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Factors Affecting the Success of Robinson Scholars

Capstone Project
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Amanda Michele Dunn

Executive Summary

The Robinson Scholars Program was created by the University of Kentucky Board of Trustees as an effort to combat historically high rates of poverty and low rates of educational attainment in Kentucky's Appalachian region. The first class was selected in 1997 and was part of a broader effort to improve community and economic development in eastern Kentucky.

The Robinson Scholars Program provides financial and academic support for potential first-generation college students from the program's 29-county service area. Scholars are selected in the eighth grade and are provided with enrichment opportunities and college preparation activities throughout their high school careers. Once they enter college, they are provided with academic support and advising services and are required to attend official Robinson Scholar activities and participate in the program's service projects.

The mission of the program is to help the selected students obtain bachelor's degrees, so that they may add to the human capital of their own communities. Though the program provides students with a considerable amount of support, the road to a bachelor's degree often proves to be difficult for these students. A number of scholars are placed on probation from the program during their time at the university and some are even dismissed from the program entirely.

The purpose of this study is to analyze the relationship between student characteristics and the likelihood of a student being placed on probation or being dismissed from the program. The following research questions were investigated:

- Does a student's gender make them more or less likely to go on probation or be dismissed from the Robinson Scholars Program?
- Do ACT scores or amount of funding received from the program influence a student's probability of probation or dismissal?
- Are there certain counties in the service area that are more likely to produce students who go on probation or are dismissed?
- Are students more likely to go on probation during certain semesters in their collegiate careers?

To answer these questions, a panel data set from the entire population of Robinson Scholars was obtained from the program's administration. Regression equations were estimated to determine the relationship between various student characteristics and the dependent variables of likelihood to be placed on probation and likelihood to be dismissed.

The results showed that gender and composite ACT score significantly affect a student's likelihood of being placed on probation. Additionally, college experience was found to significantly affect a student's probability of being placed on probation. There were also four counties of origin which significantly increase a student's likelihood of being placed on probation. The regression equation for dismissal did not explain much of the variance in student likelihood of being dismissed from the program, suggesting that future research should consider additional factors to explain academic performance among Robinson Scholars.

Background

Appalachia remains, for many Americans, a symbol of poverty and underdevelopment in the midst of the nation's global power and prosperity. Unfortunately for Appalachians, the poverty is not a symbol, but a stark reality. Appalachia, as defined by the Appalachian Regional Commission, encompasses 410 counties in 13 states – Alabama, Georgia, Mississippi, South Carolina, North Carolina, Tennessee, Kentucky, Virginia, West Virginia, Ohio, Maryland, Pennsylvania, and New York. It is a diverse region both culturally and economically. Central Appalachia is the portion of the region most Americans think of when they think of Appalachia (Thorn 2004).

Central Appalachia is the subregion where residents are most likely to be burdened with the deepest poverty. Much of the area's problems are created due to its remoteness from urban growth areas. Many counties in Central Appalachia have been designated as "persistently poor" as long as statistics have been available. The U.S. Economic Research Service defines counties as "persistently poor" if 20 percent or more of their populations have been living in poverty for the last 30 years. Kentucky has 43 counties which meet that definition and 29 are in the Robinson Scholars 30-county service area. The percentage of families living in poverty in Central Appalachia is roughly double that of the United States, as a whole. The U.S. poverty rate is about 12.5 percent, according to the U.S. Census Bureau. Additionally, Central Appalachian counties that are classified as rural, such as almost every eastern Kentucky county, are the most likely of all to be classified as "distressed" (Thorn 2004).

The Robinson Scholars Program was created by the University of Kentucky Board of Trustees to help address the educational issues facing the residents of Kentucky's central

Appalachian counties. Coal and timber royalties from the UK-owned portion of the Robinson Forest were set aside to fund educational and economic development opportunities for eastern Kentucky. A large portion of those royalties went toward scholarships for students from 29 of those eastern Kentucky counties with historically low college attendance and, in 1997, the Robinson Scholars Program was created.

Robinson Scholars are first-generation college students, meaning that neither their parents nor grandparents have earned a bachelor's degree by the time of their selection. They come from one of the 29 counties in the service region and are selected in the eighth grade. Students receive support, enrichment opportunities, and college preparation services throughout their high school years in order to prepare them for success at the university level. Once a student begins their studies at the University of Kentucky, they receive scholarship funding, as well as academic support and advising.

Though the Robinson Scholars Program provides its students with a great deal of support in their transition to college, it can still be a difficult journey for the Scholars. When they are accepted into the program, Robinson Scholars sign an agreement which outlines what is required of them to remain in good standing. Robinson Scholars must maintain a cumulative 2.5 G.P.A. each semester and must also attend required events and participate in the mandatory Robinson Scholars service programs.

Students who do not meet these requirements may be placed on probation. Probation is used as a warning to students that they need to work harder to meet their responsibilities to the program. There is a designation of academic probation for students who do not meet the G.P.A.

standards set by the program and there is a designation of administrative probation for students who do not meet the attendance and service requirements of the program.

When a student's cumulative G.P.A. slips below a 2.5, they are placed on probation. They then have one semester to bring their grades up, or they face dismissal from the program. Dismissals can be appealed to the Robinson Scholars Appeals Board, and the board has the authority to reinstate or place conditions on reinstatement.

To remain in good standing and off of administrative probation, students have several conditions that they must meet. All Robinson Scholars must attend a "start of the semester meeting", any program-wide workshops, and two Individual Support Plan meetings. They must also complete a minimum of ten documented community service hours.

Freshmen have the most stringent administrative requirements. Freshmen must participate in UK FUSION, a campus-wide, day-long community service event. Freshman scholars must maintain Student Support Services membership and attend all Robinson Scholar Program UK 101 class meetings. They must document a minimum of five study hours at The Study weekly and are expected to study a minimum of fifteen hours on a weekly basis. Freshmen must participate in monthly Peer Advisor Program meetings.

Sophomore Robinson Scholars have similar, but slightly less stringent requirements than the freshmen. They must maintain Student Support Services membership and keep the same number of study hours as the freshmen. Unlike freshmen, they must register for and attend all Robinson Scholar Program UK 100 class meetings.

Junior Robinson Scholars must continue to maintain their Student Support Services membership. They must begin to work on securing their mandatory internship, practicum, or co-

op of at least twenty hours. Juniors must also create a professional resume and submit it to their Robinson Scholars Program scholarship advisor. Seniors simply have to meet the four conditions all Robinson Scholars must meet, ensure that they've complete their internship, practicum, or co-op, and submit and updated resume to their scholarship advisor.

Research Question

Unfortunately, many Robinson Scholars are placed on probation from the program while they are enrolled at the University of Kentucky. Many factors influence student success and educational attainment. It is possible that there is a relationship between various student characteristics and their likelihood of being placed on probation.

The purpose of this study is to analyze the relationship between student characteristics and likelihood of being placed on probation or being dismissed from the Robinson Scholars Program using data obtained directly from program administration. The research questions that the study sought to answer were:

- Does a student's gender make them more or less likely to go on probation or be dismissed from the Robinson Scholars Program?
- Do ACT scores or amount of funding received from the program influence a student's probability of probation or dismissal?
- Are there certain counties in the service area that are more likely to produce students who go on probation or are dismissed?
- Are students more likely to go on probation during certain semesters in the collegiate careers?

Literature Review

Duncan (1996) examined the phenomenon of persistent poverty in rural communities. She found that in many rural communities, there is a “micro social system” where there is representation from all the relevant social strata and organizations. The class system is visible and there is a tangible sense of social stratification in everyday interactions. Rural social standing is maintained through memory and history and residents bear the burden of the perception of their family members from previous generations. These expectations can constrain available opportunities and, subsequently, diminish the aspirations of young people. Young people often end up following in the footsteps of their family members, causing them to repeat the cycle of poverty.

Historically, Appalachia, as well as much of the rural south, has lagged behind the rest of the country in the field of education. At the start of the public school movement, Appalachian residents distrusted the particular version of knowledge that public schools were teaching their children. Because of the mountainous terrain and the remoteness of the communities, it was difficult to bring public schooling to the region. Local work in low-skilled, low-wage extractive industries undermined the need for specialized training (Shaw 2004).

Despite its history, Appalachia is making strides in education. Between 1990 and 2000, the percentage of residents with a high school degree or better increased by 11 percent in central Appalachia. The gains in college degree attainment have not been as drastic. In the same time period, the percentage of residents with a college degree only increased by 2 percent in central Appalachia. The gap in higher education attainment between Appalachia and the rest of the United States is actually widening (Shaw 2004). According to the U.S. Census Bureau, the

percentage of residents with bachelor's degrees in most of the Robinson Scholar service area counties is less than 10 percent, compared 17.1 percent in all of Kentucky and 24.4 percent nationally.

Previous research has shown that the achievement gap between low-income students and those with higher income begins at conception. Student ability depends largely on the historical social and economic characteristics of his or her family. There are cultural and social class differences which lead to differences in childrearing and role modeling, which shape children's academic abilities and their aspirations. Low-income parents are less likely to verbally interact with their children and read to them, two activities that help prepare children for the rigors of school. Low-income children also tend to suffer from more health problems than their peers, which is negatively correlated with academic achievement (Rothstein 2004).

Much of the literature in education has focused on "neighborhood effects" in urban communities, as these effects were theorized to be less influential in areas with low population density. The work of Pinderhughes, Nix, Foster, and Jones (2001) disputes this idea by showing that relationships between community disadvantage and parenting practices were not moderated by urban versus rural residence.

Brown, Copeland, Costello, Erkanli, and Worthman (2009) looked at the impact of these "neighborhood effects" on educational goal setting, priorities, and educational attainment in a rural setting. This study analyzed community poverty and average educational attainment as they were related to the educational goals and attainment patterns of 200 white youth living in the Appalachian mountains of western North Carolina using the Life Trajectory Inventory for Youth (LTI-Y), an ethnographically-based instrument which examines educational priorities and

goal-setting as well as outcomes. The results for exposure to family poverty and community poverty were very similar and both were statistically significant. Participants with higher exposure to poverty reported lower educational attainment. Participants who had family members who graduated from college were much more likely to have a goal of graduating college themselves. Additionally, community education level had a strong association with educational goal setting among males, explaining 29 percent of the variance.

Other studies have also confirmed that parents' education greatly influences a student's academic preparation for college. Choy (2001) found that 49 percent of the 1992 high school graduates whose parents never attended college were only marginally qualified or were not qualified to attend college when they finished high school, compared to 15 percent of those who had at least one parent with a bachelor's degree. The study also found that high school math course taking is associated with eventual college enrollment and that high school math course taking is also highly related to parents' education.

Potential first-generation college students often have a difficult time with the college admissions process. They typically receive less help from their parents with college applications and are not more likely to receive help from their high schools (Choy 2001). They also are likely to have limited access to information about the college experience, so they often aren't sure of what to expect from the experience (Thayer 2000). Specifically, low-income and first-generation students often do not understand the steps necessary to reach higher education, including how to finance their college education, how to complete basic admissions procedures, and how to make connections between career goals and education requirements. Many students are receiving information about the college admissions process from the internet, but the internet is not always accessible in rural or low-income communities (Vargas 2004).

Once first-generation college students reach college, they still face many obstacles that can prevent them from obtaining a degree. They typically lack knowledge of the skills necessary to succeed in a college setting, including time management, budgeting and finances, and the bureaucratic operations of institutions of higher education. Students may not be prepared for the academic expectations and they often lack the support needed to thrive (Thayer 2000). As a result, it can often be difficult to retain first-generation college students. At four-year institutions, the retention rate for first-generation college students is 72 percent for the first year and 51 percent for the second year compared to 76 percent and 60 percent for non-first generation college students, according to the National Center for Education Statistics.

There are some pre-college intervention efforts that have been shown to help first-generation college students succeed. Effective programs help students understand the importance of support structures for their own college success. They also provide exposure to college campuses and college-level work as part of a college prep program, allowing students to picture themselves succeeding in college. These programs and services can actually counter negative school, community, and family influences to develop students' abilities, attitudes, and beliefs about college so that they may be successful (Gullat 2003).

Studies show that students are most likely to leave college within their first four semesters, so early intervention and retention strategies are key once students are enrolled in college. Successful college intervention programs focus on the student-environment interaction within the college. These multifaceted strategies help students develop a sense of social and academic competence. Additionally, programs that are successful in retaining first-generation and low-income students can be successful for the general student population (Thayer 2000).

In order to estimate the relationship between inputs, such as neighborhood effects and prior academic achievement, and outputs, such as educational attainment, the use of an educational production function becomes useful. These production functions illustrate the maximum level of output possible with the addition of certain inputs. One such production function is the value-added achievement model. This model takes into account that current achievement has been influenced by multiple inputs from the current time-frame, as well as the past (Hanushek 1979).

Literature shows that there are certain differences in college enrollment and college success relative to gender. Goldin, Katz, and Kuziemko (2006) show that women's college enrollment has increased relative to men's since World War II. Instead of stopping when equality was reached in 1980, the women's greater rate of increase continued and, in 2003, there were 1.35 females for every male who graduated from a four-year institution. Their analysis of results from three surveys, including the National Longitudinal Survey (NLS), suggest that this is due to high school girls' increased success in high school and preparation for college. In the 1992 NLS, the median girl had a high school rank of 16 percentile points above the median boy. Additionally, as time has progressed, girls have closed the historic gap of high school math and science courses taken, while maintaining their advantage in number of foreign language courses taken.

Data and Methodology

Data

Panel data for the Robinson Scholars population were included in the study. This included data from the inception of the program in 1997 until the Fall 2009 semester. These data were obtained directly from the Robinson Scholars Program office. The data were kept

inconsistently, and though there were 606 student entries, complete information for all the variables in the analysis was only available for 380 students.

The two dependent variables that were analyzed in the study were student probation (either academic or administrative) and student dismissal. It is assumed that any students who were dropped from the analysis due to insufficient data were randomly distributed among students who did not go on probation, students who went on probation (both types), and students who were dismissed from the program.

The explanatory variables that were included in the analysis were student gender, ACT exam score, ACT subject test scores (English, Math, Reading, and Science), Robinson Scholar Program funding amount, county of origin, and semester of the student's college career. These include all the information that was given for each student, except college G.P.A. College G.P.A. is a variable which influences whether or not a student is placed on probation, so it is an endogenous variable. The amount of Robinson Scholar funding received is dependent on the amount of federal funding a student receives. The lower the student's familial income, the higher the federal grant amount, so those students with lower income backgrounds will actually receive less Robinson Scholar Program funding to cover their academic costs. Therefore, a higher Robinson Scholar funding denotes a higher family income. Semester effects of semesters 1-4 were compared to the rest of the semesters of a student's career.

Before moving to the multivariate analysis, I first provide some descriptive statistics for the study sample. Figures 1 and 2 show the number of students enrolled in the Robinson Scholars program by semester, as well as the number of students on both types of probation each semester. Of the 380 students in the sample, only 93 students made it to the eighth semester, the

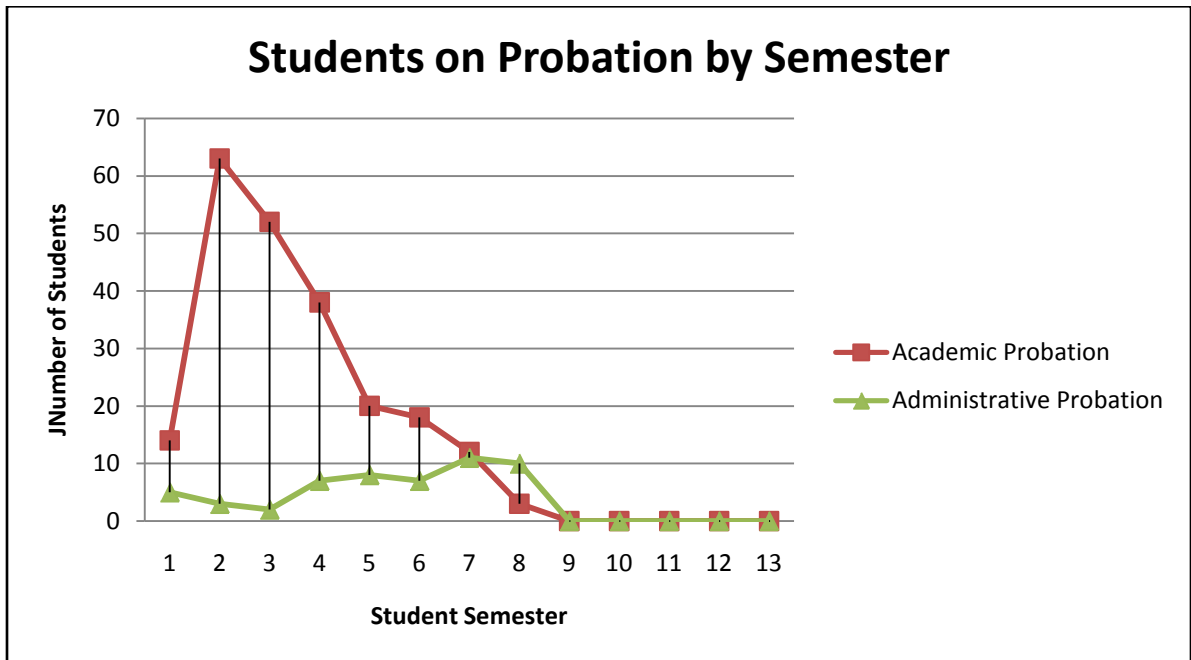
typical last semester before graduation. Assuming this sample is representative of Robinson Scholars more generally, this means that only 25.7% of the Robinson Scholars are remaining in the program long enough to potentially obtain a bachelor’s degree, though some may have graduated early or transferred to another institution. According to the University of Kentucky Office of Institutional Research, the percentage of students who remain at UK from their first fall semester to their fourth is 65.4 percent.

Figure 1 also shows that 23.8% of Robinson Scholars are placed on academic probation during their second semester. This is a very large number, which decreases slightly over the next couple of semesters and then levels off. The percentage of students placed on administrative probation actually increases over the course of the students’ four years at the university.

Figure 1

Student Semester	No. of Students	Probation Type				Total
		Academic		Administrative		
1	361	14	3.9%	5	1.4%	380
2	265	63	23.8%	3	1.1%	331
3	250	52	20.8%	2	0.8%	304
4	227	38	16.7%	7	3.1%	272
5	200	20	10.0%	8	4.0%	228
6	165	18	10.9%	7	4.2%	190
7	136	12	8.8%	11	8.1%	159
8	93	3	3.2%	10	10.8%	106
9	43	0	0.0%	0	0.0%	43
10	26	0	0.0%	0	0.0%	26
11	4	0	0.0%	0	0.0%	4
12	1	0	0.0%	0	0.0%	1
13	1	0	0.0%	0	0.0%	1
Total	1,772	220		53		2,045

Figure 2



Methodology

To analyze the effect of the various student characteristics on student likelihood to be placed on probation or to be dismissed from the Robinson Scholars Program, I conducted regression analysis, with both probation and dismissal as dependent variables. Each regression model included the following explanatory variables: gender, ACT composite score, ACT subject area test score, Robinson Scholar funding amount, county of origin, and semester within the student’s career.

I estimated duration models to analyze the events or “failures” of being placed on probation or dismissed from the program in relation to time. This was to answer the questions of: what is the fraction of the Robinson Scholar population which remain in good standing after each semester? At what rate do they “fail”? Which student characteristics increase or decrease a student’s odds of “failure”?

Limitations

The most major limitation of the study is a considerable amount of missing data. Though there were entries for 606 Robinson Scholars, there was only enough data on 380 of them to include them in the analysis. Additionally, there was no data available on the students' high school G.P.A. or fields of study.

Results

The regression equation for likelihood of probation included 1,808 individual panel observations from the population of 380 students. The F was 5.54 and the probability of $>F$ was 0.00. The R-squared for the equation was 0.11. The regression equation for likelihood of dismissal also included an N of 1,808. The F was 1.56 and the probability $>F$ was 0.01. The R-squared for that equation was 0.03, which means that the regression equation for the likelihood of student dismissal explained very little of the variance.

The results of the probation regression equation are shown in Figure 3. The analysis of the regression equation for likelihood of a student going on probation showed significance for several of the explanatory variables included in the study. Being female and having a higher ACT score are both negatively and significantly related to being placed on probation from the Robinson Scholars Program. Being female had the highest negative coefficient of -0.05, while having a higher ACT score had a coefficient of -0.03. This is consistent with the literature on student collegiate success.

Figure 3

Probation Regression Equation						
Variable	Coefficient	Standard Error	t	P	95% Con. Interval	
Female	-0.0546675	0.0162513	-3.36	0.001	-0.0865412	-0.0227937
ACT	-0.0266553	0.0127681	-2.09	0.037	-0.0516975	-0.0016132
ACT - English	0.0049386	0.0044578	1.11	0.268	-0.0038045	0.0136817
ACT - Math	0.0023221	0.0038837	0.6	0.55	-0.005295	0.0099392
ACT - Reading	0.0019371	0.003853	0.5	0.615	-0.0056197	0.009494
ACT - Science	0.0025955	0.0042615	0.61	0.543	-0.0057626	0.0109536
RSP Funding	-0.00048	0.0046625	-0.1	0.918	-0.0096246	0.0086647
Bell	0.0530453	0.0595224	0.89	0.373	-0.0636964	0.169787
Breathitt	0.0606342	0.0552169	1.1	0.272	-0.0476631	0.1689315
Carter	0.2580355	0.0591054	4.37	0	0.1421116	0.3739594
Clay	0.0422111	0.0535381	0.79	0.431	-0.0627935	0.1472158
Elliott	0.0872505	0.0594822	1.47	0.143	-0.0294124	0.2039134
Estill	0.1945964	0.0600667	3.24	0.001	0.0767871	0.3124057
Harlan	0.134257	0.0550061	2.44	0.015	0.0263732	0.2421407
Jackson	0.0724108	0.0593804	1.22	0.223	-0.0440524	0.188874
Johnson	0.126319	0.059551	2.12	0.034	0.0095211	0.2431169
Knott	0.0392793	0.0565507	0.69	0.487	-0.0716339	0.1501926
Knox	0.000833	0.0568249	0.01	0.988	-0.1106181	0.1122841
Laurel	0.2232312	0.0578157	3.86	0	0.1098369	0.3366255
Lawrence	0.0475616	0.057599	0.83	0.409	-0.0654076	0.1605309
Lee	0.0433418	0.0576725	0.75	0.452	-0.0697718	0.1564553
Leslie	0.0618737	0.059006	1.05	0.295	-0.0538553	0.1776027
Letcher	0.0924834	0.0552702	1.67	0.094	-0.0159186	0.2008853
Magoffin	0.1164967	0.0578804	2.01	0.044	0.0029754	0.230018
Martin	0.1603747	0.1570132	1.02	0.307	-0.1475764	0.4683259
McCreary	0.0731146	0.060192	1.21	0.225	-0.0449405	0.1911697
Menifee	0.1469717	0.0597945	2.46	0.014	0.0296962	0.2642471
Morgan	0.1211006	0.0612735	1.98	0.048	0.0009243	0.2412768
Owsley	0.0264402	0.0578311	0.46	0.648	-0.0869843	0.1398647
Perry	0.0477965	0.0516791	0.92	0.355	-0.053562	0.149155
Pike	0.1019614	0.0507251	2.01	0.045	0.002474	0.2014489
Powell	0.0614254	0.0527253	1.17	0.244	-0.0419852	0.1648359
Rockcastle	0.2435598	0.0601449	4.05	0	0.1255971	0.3615224
Whitley	0.0611195	0.0545095	1.12	0.262	-0.0457903	0.1680294
Wolfe	0.1497285	0.057613	2.6	0.009	0.0367317	0.2627254
Semester 1	-0.0682919	0.0218375	-3.13	0.002	-0.111122	0.0254617
Semester 2	0.102315	0.0229991	4.45	0	0.0572068	0.1474233
Semester 3	0.0893743	0.0228014	3.92	0	0.0446538	0.1340947
Semester 4	0.0641314	0.0236695	2.71	0.007	0.0177082	0.1105545
Constant	0.4160213	0.0671263	5.41	0	0.2313206	0.4946314

As shown in Figure 3, there were ten counties of origin which were significantly positively correlated with being placed on probation: Carter, Estill, Harlan, Johnson, Laurel, Magoffin, Menifee, Morgan, Pike, and Rockcastle. Their coefficients range from 0.10 for Pike County to 0.26 for Carter County. Interestingly, these do not the counties in the service area which are in the most socioeconomic distress. These ten counties are scattered throughout the service region, instead of being clustered in one area. It does not appear, on the surface, that these ten counties have any distinctive characteristics which would cause their students to have trouble adjusting to college.

The first three semesters of the student's college career are significantly correlated with placement on probation from the program. Being in the first semester of college is negatively correlated with placement on probation, while being in the second and third semesters is positively correlated with being placed on probation. The coefficient for the first semester is -0.0683. The coefficients of the second and third semesters are 0.1023 and 0.0894, respectively.

The analysis of the regression equation for likelihood of student dismissal from the Robinson Scholars Program did not explain much of the variance. The only explanatory variable which was significant was student gender. Females were 2.5% less likely to be dismissed from the program than their male counterparts.

Recommendations

Student success in the first semester of college shows that the program is doing something positive to help Robinson Scholars transition to the university and start off their collegiate careers successfully. The sharp increase in student probation in the second and third semesters would indicate that the program is possibly cutting off their assistance to these

students too early, and not ensuring that the students have fully set the foundation for success in higher education before they let them out on their own. As the literature shows, many first-generation college students enter campus with a lack of understanding of how to succeed in college and a lack of academic preparation, so administrators want to make sure they properly guide those students through the transition and lay the foundation for future post-secondary success.

The number of students who are placed on administrative probation also increases as the students advance in their collegiate careers. Because these are probations caused by infractions such as a failure to attend a required Robinson Scholars event, there should be no reason that they should not be able to meet those obligations, even late in their collegiate careers. It might be advantageous for the Robinson Scholars Program to look into how they keep track of their upperclassmen students and potentially send them more reminders about their required obligations to remain in good standing in the program. First-generation college students often do not understand the bureaucracy and inflexibility of college, so some gentle reminders as to what their responsibilities are could help alleviate some of the problem of administrative probation.

Additionally, it appears that the Robinson Scholars Program is having a difficult time getting its students through four years at the college level. Only 23.8 percent of the scholars are still enrolled by their eighth semester, so most of the students are not remaining in college long enough to obtain a bachelor's degree. Though a low retention rate is typical for first-generation and low-income college students, this means that the program is not yet fulfilling its mission of increasing the education levels among high school graduates in these 29 counties. The Robinson Scholars Program may be getting a considerable number of these students to college, but it is not getting them to walk across the stage after four years.

Since there are ten counties of origin which are more likely to produce students who are placed on probation in the Robinson Scholars Program during their college careers, the program administration might benefit from conducting further research in this area. In some of these counties, such as Carter and Rockcastle, Robinson Scholars are approximately 25% more likely to be placed on probation than Robinson Scholars from the omitted county. This may be due to a variety of factors, but it might help the program to narrow down the reasoning for the discrepancies among counties

It would be beneficial for the Robinson Scholars Program to obtain more complete data on each of its students. The administrative data set used for this study is the complete record held by the program. This data set was missing information on a considerable number of students. It was also missing the information on high school G.P.A. for nearly every student.

References

- Brown, R., Copeland, W.E., Costello, E.J., & Erkanli, A. (2009). Family and Community Influences on Educational Outcomes Among Appalachian Youth. *Journal of Community Psychology, 37* (7), 795-808.
- Choy, S.P. (2001). Students Whose Parents Did Not Go To College: Postsecondary Access, Persistence, and Attainment. *National Center for Education Statistics*.
- Duncan, C.A. (1996). Understanding Persistent Poverty: Social Class Context in Rural Communities. *Rural Sociology, 61* (1), 103-124.
- Goldin, C., Katz, L.F., & Kuziemko, I. (2006). The Homecoming of American College Women: The Reversal of the College Gender Gap. *The Journal of Economic Perspectives, 20* (4), 133-156.
- Gullatt, Y. & Jan, W. (2003). How Do Pre-Collegiate Academic Outreach Programs Impact College-Going Among Underrepresented Students. *Pathways to College Network Clearinghouse*.
- Hanushek, E.A. (1979). Conceptual and Empirical Issues in the Estimation of Educational Production Function. *Journal of Human Resources, 14* (3), 351-388.
- Pinderhughes, E.E., Nix, R., Foster, E.M., & Jones, D. (2001). Parenting in Context: Impact of Neighborhood Poverty, Residential Stability, Public Services, Social Networks, and Danger on Parental Behaviors. *Journal of Marriage and the Family, 63* (4), 941-953.
- Rothstein, R. Class and Schooling. Economic Policy Institute: Columbia University, 2004, chapter 1.

- Shaw, T.C., DeYoung, A.J., & Rademacher, E.W. (2004). Educational Attainment in Appalachia: Growing with the Nation, but Challenges Remain. *Journal of Appalachian Studies*, 10 (3), 307-329.
- Thayer, P.B. (2000). Retention of Students from First Generation and Low Income Backgrounds. *The Journal of the Council for Opportunity in Education*.
- Vargas, J.H. (2004). College Knowledge: Addressing Information Barriers to College. *College Access Services: the Education Resources Institute*.
- Thorn, D., Tickameyer, A., & Thorne, M. (2004). Poverty and Income in Appalachia. *Journal of Appalachian Studies*, 10 (3), 341-357.