



THE CORELLA & BERTRAM F.  
BONNER FOUNDATION

## **BONNER DATA STUDY: KEY PROGRESSION OUTCOMES INCLUDING COMPLETION**

### **Context**

The Bonner Foundation is currently undertaking several initiatives related to assessment and evaluation. These are designed to strategically help the Foundation to (1) ensure program quality; (2) document the impacts on student learning, persistence, and leadership development; (3) better understand long range post-graduate outcomes including on related dimensions such as flourishing, well-being, civic participation, and careers; (4) quantify and better explain the value of the program to broader institutional mission and aims; and (5) begin to quantify and describe the impact of the program and campus-community partnerships on community change.

### **Bonner Data Study Approach**

The Data Study sought to leverage data that institutions already collect and report (to IPEDS) to conduct analysis about the differences between students involved in the Bonner Program and other students who do not participate in the program. This analysis could provide a “proof in concept” and lay the groundwork for more extensive analyses in the future. The study aimed to further our understanding of a number of important questions posited by many over the years including our program staff, faculty, students, our presidents and other administrators, national and community-based partners, and Board of Trustees:

- **What is the difference between Bonners and other students (non-Bonners) for key progression outcomes such as term-based GPA, attempted and earned hours, and retention?**
- **What key differences exist among a subgroup of schools for time to degree, degree GPA, and graduation attainment?**
- **What key differences exist for key progression and graduation outcomes by group (income level, key pre-college aptitude ranges, socio-demographic factors, etc) and do we see variances for these groups between Bonners and other students?**

Seven institutions – Berry College, College of Saint Benedict, Guilford College, Stetson University, The College of New Jersey, Ursinus College, and Wofford College – provided data

for the pilot. The Foundation's hope is to learn from this first implementation in order to carry out the same analysis with other colleges and universities in the network.

## **Bonner Data Study Methodology**

We were able to obtain data from the schools that specifically allowed us to assess differences between Bonners and other non-participating students for the following:

- First through Fourth Term GPAs obtained
- First through Fourth Term Attempted and Earned Hours
- 1st, 2nd and 3rd Term retention and attrition outcomes
- Degree attainment: Degree Attainment within 150% of time (y/n)
- Degree cumulative GPA

Given available data and scope, the research team sought to answer the following key questions:

1. Do Bonner Scholars and/or Bonner Leaders perform at a level congruent or above the general population of the institution (“non-Bonners”)? Typically, the goal of an intervention/access program is integration.
2. The secondary focus of assessment is whether students in the program who come from groups historically under-represented (racial/ethnic subgroups) in higher education and/or from lower socio-economic levels (e.g., Pell eligible) perform at a level congruent or above like-students in the general population or students who do not come from these groups within the program or the campus broadly?

## **Findings**

For the first-term GPA variable, Bonner program participation overall (all schools combined) exhibited a marginal significance ( $p < .06$ ) level for first term GPA mean as compared to those not participating. This finding is very significant given 5 of the 7 Bonner programs (all of which illustrated an “access” orientation) exhibited statistically significant and much lower baseline variances from the non-Bonners:

- Higher financial need as measured by Adjusted Gross Income (“AGI”) and Estimated Family Contribution (“EFC”);
- Subgroup membership (Pell, racial/ethnic minorities) associated with progression risk (5 of 7); and
- Lower scores on pre-college measures (SAT, ACT, HSGPA) associated with the effective prediction of progression outcomes (4 of 7 schools).

Given these baselines for key covariates such as pre-college SAT and ACT scores, High School GPA, and financial need, the “integration” of Bonner students and the similar performance on the first term GPA is a very important finding. The first term GPA is often the most important post-matriculation indicator of retention and graduation along with first term earned hours.

This extraordinary finding for the many Bonner students coming to college with lower baseline scores and financial need likely speaks to the extra support, advising, and peer influence during the first term for Bonner program participants. For the two programs classified as leadership-oriented (Ursinus College and College of Saint Benedict), the Bonners in these programs exceeded the first term GPA performance of those not participating in the program at a threshold that was statistically significant. Additionally, findings for the subsequent term GPAs (2nd through 4th term) were similar for Bonners. Again, this suggests that the students performed within the same levels as their counterparts at those schools with an access-oriented program mission and Bonner performance extended beyond their counterparts for the term-based GPA at those schools whose programs were primarily leadership-oriented.

Another impressive finding of the study was for third-term (1st year) retention. The Bonner Program participants exhibited mean overall differences for the variable (i.e., higher overall retention rates) at a high level of significance ( $p < .001$ ) with and without controlling for key covariates (e.g., SAT Composite, ACT). Although term-based GPAs are similar as noted above which is a significant finding for those programs that are access-oriented, the student’s support (financial, peer, faculty, advising) and academic and social integration likely strengthens their ability to persist above classmates and why this finding exhibits a stronger relationship as measured in correlations and via mean differences. Additionally, findings related to subgroups were not statistically significant, Bonner Programs generally exhibited descriptively higher rates for 3rd term retention for these subgroups (e.g., African American, Minority, Pell) as compared to non-Bonner like-subgroups across programs.

Pertaining to graduation, Bonner Program participation exhibited positive and statistically significant correlations and mean differences ( $p < .001$ ) for degree attainment for all schools when the sample was combined and at Berry College, Guilford College, and Stetson University specifically. However, the sample overall and at Wofford College reflect a negative correlation with degree GPA ( $< .001$ ). This means that program participation (sample combined) has a statistically meaningful relationship at a magnitude that is stronger and statistically meaningful for degree attainment.

However, Bonner program participants generally show a negative (lower) relationship to the outcome degree GPA. There could be multiple reasons for this such as higher levels of co-curricular engagement, baseline pre-college measures (e.g., test scores, high school GPA), and financial challenges indicating resulting in more ground to be made up once in college as compared to other students, but significant support structures (financial, peer, academic) help support the student in obtaining a degree at a rate that is higher than non-program participants.

As for key subgroups (Pell, minority, etc), we found some school-based differences (e.g., Bonner minority students as compared to other minority students at the campus), but overall there were not significant mean differences.

## **Summary**

The Bonner Scholar Program participation within this sample of schools appears to promote integration with the campus in terms of its progression outcomes related to both term-based and degree GPA, retention, and degree attainment. Specifically, Bonners perform at levels similar to the general population or some cases (leadership-oriented schools) exceed these levels with one campus exception. Key subgroups (Minority, Pell, etc) also perform at levels that exceed like-groups in non-Bonner populations (descriptively).

As noted, the majority of programs reflect distributions and means similar to the general population (i.e., non-Bonners) and this finding is particularly significant given 5 of the 7 Bonner programs exhibited statistically significant baseline variances from the general population:

- Lower economic standing as measured by AGI and EFC, and
- Subgroup membership (Pell, racial/ethnic minorities) associated with progression risk. Additionally, 4 of the 7 Bonner Program participants exhibited lower scores on pre-college measures (SAT, ACT, HSGPA) associated with the effective prediction of progression outcomes.

The Bonner Programs that admit students with higher pre-college academic measures such as GPA and test score also appear to sustain and even augment these gains, with students graduating with higher grades and at higher rates than their peers. Both program orientations, thus, show positive findings, although the Bonner Foundation encourages programs to maintain an access orientation that admits significant proportions of higher financial need students. Additional analyses can be pursued that include a broader array of institutions (especially Bonner Scholar Programs) as well as campus-specific review to further assess both program and subgroup differences for key progression outcomes.