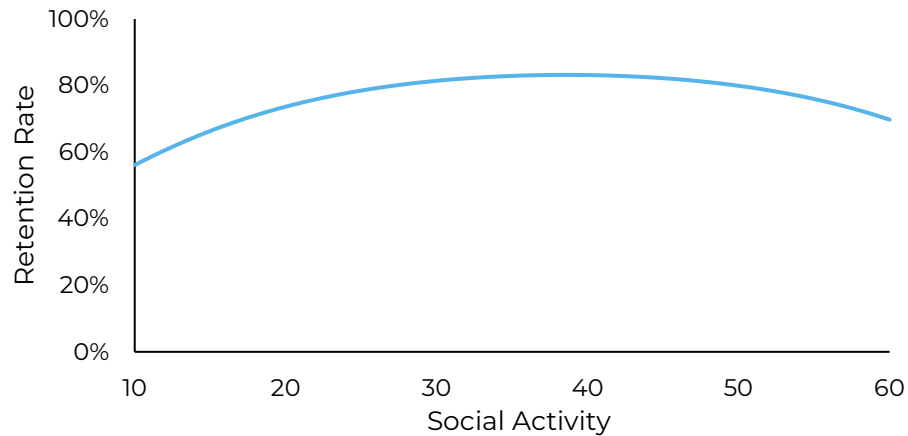


Figure 4. Curvilinear relationship between Social Activity and first-to-second year retention

On-Track Status

Results from the multiple-predictor logistic regression model indicated that being male (this finding is inconsistent with other research),²³ completing homework in high school,²⁴ Academic Discipline,²⁵ and Steadiness²⁶ significantly predicted on-track status. Neither FGCS status nor any type of resource use significantly predicted on-track status, after statistically controlling for the other predictors in the model. Similar to first-to-second year retention, Hispanic students who exhibited too little or too much Steadiness were less likely to be on track than Hispanic students who exhibited a moderate amount of Steadiness (see Figure 5). In sum, these findings suggest that having a history of completing homework and having SEL skills (Academic Discipline and Steadiness) are associated with being more likely to accumulate 24 or more credit hours after the first year for both Hispanic FGCS and Hispanic non-FGCS.

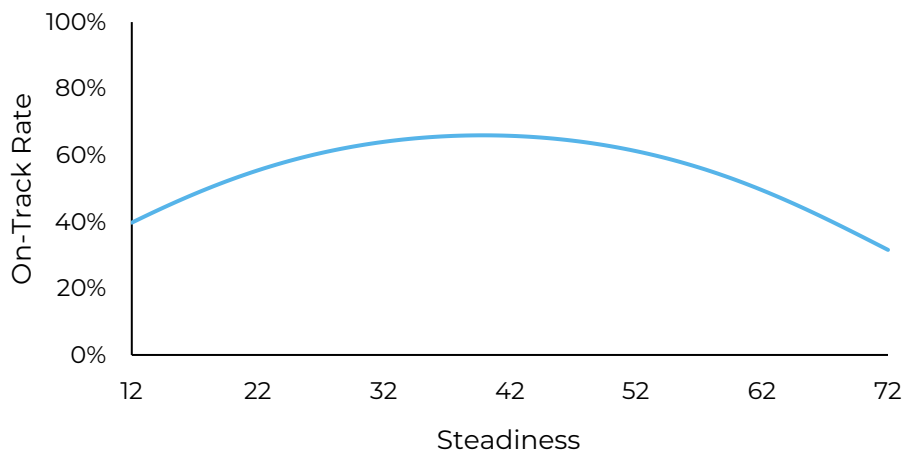


Figure 5. Curvilinear relationship between Steadiness and on-track rate

Conclusion and Implications

In this study, we found that Hispanic FGCS typically performed worse on first-year academic outcomes than Hispanic non-FGCS. Specifically, Hispanic FGCS had lower first-year GPAs and were less likely to be on-track in terms of credit accumulation than Hispanic non-FGCS. However, the FGCS differences disappeared after controlling for other salient factors (e.g., academic resource use, SEL skills), which suggests that these factors mediate the effects of FGCS.

Using a multiple-predictor model, we also found that several SEL skills predicted an increased likelihood of student success. For example, Academic Discipline was predictive of first-year GPA, first-to-second year retention, and on-track status; a moderate amount of Steadiness was related to first-to-second year retention and on-track status; and a moderate amount of Social Activity was related to first-to-second year retention. This suggests that, even when typical academic measures (HSGPA and ACT Composite score) are controlled for, SEL skills pertaining to persistence, emotional control, and sociability are equally predictive of first-year academic success for both Hispanic FGCS and Hispanic non-FGCS. These findings are similar to those of Robbins et al. (2006), indicating that these patterns exist for all students, not just for Hispanic students.²⁷ Regarding resource utilization, we found that academic resource use was predictive of first-year GPA but none of the other outcomes of interest. Neither wellness nor career resource use were predictive of any of the first-year outcomes.

The overall findings from this study highlight the importance of dedicating additional resources to Hispanic FGCS to ensure that they find success in school by boosting academic resource use on campus and assessing for and encouraging effective levels of SEL skills. While neither academic resource use nor SEL skills differentially benefited Hispanic FGCS over Hispanic non-FGCS, they were still related to positive first-year outcomes. In applied settings, administrators can work with students to enhance their Academic Discipline while ensuring that students find a healthy balance in both their Social Activity and Steadiness. For example, in the case of Social Activity, administrators could work with students to participate in at least one campus club or activity so as to promote engagement with the campus community and encourage the development of a local social support network. In contrast, administrators could also work with students who are involved in many social activities (likely informal social gatherings) and help them to balance their participation in these activities with their academic goals and priorities. Overall, these skills might be readily integrated into academic curricula and first-year experience programming to encourage the well-rounded development of students who will soon be entering the workforce. Limitations of this study are that the findings were not experimental in nature and that they were only derived from students at a single postsecondary institution.

Appendix A

ACT Engage Scales

Academic Discipline: The amount of effort put into schoolwork and the degree to which the student is perceived as hardworking and conscientious.

Academic Self-Confidence: The extent to which the student believes he or she can perform well in school.

Commitment to College: The student's commitment to staying in college and getting a degree.

Communication Skills: How attentive the student is to others' feelings and how flexible the student is in resolving conflict with others.

General Determination: The extent to which the student strives to follow through on commitments and obligations.

Goal Striving: The strength of the student's efforts to achieve objectives and end goals.

Social Activity: How comfortable the student feels meeting and interacting with people.

Social Connection: The student's feelings of connection and involvement with the college/school community.

Steadiness: The student's responses to strong feelings and how he or she manages those feelings.

Study Skills: The extent to which the student believes he or she knows how to assess an academic problem, organize a solution, and successfully complete academic assignments.

Appendix B

Resource Use Categories

A group of students (74% of the sample) were administered a survey during the spring semester (February, 2013) where they answered questions regarding their use of 17 on-campus resources. For the analysis, these resources were grouped into three categories (academic, career, and wellness), confirmed by a confirmatory factor analysis. Each resource category was split into three levels: low use

(below the 25th percentile), moderate use (between the 25th and 75th percentile), and high use (above the 75th percentile). Therefore, what was considered low use for one category was different for another, depending on how frequently it was used by students (see Table 1). This information is defined below:

Academic: Campus-sponsored tutoring, campus-sponsored study groups, scheduled meetings with teachers and professors, writing lab, math lab, formal mentoring organized through college, and academic advising.

Career: Job placement, student employment services, career planning services, and financial aid services.

Wellness: Personal counseling services, student health and wellness services, campus sponsored social activities, campus recreational center, cultural center, and student center or union.

Table 1. Definitions of Low, Moderate, and High Use for Each Resource Category

Category	Low Use	Moderate Use	High Use
Academic	0-13	14-23	24 or more
Career	0-2	3-6	7 or more
Wellness	0-7	8-12	13 or more

Notes

1. Robbins, S. B., Allen, J., Casillas, A., Peterson, C. H., and Le, H., "Unraveling the Differential Effects of Motivational and Skills, Social, and Self-Management Measures from Traditional Predictors of College Outcomes." *Journal of Educational Psychology* 98, no. 3 (2006): 598–616. Retrieved from <https://doi.org/10.1037/0022-0663.98.3.598>.
2. Sanchez, E. I., *Differential Effects of Using ACT® College Readiness Assessment Scores and High School GPA to Predict First-Year College GPA among Racial/Ethnic, Gender, and Income Groups*. (Iowa City, IA: ACT, 2013).
Radunzel, J., and Noble, J., *Differential Effects on Student Demographic Groups of Using ACT® College Readiness Assessment Composite Score, ACT Benchmarks, and High School Grade Point Average for Predicting Long-Term College Success through Degree Completion*. (Iowa City, IA: ACT, 2013).
3. Balemian, K., and Feng, J., "First Generation Students: College Aspirations, Preparedness and Challenges." (presentation, College Board AP Annual Conference, Las Vegas, NV, July 19, 2013).
4. Higher Education Act of 1965, 1998 Higher Education Act Amendments, Subpart 2—Federal Early Outreach and Student Services Programs, CHAPTER 1—FEDERAL TRIO PROGRAMS SEC. 402A, 20 U.S.C. § 1070a–11 (1998).
5. ACT, *Development and Validation of ACT Engage: Technical Manual*. (Iowa City, IA: ACT, 2016).

6. Peterson, C. H., Casillas, A., and Robbins, S. B., "The Student Readiness Inventory and the Big Five: Examining Social Desirability and College Academic Performance." *Personality and Individual Differences* 41, no. 4 (2016): 663–73. Retrieved from <https://doi.org/10.1016/j.paid.2006.03.006>.
7. Robbins, S. B., Allen, J., Casillas, A., Peterson, C. H., & Le, H., "Unraveling the Differential Effects."
8. Tinto, V., *Leaving College: Rethinking the Causes and Cures of Student Attrition*. (Chicago, IL: University of Chicago Press, 1987).
9. Robbins, S. B., Allen, J., Casillas, A., Akamigbo, A., Saltonstall, M., Campbell, R., Mahoney, E., and Gore, P., "Associations of Resource and Service Utilization, Risk Level, and College Outcomes." *Research in Higher Education* 50, no. 1 (2009): 101–18. Retrieved from <https://doi.org/10.1007/s11162-008-9106-7>
10. Gender, annual family income, financial aid status, and language fluency.
11. HSGPA, ACT Composite score, and high school homework completion.
12. This represented 82% of the 2012 first-time entering first-year cohort. These students had completed the ACT Engage assessment and had ACT or SAT scores available. Resource use was available for 510 students (74% of the sample). In the sample of 685 students, 48 students did not have FGCS status information available, making the effective sample size 637. In the sample of 510 students, four students did not have FGCS status information, making the effective sample size 506.
13. $p < .0001$
14. $p = .0097$
15. $p = .2677$
16. $p < .0001$
17. $p = .0404$
18. $p = .0149$
19. $p = .0593$
20. $p = .0009$
21. $p = .0425$
22. $p = .0283$

23. $p = .0013$

This finding is atypical as females tend to outperform their male counterparts in credits earned and several other indicators of college success (see Conger, D., and Long, M. C., "Why Are Men Falling Behind? Gender Gaps in College Performance and Persistence." *The ANNALS of the American Academy of Political and Social Science* 627, no. 1 (2010): 184–214. Retrieved from <https://doi.org/10.1177/0002716209348751>.)

24. $p = .0174$

25. $p < .0001$

26. $p = .0346$

27. Robbins, S. B., Allen, J., Casillas, A, Peterson, C. H., and Le, H. "Unraveling the Differential Effects."

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