

Does Nonprofit Financial Aid Affect Postsecondary
Persistence Rates at Four-Year Public Institutions in the State of Colorado?

Colleen Skates

University of Colorado Denver

School of Public Affairs

April 25, 2013

Table of Contents

Executive Summary4
Background.....5
Organizational Background.....6
Literature Review.....8
 Financial Aid.....8
 Nonprofit Financial Aid.....11
 Nonprofit Characteristics.....13
Methodology.....15
Discussion of Results16
Limitations.....19
Implications and Recommendations20
Conclusion.....23
References25
Appendix A – Definitions29
Appendix B – Variables31
Appendix C – Course Work33

Table of Figures and Tables

Figure 1 Sources of Student Financial Assistance 2011/2012 Academic Year in Colorado. . . .10

Table 1 Retention Rates of Colorado Higher Ed Students Base Year 2006.....17

Table 2 Enrollment by Year by Aid Type17

Table 3 Correlation of Aid Type to Persistence18

Table 4 Students Offered Aid by Year and Enrollment Status.....18

Executive Summary

The Colorado Department of Higher Education is experiencing decreasing levels of funding per student at the postsecondary level. This is problematic because more jobs in the future will require some level of postsecondary education. Nonprofit financial aid could be used more effectively and at a greater level to assist students in their pursuit of higher education, but very little research has been conducted to examine this relationship. To study the potential impact of nonprofit financial aid, data provided by the Colorado Department of Higher Education were analyzed to determine whether or not the nonprofit aid had a significant effect on persistence rates. The results indicate that nonprofit aid is related to persistence for the second and third year of a postsecondary program, but once the nonprofit aid is no longer available, persistence rates fall. This suggests that organizations providing this type of aid should reexamine their policies for the amount and duration of the aid distribution. Suggestions for increasing the pool of nonprofit aid are also discussed.

Background

A report released by the Colorado Department of Higher Education (DHE) in December 2012 found that although student aid funding levels for higher education in the state of Colorado have remained relatively constant over the past four years, there are more students requiring financial assistance, leaving fewer dollars to go around per student¹. Without adequate resources, students do not complete the program in which they are enrolled and do not receive the lifelong benefits that result from postsecondary education such as higher lifetime earnings and socioeconomic status, lower likelihood of unemployment, and higher probability that their children will attend a postsecondary institution, not to mention the benefits that society as a whole would reap (Carnevale, Smith, & Strohl, 2010).

It is estimated that by the year 2018, 61 percent of jobs in the United States will require some sort of postsecondary education (Carnevale, Smith & Strohl, 2010). Given that state funding of higher education per student is down, combined with a greater demand for credentialed workers, there needs to be some sort of mechanism to fill the funding gap. Nonprofit organizations have long been filling the gap in social issues (Weisbrod, 1988; Worth, 2012), and the area of higher education funding is no exception. Organizations such as the nonprofit Boettcher Foundation have been providing four-year full ride scholarships to top high school students since 1952 (Boettcher Foundation, 2011). Smaller nonprofits and community organizations also award scholarships to students each year.

The purpose of this project is to determine if nonprofit organizations that provide financial assistance for postsecondary education are influencing persistence rates in the state of

¹ The terms higher education, postsecondary education and college will be used interchangeably throughout this report and refer to any education beyond high school regardless of program duration.

Colorado, with persistence measured as the number of students who continue in the higher educational system from one year to the next. If a positive relationship is found, the next step will be to suggest ways that nonprofits and government in Colorado can collaborate to create more postsecondary funding opportunities that allow students to complete their programs.

The results can be used by the DHE and nonprofits to work together to advise education funding policy. The report can also be used by nonprofits that provide financial aid for higher education to demonstrate to their supporters that their work has a significant impact.

The report will answer the following questions:

1. Do four-year students who receive financial aid from nonprofit organizations for the purpose of postsecondary education have higher persistence rates than students who do not receive aid from nonprofits?

2. What resources are unique to nonprofit organizations that make them good sources for higher education funding?

3. How can governmental agencies and nonprofit organizations work together to more effectively affect higher education funding?

Organizational Background

The Colorado Department of Higher Education's mission is "...to improve the quality of, ensure the affordability of, and promote access to, post-secondary education for the people of Colorado" (Colorado Department of Higher Education, 2013). Until 2008, the DHE was a part of the Colorado Commission on Higher Education (CCHE) at which time it was made a separate entity in order to clarify the roles of the two groups (Colorado Department of Higher Education, 2013). The DHE coordinates policy and state resources for Colorado's 28 public higher educational institutions. The DHE provides information regarding tuition, fees and eligibility

requirements for Colorado public colleges; sources of higher education funding; and other useful information for students and parents intending to pursue postsecondary education.

The DHE also oversees the Colorado Student Financial Assistance programs. These programs are the College Opportunity Fund (COF), Colorado Need-based Awards, Colorado Work-Study, Dependent Tuition Assistance Program and Colorado National Guard Tuition Assistance Program. Funding for these programs has remained relatively constant over the past four years, but tuition costs are rising, as are the number of students from low and middle-income families requiring aid. Colorado student aid increased 37.25 percent from 2007 through 2012, while the number of students receiving that aid over the same time period increased 87.4 percent (Colorado Department of Higher Education, 2013).

DHE recently revealed a new policy which will restructure how financial aid is distributed in Colorado and will further the goals of access, retention and completion. Much like some nonprofit aid, receipt of state aid will be tied to demonstrating progress towards completion in a timely manner (Kiley, 2013). With limited resources and demand for credentialed workers increasing, the DHE is interested in exploring additional ways to help students with the funding and completion of their postsecondary education without straining state budgets.

Literature Review

Financial Aid

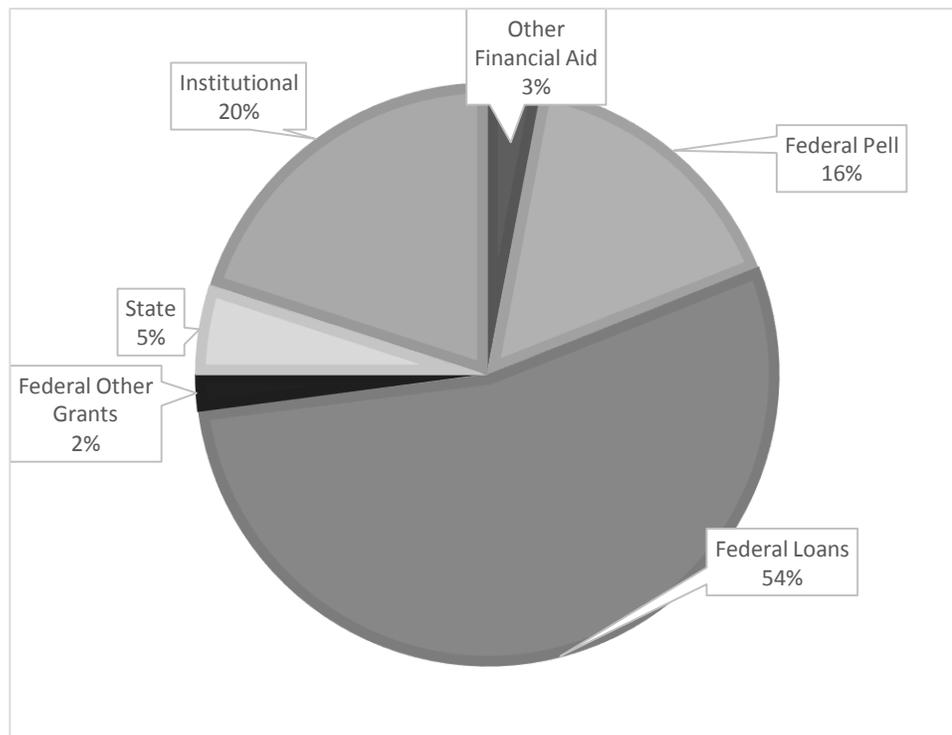
Funding for college typically comes from one of a combination of four sources: federal grants and loans, state grants, institutional grants and loans, and nonprofit/private grants and loans. Figure 1 illustrates the sources of financial aid for the 2011/2012 academic year. Some of the sources are need-based, such as the Pell Grant; some are merit-based, such as the Boettcher Scholarship; and others can be a combination of the two. One of the major distinctions between any of the sources is that loans must be paid back and grants are considered to be gifts.

Almost all federal grants are based on financial need with a maximum amount in most cases of \$5,550. Subsidized federal loans are need-based with interest deferred until the student graduates. PLUS loans are not need-based, however the amount borrowed cannot exceed the cost of attendance. As shown in Figure 1, state grants make up about five percent of financial assistance to students in Colorado, with some being need-based and some based on merit. Nonprofit/private financial aid, also known as Other Financial Aid, can be from sources such as nonprofit organizations, professional organizations, local businesses, individual donors, a parent's employer, or any other source that is not governmental or institutional. Most business and individual donors use a nonprofit organization to distribute this aid, therefore the term nonprofit aid will be used to describe this resource. Definitions of all aid types are found in Appendix A.

The bulk of financial aid to students comes from the federal government in the form of the Pell Grant and Stafford Loan programs (Dynarski, 2008; Deming & Dynarski, 2009). In addition, some states provide direct subsidies to colleges to keep tuition low, while other states, such as Colorado, also provide need-based aid to students. In addition, undergraduate Colorado

residents attending an in-state public institution are eligible to receive a stipend from the COF, currently \$62 per credit hour enrolled (Colorado Commission on Higher Education, 2013). The COF stipend is available to students regardless of need or merit.

Figure 1
Sources of Student Financial Assistance 2011/2012 Academic Year in Colorado



(Colorado Department of Higher Education, 2013)

There is a wealth of research regarding the effects of financial aid on postsecondary persistence rates, but little information regarding the impact the nonprofit community has made in this area. This is largely because there are many sources of nonprofit financial aid but no centralized system for tracking the aid (Nelsen, 1999; Institute for Higher Education Policy, 2005). Many of these sources are small community-based nonprofits granting aid of less than \$3,000 per student (Nelsen, 1999; Institute for Higher Education Policy, 2005). What research

that does exist discusses private financial aid from all sources rather than aid coming solely from 501(c)(3) organizations. The National Scholarship Providers Association (NSPA) reported that 116 of their 305 members awarded over \$751 million in aid for the school year 2011/2012, but their membership includes universities and colleges, as well as organizations that provide scholarships for primary and secondary education (National Scholarship Providers Association, 2013). The National Center for Charitable Statistics (NCCS) maintains a website that can be searched by National Taxonomy of Exempt Entity (NTEE) code. A recent search showed 109 tax exempt organizations in Colorado with the B82 NTEE code, Scholarships and Student Financial Aid. To ascertain the dollar value of the financial aid awards, the Internal Revenue Service Form 990 for each organization must be accessed and examined. Furthermore, not all organizations with the B82 designation actually provide scholarships, as a review of several Forms 990 revealed (National Center for Charitable Statistics at the Urban Institute, 2013). Attempting to gather this information for all nonprofits in the United States with the B82 classification would be difficult and time consuming.

Studies find that financial aid in general does lead to higher persistence rates, although to what extent is subject to debate. One of the most successful programs to date is the Manpower Demonstration Research Corporation's (MDRC) Opening Doors Demonstration (Scrivener & Coghlan, 2011), a random assignment study, dealing with community college students. MDRC partnered with six community colleges across the country to provide a range of interventions to low income students. The participating colleges chose one strategy from the following list: financial incentives, reforms in instructional practices, or enhancements in student services (Scrivener and Coghlan, 2011). Students were randomly assigned to receive the intervention and were measured against a control group of students who did not receive the intervention. The

evaluation of the program found that tying financial aid to academic performance had the largest effect on persistence. Brock (2010) argues that the results obtained were modest, pointing out that after four semesters there was only a difference of 2.4 credit hours between the program group and the control group. Since the study involved community college students and did not track the students through completion, it is difficult to determine what impact this intervention would have on students in four-year programs and whether completion was affected. It could be argued that the existence of the financial aid allows students to purchase more credit hours and graduate sooner.

Chen and DesJardins (2008) examined how different types of aid affected dropout rates using data from the Beginning Postsecondary Statistics survey sponsored by the National Center for Educational Statistics. The students, enrolled in four-year institutions, were surveyed as they started their postsecondary education in the 1995/96 school year. The study found that low-income students were at a higher risk of dropout than their upper income counterparts. The research also found that loans and work-study reduced the dropout risk for the lower income students by 25 percent in the first year. The effect of Pell Grants was not as significant, most likely because the grants do not fully cover the entire cost of college (Chen & Desjardins, 2008). This study did not examine the relationship of aid amount to retention because the information was not available.

Nonprofit Financial Aid

Nonprofit aid, although significant, does not account for a huge portion of aid given to students. Nationwide, about seven percent of students received this type of aid in 2003 accounting for approximately three percent of total aid awarded (Institute for Higher Education Policy, 2005). This figure is approximate because of the difficulties in measurement previously

mentioned. In 2012, other financial aid accounted for three percent of financial aid in Colorado public institutions (Colorado Department of Higher Education, 2012).

The Wisconsin Scholars Grant (WSG) program is privately funded through the Fund for Wisconsin Scholars, a nonprofit established in 2007 with a gift of \$175 million, with the first grants awarded in 2008 (The Foundation Center, 2007). The fund has a permanent endowment from which grants are paid. Grants for four-year colleges are \$3,500 per year for up to five years, and \$1,800 per year at two-year institutions. Eligible students must be receiving a Pell Grant and attending a Wisconsin public postsecondary school. Recipients are chosen at random. The grants are in addition to any other funding received by the student, although it is not known to what extent the WSG crowds out existing aid, also known as aid displacement (Goldrick-Rab, Harris, Kelchen, & Benson, 2012). According to a 2012 study which compared outcomes of students receiving the WSG to those who did not, the WSGs were found to affect retention, credits attempted, and grade-point average modestly in the first year but by year four the impact on retention is non-significant (Goldrick-Rab, et al, 2012). The study also found that the more assistance a student received, the stronger the effects, and that the type of aid - grants or loans - did not seem to matter. This contradicts the findings of Chen and DesJardins (2007) that Pell grants did not have a significant impact on retention.

Colorado has many nonprofit organizations dedicated to higher education funding. Some of the larger and most well-known are the Boettcher Foundation, the Denver Scholarship Foundation, and the Daniels Fund Scholarship Program. The Denver Scholarship Foundation (DSF) uses an approach that encompasses mentoring at the high school level, need-based financial aid of up to \$3,400 per year at a participating college, and mentoring the student

through program completion. Since its beginning in 2007, 81 percent of DSF recipients have either graduated or are still in school (Denver Scholarship Foundation, n.d.).

Nonprofit Characteristics

One of the major reasons for the existence of nonprofits is to be “gap fillers” (Worth, 2012, p. 49). When the government and the market fail to provide necessary goods and services, for whatever reason, nonprofits can step in to fill the gap. Arguably, higher education can be considered a *public* good; regardless of whether or not a person receives the education, the person still receives the benefits of it by virtue of the creations of those who did receive the higher education (Brown, 1997; Gruber 2007). Secondly, the person consuming the higher education cannot stop someone else from also consuming the higher education just by the fact that the first person consumed it (Gruber, 2007). The problem arises when someone who wants the higher education cannot afford to pay for it. This is when either government or the nonprofit sector steps in to fill the gap.

The gap a nonprofit chooses to fill becomes its mission. The sole reason a nonprofit exists is to pursue its mission (McDonald, 2007) and because it is not subject to the bureaucracy of government, the nonprofit can take into account the diversity of its clients and can experiment with programs while doing so. Government agencies also have missions, but the people fulfilling the mission are controlled by elected officials who are controlled by their constituents (Worth, 2012). Government agencies can only support what is acceptable to the majority, whereas a nonprofit can choose to whom it will offer services based on self-established criteria.

Nonprofits are also characterized by the “nondistribution constraint” (Hansmann, 1987, p. 29; Ortman, 1996, p. 471) which prevents the distribution of profits in a nonprofit organization to anyone with control over the organization; all profits or surpluses must be used to finance

future services. People are more likely to trust a nonprofit than a corporation because the profit motive is eliminated; therefore, they will donate because the funds will be used for the common good (Hansmann, 1987; Weisbrod, 1988).

One reason nonprofits are ideal vehicles for providing postsecondary financial aid is because they are able to be flexible; they have the freedom to make exceptions. For example, Bootstraps, a nonprofit in Colorado that awards scholarships and interest-free loans, recently completed their application cycle for the school year beginning fall 2013. According to the awards committee chairperson, several of the students had difficulty obtaining their Student Aid Report (SAR) from the Free Application for Federal Student Aid (FAFSA) website (a requirement for the application), but rather than disqualify the student, the committee recognized that completing the FAFSA for the first time can be intimidating and allowed the applicants extra time if the SAR was the only item missing from the student's application (Lange, 2013). Conversely, missing the deadline for federally funded financial aid would have automatically disqualified the student.

Nonprofit aid providers are better able to identify students that may otherwise fall through the cracks due to socioeconomic factors or ignorance about what aid might be available (Institute for Higher Education Policy, 2005). They can also offer additional services, such as mentoring, to ensure the student has an adequate support system during college (Long, 2008). Studies show that students who receive mentoring and support services were more likely to persist in their programs (Deming & Dynarski, 2009; Scrivener & Coghlan, 2011). Some researchers question whether it is the financial aid or the additional services that lead to increased persistence (Deming & Dynarski, 2009; Lotkowski, Robbins, & Noeth, 2004). Many students who rely on financial aid for college are the first in the family to go to college, which is

also an indicator of low family income. They cannot look to their parents to help them with the financial aid process because in many cases the parents themselves do not understand (Deming & Dynarski, 2009).

Methodology

In order to test the hypothesis that the population of interest, students who receive nonprofit financial aid, will have higher persistence rates in postsecondary education than those who do not receive nonprofit aid, a dataset consisting of the cohort of students enrolled for the first time in the Colorado Higher Education system in 2006 was obtained from the Colorado Department of Higher Education (DHE) Student Unit Records Data System (SURDS) to develop a purposive sample. Appendix B describes the variables used from SURDS. The cohort consisted of 1,936 records of students enrolled as freshmen in Colorado public two and four-year institutions of higher education in the fall of 2006. Since this report focused on four-year Colorado resident students, students with a two-year college or out-of-state tuition classification were excluded. Only students with a full-time enrollment classification were tracked as very few part-time students received nonprofit financial aid. Students who had earned college credit while still in high school were removed from the sample since they were more likely to complete their degrees in less than four years as a result of earning those credits. Finally, students with no enrollment classification status were eliminated since it would not be possible to determine if those students were enrolled full or part-time. The remaining sample of 561 students was then divided into three groups – students who received any kind of aid, including nonprofit aid; students who received nonprofit aid; and students who received no aid for the following school year beginning in the fall of 2007. Students who were offered aid each year were also examined to determine the effects of aid in subsequent years.

Nonprofit aid ranged from \$45 to \$23,989; the largest amount for any aid type for the fall of 2007 was \$43,414. Research indicates that a \$1,000 increase in Pell Grant eligibility yields a measurable increase in persistence, therefore aid of less than \$1,000 was not considered in the analysis. (Bettinger, 2004; Abraham & Clark, 2006; Kane, 2007). Most other scholarships come from nonprofit organizations (Institute for Higher Education Policy, 2005), therefore the variable “other scholarships” was used as a proxy for nonprofit financial aid. A search of the scholarship locating service zinch.com was performed on March 7, 2013 to test the validity of this assumption. The search revealed that 10% of scholarships listed and available to students in Colorado were funded by corporations; however these scholarships were also available to students nationwide and did not account for a significant amount of private aid.

All sources of aid were compared: grants, loans and work study. In addition, further analysis was performed to assess the significance of nonprofit aid offered in subsequent years. Depending on the year examined, the percentage of students receiving nonprofit aid and also any other type of aid ranged from 93 percent (2007) to 75 percent (2009).

Once the final sample of 561 students was established, each group of students was tracked from 2007 to 2009 for persistence and whether or not financial aid was received by year.

Discussion of Results

Table 1 shows the retention rates by year for each group. The students who received nonprofit aid for the 2007 school year show significantly higher retention rates than their counterparts receiving other types of aid or no aid for that year. Subsequent years also show an increase in retention rates for the students who received nonprofit aid in 2007, regardless of whether the aid continued to subsequent years, although the differences are not as great as the 2007 rate.

Table 1								
<i>Persistence Rates of Colorado Higher Ed Four-Year Students Enrolling for the First Time 2006</i>								
	Total Persistence		Receiving Any Financial Aid > \$999 in 2007 Persistence Rate		Receiving Nonprofit Aid > \$999 in 2007 Persistence Rate		Receiving No Aid in 2007 Persistence Rate	
	N	%	N	%	N	%	N	%
2006	561		495		133		66	
2007	411	73.20%	365	73.70%	106	79.70%	46	63.40%
2008	331	59.00%	291	58.80%	83	62.40%	39	59.00%
2009	297	52.90%	265	53.50%	78	58.60%	34	51.00%

Table 2 shows that of the original sample of 561 students, 411 continued to a second year of postsecondary education with approximately 88.8 percent of them receiving some form of financial aid greater than \$1,000 and 25.8 percent receiving nonprofit aid. Total enrollment decreases in 2008 with the percentage of both categories of aid recipients decreasing. Enrollment holds relatively steady from 2008 to 2009.

Table 2							
<i>Enrollment by Year by 2007 Aid Type</i>							
Year	Enrollment	Rec'd Aid > \$999	% of Enrollment	Rec'd NP Aid > \$999	% of Enrollment	No Aid	% of Enrollment
2006	561						
2007	411	365	88.80%	106	25.80%	46	11.20%
2008	331	291	87.90%	83	25.10%	39	11.80%
2009	297	265	89.20%	78	26.30%	34	11.40%

To test the significance of the relationship shown in Table 1, a bivariate correlation analysis was performed. Table 3 shows that there is a strong positive relationship between persistence and financial aid of either type in 2008 and 2009. There was no significant relationship in 2007.

Table 3		
Correlation of Aid Type to Persistence		
	Pearson's r	
	<u>Any Aid</u>	<u>NP Aid</u>
2007	.029	.081
2008	.466**	.165**
2009	.636**	.241**

**Correlation is significant at the $p < .01$ level

Further analysis showed a relationship between receiving nonprofit aid each year, rather than just 2007, and persisting to an additional year. Table 4 illustrates the persistence rates of students who were offered aid each year by type, as opposed to the just the first year. Further research is needed to determine why there was such a large difference between the two groups in the year 2009.

Table 4						
<i>Persistence Rates of Students Offered Aid Each Year</i>						
	<u>Any Financial Aid > \$999</u>			<u>Nonprofit Aid > \$999</u>		
	<u>Offered</u>	<u>Enrolled</u>	<u>%</u>	<u>Offered</u>	<u>Enrolled</u>	<u>%</u>
2007	495	297	60.0%	133	84	63.2%
2008	305	225	73.7%	45	35	78.0%
2009	247	122	49.4%	35	34	97.0%

The data indicate the hypothesis is true; students who receive nonprofit financial aid will have higher persistence rates than those who do not receive nonprofit aid. The Pearson's r statistics indicate the students receiving nonprofit financial aid are more likely to persist in postsecondary education than are students not receiving such aid.

Limitations

One of the most significant limitations of this research is that the number of students reported as receiving nonprofit aid was small compared to those receiving any type of aid (approximately one-fourth). One reason for this is that not all nonprofit financial aid is reported to the DHE; some nonprofit sources provide the aid directly to the student, circumventing the reporting process.

There are also limitations in the data that were reviewed. It is not known how many of the students completed their programs as opposed to persisting from year to year. Assumptions could be made that some percentage of students who get to a certain level will graduate within a specified period of time; however, students who left school because of graduation cannot be differentiated in these data from students who dropped out, so estimates of persistence are conservative. Ideally, though not possible due to the proprietary nature of the data, direct access to SURDS would have been provided in order to have first-hand knowledge of the variables. Additionally, data reported in SURDS are provided by the institutions to the DHE, as opposed to the DHE visiting each institution and examining records. This could result in noise in the data because of variations in interpretation of the requirements. The DHE utilizes a rigorous validation process to ensure minimizing the impact of noise in the data (Bean, 2013).

This research cannot be generalized to other populations since it focused on Colorado in-state students attending four-year public institutions. It is not known if these findings would hold true at two-year institutions, private institutions, or even in another state.

Lastly, other factors that influence persistence and retention were not addressed. Each school has their own retention rate which can be impacted by factors such as school location, diversity of the student population, and academic support services (Lau, 2003). Persistence rates

differ by gender, socio-economic status, level of college-preparedness and education level of the student's parents, to name a few (Lau, 2003). In addition, nonprofits may or may not be providing other assistance beyond financial aid that could be influencing the persistence rates. These factors should be addressed in future research of nonprofit aid.

Implications and Recommendations

The intent of this research was to determine if a positive relationship exists between nonprofit financial aid and college persistence, and, if so, how the findings can be used to affect policy. Clearly the relationship exists, but the question remains of what to do with the information.

Many nonprofits choose to work outside the school financial aid system because of the practice of aid displacement employed by some postsecondary institutions. Aid displacement occurs when a college reduces the amount of aid it offers to a student because of outside or nonprofit scholarships (Lorin, 2013). By providing the aid directly to the student, the nonprofit can assure that the recipient of the aid will not be penalized by having aid that they earned taken away. Some scholarship organizations, such as Scholarship America, have individual agreements with colleges to ensure that displacement will not occur for their recipients (National Scholarship Providers Association, 2013). Colleges and aid providers can work together to eliminate this practice by coming to an agreement regarding how an over-award should be handled. One example is to use the overage to pay down student debt (National Scholarship Providers Association, 2013). By working together to maximize the benefit to the student, nonprofit aid providers can work within the boundaries of the financial aid offices so that all aid dollars are reported to the state.

A more thorough system for tracking nonprofit aid in Colorado must be created before the DHE can begin to determine how wide-reaching nonprofit aid is. Awards that are not processed through a school's financial aid office are not reported in SURDS (Duran, 2013), therefore there is no way to quantify the exact dollar amount of nonprofit aid. Nonprofit Aid providers need to be made aware that the lack of a centralized reporting system is contributing to government and institutions of higher education being unable to partner with nonprofits to maximize the benefit to the students.

NSPA, with the mission to “advance the collective impact of scholarship providers and the scholarships they award” (National Scholarship Providers Association, 2013), is in a strategic position to educate the nonprofit aid providers about the importance of a centralized reporting system for nonprofit aid. They could take the lead on convening working groups, consisting of aid providers from all sectors, including nonprofits and governments, to investigate this.

Nonprofit aid needs to take on a new form to be more effective. The data from the DHE show that the majority of students who received nonprofit aid received it for one or two years; the number of students who were offered nonprofit aid decreased by almost 70 percent from 2007 to 2008. It is not known if the decrease is attributable to the students not persisting or if the students did not persist because the nonprofit aid did not continue. Findings here suggest, however, that if nonprofit aid had been extended to these students, persistence rates might have increased dramatically; of the 45 students offered nonprofit aid in 2008, 78 percent accepted and persisted. In order for nonprofit aid to be the most effective it should be offered for all four years of college, assuming the student is achieving the benchmarks established by the nonprofit provider. Further research should be conducted to determine the effect of single-year versus multi-year nonprofit financial aid.

Where could nonprofit organizations find the money to fund postsecondary education for more students? Higher Education tax policy has come a long way over the years in increasing deductions for higher education related expenses and eliminating taxation of most scholarships, but nearly all of the students benefitted by these policies would have pursued higher education regardless because the policies benefit the middle and upper-middle class families more so than low income families (Reschovsky, 2008).

In addition to focusing on tax deductions and credits for students and their parents, tax policy should offer incentives to people to donate to nonprofit organizations that provide financial aid to students. One incentive could come in the form of higher deductibility for donations to financial aid nonprofits. In Colorado, the state income tax return provides for adjustments to federally reported income that is not taxable in Colorado, such as interest earned on US Government bonds and contributions made to Colorado higher education savings plan (Colorado Department of Revenue, 2012). Donations made to nonprofit organizations that provide financial aid for the purpose of higher education could be an additional item exempt from Colorado income tax. This would have the effect of increasing donations to nonprofit organizations as well as raising awareness of the work they perform. Nonprofits that provide other services would want the same treatment, but the argument can be made that once you educate people, there would be much less need for other nonprofit services and there would be more high-earning people able to donate to the other nonprofits (Deming & Dynarski, 2009). Although unlikely to come to fruition, this idea bears some consideration.

The additional nonprofit aid should not replace the aid available from government; it should supplement what is available so that more students can have the opportunity to pursue a higher education. Once the full reach of nonprofit aid is known, government and aid providers

can develop solutions to collaborate for the most effective mix of aid for higher education students. Since the two groups, DHE and nonprofits, share very similar missions, they are well-suited for collaboration (Shaw, 2003).

Conclusion

This research examined the relationship between nonprofit financial aid and college persistence. It was determined that a positive relationship existed within the cohort studied. The relationship is strong enough to proceed with the recommendations, but further analysis of other cohorts and other variables should be conducted to determine if the relationship can be generalized to other populations. This is important to establish from a policy perspective because of the potential benefits to the state of Colorado. Developing more broad-reaching sources of higher education financial aid will allow more students to attend postsecondary institutions in Colorado yielding a higher educated workforce. This workforce will earn more money over their lifetime, contribute more to the tax base, and be less of a burden on society.

References

- Bean, B. (2013, April 20). Director of Research and Information. (C. Skates, Interviewer)
- Boettcher Foundation. (2011). *Scholarships*. Retrieved from Boettcher Foundation:
<http://www.boettcherfoundation.org/index.php/scholarships/>
- Brock, T. (2010). Young adults and higher education: Barriers and breakthroughs to success. *The Future of Children*, 109-132.
- Brown, E. (1997). Altruism toward groups: The charitable provision of private goods. *Nonprofit and voluntary sector quarterly*, 175-184.
- Carnevale, A., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Georgetown University Center on Education and the Workforce.
- Chen, R., & DesJardins, S. L. (2008). Exploring the effects of financial aid on the gap in student dropout risks by income level. *Research in Higher Education*, 1-18.
- Colorado Commission on Higher Education. (2013). *College Opportunity Fund FAQ*. Retrieved from College Opportunity Fund: <http://cof.college-assist.org/cofapp/cofapp/Default.aspx?pageID=3>
- Colorado Department of Higher Education. (2013, 03 05). Retrieved from Colorado Department of Higher Education: <http://highered.colorado.gov/dhedefault.html>
- Colorado Department of Revenue. (2012, November). *Colorado Income Tax Filing Guide*. Denver, CO: Colorado Department of Revenue.
- Deming, D., & Dynarski, S. (2009). *Into college, out of poverty? Policies to increase the postsecondary attainment of the poor*. Cambridge, MA: National Bureau of Economic Research. Retrieved March 5, 2013, from www.nber.org/w15387

Denver Scholarship Foundation. (n.d.). *Supporting Students*. Retrieved March 9, 2013, from

Denver Scholarship Foundation: <http://www.denverscholarship.org/page.aspx?pid=678>

Duran, C. (2013, March 18). Financial Aid Director. (C. Skates, Interviewer)

Dynarski, S. (2008). Building the stock of college educated labor. *Journal of Human Resources*, 576-610.

Goldrick-Rab, S., Harris, D. N., Kelchen, R., & Benson, J. (2012). *Need-based financial aid and college persistence: Experimental evidence from Wisconsin*. Madison, WI: the Institute for Research on Poverty.

Gruber, J. (2007). *Public finance and public policy*. New York: Worth Publishers.

Hansmann, H. (1987). Economic theories of nonprofit organizations. In W. W. Powell, *The nonprofit sector: a research handbook* (pp. 27-42). New Haven, CT: Yale University Press.

Institute for Higher Education Policy. (2005). *Private scholarships count*. Washington, DC: Institute for Higher Education Policy.

Kiley, K. (2013, Jan 29). *Colorado shifts focus of state grant from affordability to completion*. Retrieved from Inside Higher Ed:
<http://www.insidehighered.com/news/2013/01/29/colorado-shifts-focus-state-grant-affordability-completion>

Lange, S. (2013, March 1). Awards Committee Chair. (C. Skates, Interviewer)

Lau, L. K. (2003). Institutional factors affecting student retention. *Education*, 126-136.

Long, B. T. (2008). Financial aid: A key to community college success. *The White House Summit on Community Colleges Conference* (pp. 52-57). Washington, DC: US Dept of Education.

Lorin, J. (2013, March 6). *Bloomberg*. Retrieved from Poor scholars hit by money squeeze from wealthy colleges: <http://www.bloomberg.com/news/2013-03-07/poor-scholars-hit-by-money-squeeze-from-wealthy-colleges.html>

Lotkowski, V., Robbins, S., & Noeth, R. J. (n.d.).

McDonald, R. E. (2007). An investigation of innovation in nonprofit organizations: The role of organizational mission. *Nonprofit and Voluntary Sector Quarterly*, 256-281.

National Center for Charitable Statistics at the Urban Institute. (2013). *Search Active Organizations*. Retrieved from National Center for Charitable Statistics: <http://nccsweb.urban.org/PubApps/search.php>

National Scholarship Providers Association. (2013). Retrieved from National Scholarship Provider Association: <https://www.scholarshipproviders.org/Content/ContentDisplay.aspx?ContentID=6>

Nelsen, W. C. (1999, October 22). Student aid from the private sector: Dramatic increases are possible. *The Chronicle of Higher Education*.

Ortmann, A. (1996). Modern economic theory and the study of nonprofit organizations: Why the twain shall meet. *Nonprofit and Voluntary Sector Quarterly*, 470-484.

Reschovsky, A. (2008). Higher education tax policies. In S. Baum, M. McPherson, & P. Steele (Eds.), *The effectiveness of student aid policies: What the research tells us* (pp. 69-99). New York: The College Board.

Scrivener, S., & Coghlan, E. (2011). *Opening doors to student success*. New York: MDRC.

Shaw, M. M. (2003). Successful collaboration between the nonprofit and public sectors. *Nonprofit Management and Leadership*, 107-120.

- The Foundation Center. (2007, December 19). *Philanthropy New Digest*. Retrieved from Foundation Center: <http://foundationcenter.org/pnd/news/story.jhtml?id=197900038>
- Weisbrod, B. A. (1988). *The Nonprofit Economy*. Cambridge: Harvard University Press.
- Worth, M. J. (2012). *Nonprofit management principles and practices*. Thousand Oaks, CA: Sage Publications.
- Zinch. (2013). *Zinch - A Chegg Service*. Retrieved March 7, 2013, from <http://www.zinch.com/>

Appendix A – Definitions²

College: Higher education, postsecondary education and college are used interchangeably and refer to any education beyond high school regardless of program duration.

College Opportunity Fund: Provides a stipend for new and continuing in-state students going to college in Colorado. To receive the stipend, a student must apply for and authorize the use of the stipend at their respective institution. The stipend replaces traditional direct legislative appropriations to the state's colleges and universities.

Colorado Work-Study: Part-time employment program designed to assist students with financial need or work experience.

Colorado National Guard Tuition Assistance Program: Pays up to 100% of tuition costs at state supported institutions, for its members.

Dependent Tuition Assistance Program: Pays tuition, on-campus room and board for dependents of Colorado law enforcement officers, fire or National Guard personnel killed or disabled in the line of duty, and for dependents of prisoners of war or service personnel listed as missing in action.

Federal grants: Funded by the federal government and includes, but is not limited to, Federal Supplemental Educational Opportunity Grant, for students with exceptional financial need; Teacher Education Assistance for College and Higher Education, for students pursuing a teaching bachelor or graduate degree and agreeing to teach in an area that serves low-income students for four years; Iraq and Afghanistan Service Grant, for students whose parent or guardian was a member of the US armed forces and died as a result of military service in Iraq or Afghanistan post-9/11.

² All definitions in this appendix were retrieved from <http://higher.ed.colorado.gov/i3/More/Docs.aspx> and <http://www.studentaid.gov>.

Federal loans:

Program	Funded by	Interest Rate	Level	Annual Award
Federal Perkins Loan	College	5.0%	Undergraduate and Graduate	Undergraduate up to \$5,500 Graduate up to \$8,000
Direct Subsidized Loan	Federal	3.4%	Undergraduate	\$3,500 to \$5,500
Direct Unsubsidized Loan	Federal	6.8%	Undergraduate and Graduate	\$5,500 - \$20,500
Direct PLUS Loan for Parents	Federal	7.9%	Undergraduate	Cost of Attendance less other financial aid
Direct PLUS Loan for Graduate or Professional Students	Federal	7.9%	Graduate or Professional	Cost of Attendance less other financial aid

Higher Education: Higher education, postsecondary education and college are used interchangeably and refer to any education beyond high school regardless of program duration.

Nonprofit financial aid: Nonprofit financial aid can be from sources such as nonprofit organizations, professional organizations, a local business, an individual donor, a parent's employer, or any other source that is not governmental or institutional. Also referred to as private financial aid.

Pell Grant: A federally-funded program, generally awarded to undergraduate students who are financially needy and who have not earned a bachelor's or graduate degree. The current maximum is \$5,500.00 and does not have to be repaid.

Persistence: For this report, persistence is measured by students who continue in the higher educational system from one year to the next.

Postsecondary Education: Higher education, postsecondary education and college are used interchangeably and refer to any education beyond high school regardless of program duration.

Program Retention: Tracks the full-time student in a degree program over time (6yrs/4yr college, 3yrs/2yr college) to determine whether the student has completed the program.

Appendix B – Variables³

Institution Code: The number assigned to each higher education institution.

Report Year: The term on which the data are based.

Student Level: The level at which a student is classified during the term which is being reported.

Tuition Classification: Classification of the student for the purpose of assessing either in-state or out-of-state tuition.

Enrollment Classification: Signifies enrollment classification based on credit hour for financial aid.

Enrollment Duration: Number of months enrolled upon which financial aid was disbursed.

FEDERAL PELL: The dollar amount of a federal Pell Grant paid to a student.

Federal SEOG: The dollar amount of the Federal Supplemental Educational Opportunity Grant paid to the student.

Federal Work Study: The gross compensation earned by a student in the Federal College Work Study program.

Federal Perkins Loan: The dollar amount of the Federal Perkins Loan paid to a student.

Other Federal Grants and Scholarships: The amount of aid received from federal sources excluding Title IV.

Federal Stafford Loans – Subsidized: Gross amount of Federal Stafford Subsidized Loans.

Federal Stafford Loans – Unsubsidized: Gross amount of Federal Stafford Unsubsidized Loans.

Federal PLUS: Gross amount of Federal PLUS (parent loans).

Federal Health Profession Loans: The dollar amount of a Health Professional Loan.

CLEAP: The disbursed dollar amount of the Colorado Leveraging Educational Assistance Partnership program that includes federal and state funds.

Colorado Student Grant: The paid amount of need-based Colorado Student Grant Award.

Colorado Work Study Need-based: The gross compensation earned in the Colorado Need-based Work Study Program.

³ From <http://higher.ed.colorado.gov/i3/More/Docs.aspx>.

Colorado Categorical Grant: The disbursed dollar amount of the Dependent Tuition Assistance Program, Native American Treaty and Colorado National Guard.

Governor's Opportunity Scholarship: The disbursed dollar amount of the Governor's Opportunity Scholarship.

Institutional - Need-based Awards: An award that was paid to the student from the institutional funds where financial need is either the only component of the primary component used to determine the recipient.

Institutional – Merit Funds: An award that was paid to the student from institutional funds without any regard for financial need when determining the recipient.

Other Scholarships: The dollar amount paid to a student from a source other than Federal, State or Institutional foundation funds and for whom the institution does not select the recipient.

Other Loans: The dollar amount of loans not reported in the Other Federal Loans, Perkins, Stafford, or PLUS paid to students.

Student Level: The level at which a student is classified during the term which is being reported, based upon total credits obtained toward the completion of a degree/certificate program.

Registration Status: This classification divides students into three major categories – first time, transfer, and continuing/readmit.

Credit Hours – RI: The total credits attempted by the student during the reporting period eligible to be reported as resident instruction.

Degree Level: The level of degree/diploma/certificate conferred upon the student for the successful completion of a program.

Appendix C – Course Work

I was surprised to find myself consulting the textbooks I have accumulated over the last three years to complete this project. The capstone project really proved to me how inter-related the classes are. Completing the project was a great way to bring it all together. I used, in one way or another, all the classes in the MPA program and Nonprofit concentration to complete this project, but the ones that I leaned most heavily on were Research and Analytical Methods (PUAD 5003), Economics and Public Finance (PUAD 5004), Seminar in Nonprofit Management (PUAD 5110), and Nonprofit Financial Management (PUAD 5140).

I used PUAD 5003 heavily for the project and I am glad I waited until the last semester before the capstone to take the class so that the information was fresher in my mind. The Methodology, Discussion of Results, and Limitations sections drew heavily from the topics covered in this class. The class was valuable in learning to interpret and analyze data, rather than just calculate it. Throughout the writing of the capstone, I reminded myself to focus on what I said I was going to do in the project to determine what data to use, which is also something I learned in the PUAD 5003 class. I tried to refrain from confusing correlation and causation, a topic discussed frequently in the class.

Many of the topics in the Literature Review section of the project utilized topics from the PUAD 5004 class, especially in the nonprofit characteristics discussion. This class was useful in explaining the concept of public goods and private versus public provision of them. I did not discuss it in the paper, but as I was writing the recommendations section, I was performing a mental cost-benefit analysis of the various options. While taking this class, my homework assignments and papers would focus on education funding and the benefits to society, which helped in the research for this project.

PUAD 5110 played a big role in the completion of this project. This class was helpful in the nonprofit characteristics section of the literature review. The class played heavily in the discussion of how nonprofits are able to be less rigid than government in fulfilling their mission and can provide other help in addition to offering financial assistance. Many of the concepts used in this paper from PUAD 5110 overlapped with PUAD 5004.

When discussing recommendations in this paper, I was drawing on subjects from the PUAD 5140 class. When expanding programs, you need to be able to fund them, which was discussed extensively in this class.

There were many areas of commonality between classes in this project. For example, the concept of public goods and theories of why people donate to and trust nonprofit organizations were covered in PUAD 5004 and 5110. PUAD 5140 and 5110 also overlapped in discussions of taxation and funding.