

FINANCIAL AID PACKAGING AND UNDERGRADUATE ENROLLMENT AT A WOMEN'S
COLLEGE

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This study examined financial aid and enrollment at a women's college. A historical review of literature coupled with the examination of previous studies provided background information on the topic. Two student groups were used in the analysis, which included individuals who were awarded financial aid and did not enroll, as well as, individuals who were awarded financial aid and did enroll. Only students who initially applied to the College during the 2002-03 and 2004-05 academic years were included in the analysis.

Data were analyzed to determine: (1) financial aid and its affect on enrollment (2) ranking of the six college choices on the FAFSA (3) financial aid applicants and income levels (4) relationship between income and scholarship recipients (5) restructuring of financial aid packaging policies.

The results found that financial aid does influence enrollment for both student groups. Financial aid was the primary reason for attendance for the students who enrolled, but influenced the other group not to enroll. Students indicated majors and cost as factors that influenced them to enroll at other colleges. Eighty percent of enrolled students listed the College on the FAFSA as their first choice, while 30% of the students who did not enroll had the College listed first. College ranking on the FAFSA provides a good indication as whether the student might enroll.

Family incomes of students who did not enroll were greater than \$50,001 per year. For the students who did enroll their annual family income was less than \$50,000. Income was also compared to scholarship recipients and it was determined the majority of the enrolled students who were awarded a

scholarship had family incomes of \$50,000, or less per year. The majority of scholarship recipients for the students who did not enroll had family incomes greater than \$50,001.

It was recommended based on the analysis for the College to increase the two top scholarship awards, because these awards are given to the most academically capable students. The majority of scholarship awards now being offered are at the lowest academic interval, which indicates more of the brightest students need to be encouraged to enroll.

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1. INTRODUCTION

Institutional financial aid, which includes grants, scholarships, and fellowships, is trying to compete with the rising costs of higher education. Nationally costs have affected recruitment at higher education institutions. Due to fierce competition to recruit the best students, undergraduate institutions have been using attractive financial aid packages. Potential students are becoming more aware of the importance of financial aid to cover the costs of their education, while limiting their loan liability. As a result students are more knowledgeable in comparing aid between schools, and are beginning to research and obtain the best financial aid packages possible. In some cases students will provide their financial aid awards from other institutions, to investigate whether their first choice school will better or match the offer.

The Federal Student Financial Aid programs provide limited amounts of funding to students who demonstrate financial need. As a result, institutions are forced to use their own funds to supplement the financial aid package. If it can be determined the types of aid, which are most beneficial to their students, institutions, can focus on different methods of awarding aid that might increase enrollment. This would enable institutions to attract and enroll the types of students that are an educational fit to the institution. (Cockriel and Graham, 1988) By using their data colleges can determine how aid will impact the enrollment decision, and assess the responsiveness to different dollar amounts. (St. John, 1992) Institutional research should also be conducted to determine the relationship between financial aid and initial enrollment. (Somers and St. John, 1993)

Institutional financial aid is usually in the form of gift aid that does not need to be repaid. The institution needs to find a balance between the amount of aid they can afford to award, and the amount of other Federal and State aid in which the student is eligible. The financial aid package should be designed

to meet the financial needs of the student, and encourage them to enroll. What is the best way to determine this balance?

The field of financial aid continues to be vastly complex, as there are many different terminologies used in which only individuals familiar with financial aid would be able to easily understand. In order for the reader to better understand the contents of this research I have included the definitions of several terms used throughout the paper in the following section.

1.1. GLOSSARY OF FINANCIAL AID TERMINOLOGY

Academic Year—A measure of academic work to be accomplished by a student. A school defines its own academic year, but federal regulations set minimum standards schools must adhere to if they wish to award federal student aid funds. For instance, the academic year must be at least 30 weeks of instructional time in which a full-time student is expected to complete at least 24 semester or trimester hours, 36 quarter hours, or 900 clock hours.

Award Letter – List of financial aid the school is offering.

Campus-Based Programs—The term that applies to three federal student aid programs administered on campus by eligible institutions of postsecondary education. These programs are

- Federal Supplemental Educational Opportunity Grant (FSEOG) Program,
- Federal Perkins Loan Program, and
- Federal Work-Study (FWS) Program.

Central Processing System (CPS)—ED's

processing facility for the *Free Application for Federal Student Aid* (FAFSA). The CPS

- receives student information from application

processors,

- calculates a student's official Expected Family

Contribution (EFC),

- performs several eligibility database matches,

- prints *Student Aid Reports* (SARs) or *SAR*

Acknowledgements, and

- produces *Institutional Student Information Records*

(ISIRs).

Cost of Attendance (COA)—A student's cost

of attendance at a postsecondary institution includes

- tuition and fees,

- room and board expenses while attending school,

- allowances for books and supplies (including a

reasonable allowance [as determined by the

school] for renting or purchasing a personal computer),

- transportation,

- loan fees for federal student loans

- dependent-care costs

- costs related to a disability

- other miscellaneous expenses. In addition, reasonable costs for a study-abroad program and costs associated with a student's employment as part of a cooperative education program may be included. The

COA is determined by the school, within guidelines established by federal law. The COA is compared to

a student's Expected Family Contribution (EFC) to determine the student's need for aid (COA - EFC = student's financial need).

Dependency Status – Based on government standards, if you are considered a dependent student, colleges will consider parent financial resources when awarding financial aid. Dependency status is determined by questions asked on the Free Application for Federal Student Aid (FAFSA).

Estimated Financial Assistance—Student financial aid that must be taken into account to determine eligibility for federal student loans. Estimated financial assistance is called “resources” in determining eligibility (and preventing overawards) in the campus-based programs.

Expected Family Contribution (EFC)—

Calculated using a formula established by Congress; the amount that a student's family is expected to contribute toward the student's cost of attendance. The EFC is used to determine whether a student is eligible for federal student aid. It is reported on a *Student Aid Report (SAR)*, *SAR Acknowledgement*, and *Institutional Student Information Record (ISIR)*. An EFC Estimator is included in *FAFSA on the Web* and *Renewal FAFSA on the Web*.

Federal Family Education Loan (FFEL)

Program—The Federal Stafford Loan (subsidized and unsubsidized), Federal PLUS Loan (for parents), and Federal Consolidation loan programs. Funds for these programs are provided by private lenders; the loans are guaranteed by the federal government.

Federal student aid programs—Programs

administered by the U.S. Department of Education:

- Federal Pell Grants,
- Federal Supplemental Educational Opportunity Grants (FSEOG),
- Federal Work-Study (FWS),
- Federal Perkins Loans,

- Federal Direct Stafford/Ford Loans (both subsidized and unsubsidized),
- Federal Direct PLUS Loans (for parents),
- Federal Direct Consolidation Loans,
- Federal Stafford Loans (both subsidized and unsubsidized),
- Federal PLUS Loans (for parents),
- Federal Family Education Loan (FFEL)

Financial Aid Package – The total financial aid a student is offered, including scholarships, grants, work-study, and loans. **Financial Need**—The difference between a student’s cost of attendance (COA) at a school and the Expected Family Contribution (EFC). (COA - EFC =student’s financial need)

Free Application for Federal Student Aid (FAFSA)—An application completed and filed by a student who wishes to receive federal student aid. The application collects household and financial information used by the federal government to calculate the Expected Family Contribution (EFC) to postsecondary education costs. See also Renewal FAFSA.

Gift Aid – Financial aid that does not need to be re-paid. Examples include:

- Grants: Typically based on financial need
- Scholarships: Typically based on achievement or financial need
- Institution: Typically based on achievement or financial need. Note: In most cases institutional funds and endowment revenue are the source of most gift aid. Some institutional aid comes from other sources.

Need Analysis—The process of analyzing household and financial information on a student’s financial aid application and calculating an Expected Family Contribution (EFC) to determine the student’s need for financial aid for postsecondary education costs.

Private Aid – Financial aid that comes from sources that are non-government related. Alternative or private loans are examples of this fund source, which are loans that are borrowed directly from a lending institution.

Renewal FAFSA—A partially pre-formatted version of the FAFSA that students may use if they applied for federal student aid the previous award year. See also *Free Application for Federal Student Aid* (FAFSA).

Sticker Price – The actual price a student is expected to pay, after financial aid is subtracted.

Student Aid Report (SAR)—A federal “output” document sent to a student by ED’s central processor. The SAR contains financial and other information reported by the student on the FAFSA. A student receives a paper SAR if he or she files a paper *Free Application for Federal Student Aid* (FAFSA) and does not provide a valid e-mail address. The student receives a link to online SAR information if he or she provides a valid e-mail address on the FAFSA. The student’s Expected Family Contribution (EFC) is included on the SAR. All information reported on the SAR is also sent to schools the student listed on the FAFSA. (See also *Institutional Student Information Record* and *SAR Acknowledgement*.)

Subsidized loan—Awarded to a student on the basis of financial need. The federal government pays the borrower’s accrued interest during some significant periods, such as when the student is in school, thereby “subsidizing” the loan.

Unsubsidized loan—Is not need based; the borrower is responsible for accrued interest throughout the life of the loan.

Verification—A procedure through which a school checks the information a student reported on the *Free Application for Federal Student Aid* (FAFSA), usually by requesting a copy of signed tax returns filed by the student and, if applicable, the student’s parent(s) and spouse. Schools must verify information about students selected for verification by ED’s central processor, following procedures established by federal regulations. The processor places an asterisk next to the Expected Family Contribution (EFC) on SARs and *SAR Acknowledgements* and flags ISIRs to identify students selected for verification. Many schools also select certain other students for verification in addition to those selected by the central processor.

2. STATEMENT OF PROBLEM

This study addresses the effect financial aid has on initial enrollment. This has become a growing concern because federal and state aid is not keeping pace with the rising costs of higher education, which creates an obstacle between the institution and the student. Since the costs of higher education have become so high, need-based financial aid only is not sufficient. After the student's federal and state eligibility have been utilized, the only remaining element is the institution. Due to recent declines in the economy not all college endowments are growing at a consistent rate, and institutions are facing financial difficulties in providing monetary assistance to students. This topic is being presented as an acknowledgement of the limits on financial aid and a beginning attempt to recognize a potential problem in the future funding of higher education.

Based upon a review of the literature, and the researcher's experience, financial aid influences first-year enrollment. This study is being conducted because as the Financial Aid Director at Chatham College, first-year undergraduate students are sensitive to the total dollar amount of their financial aid awards. Students have declined their acceptance to attend other institutions which are less expensive, or that offered a more attractive financial aid package with less loan liability and more institutional aid. As a result the financial aid awarding policies at Chatham College need restructured in order to better meet the financial needs of attractive potential first-year students, in order to encourage enrollment. First year enrollments are vital to the sustained growth of the institution.

2.1. RESEARCH QUESTIONS

1. How and to what extent do financial aid packages affect initial enrollment of students in undergraduate higher education?
2. How was Chatham College ranked among the six college choices on the Free Application for Federal Student Aid (FAFSA) for those students that enrolled at Chatham, and those students that did not?
2. How do financial aid applicants rank at Chatham College in terms of income level?
3. What is the relationship, if any, between income level and scholarship recipients?
4. How should the financial aid packaging policies at Chatham College be restructured in order to better meet the financial needs of attractive potential first-year students, to encourage their enrollment?

3. REVIEW OF RELATED LITERATURE

3.1. HISTORICAL REVIEW

Financial assistance for individuals attending college has existed for many years. According to Brademas the first American institutional scholarship was established in 1643 at Harvard College. (1983) Princeton University established the first known scholarship awarded to the class of 1757. (McPherson, 1998) These initial scholarships were often awarded based on individual academic merit, with some consideration given to financial need.

In 1930 Smith College was the first institution to create the financial aid office. This college was the first to identify that student aid was an institutional function. The National Youth Administration (NYA) was created in 1935. This program assisted 620,000 students with \$93 million over eight years. (Coomes, 2000)

The introduction of the GI Bill of Rights in 1944 was a way for military veterans to receive subsidies from the federal government to pursue higher education. (Goodchild, 1997) The GI Bill was intended to reward veterans for their service, as well as, provide employable men and women.

Primarily the awarding of aid was left to individual institutions because there was no standardized methodology for granting assistance. However in 1954 the first financial aid methodology was developed by the College Scholarship Service, now known as the College Board. Several institutions that collaborated to develop a common formula to determine financial need established this organization. (McPherson, 1999) With the development of this system, many private institutions changed their own awarding methodology to provide institutional scholarships on the premise of financial need. (Heller, 2001) Also during 1954 a financial aid office was established at most institutions. (Coomes, 2000)

The National Student Defense Loan (NDSL) was established under the Defense Education Act (NDEA) in 1958. This loan still in existence is now called the Federal Perkins Loan. (Goodchild, 1997) This loan is considered the first Federal Aid program. (Coomes, 2000) The Perkins loan is a low-interest loan, in which the maximum interest rate can not exceed 5%. Loan funds are allotted to each institution on an annual basis by the Federal government. Funds are then awarded by institutions to students that demonstrate financial need. Undergraduate students may borrow up to \$4000 per academic year. Each participating institution is responsible for awarding the funds, and contributing a percentage towards the capital contribution. (Federal Student Handbook, 2003-04)

One of the first major student aid programs enacted was the Federal College Work Study Program, created through the Educational Opportunity Act of 1964. The emphasis of this program was to provide employment for students demonstrating financial need. The Federal Work-Study Program provides jobs for students with financial need, enabling them to earn money to help pay education expenses. (Coomes, 2000) The Federal Work Study Award depends on the financial need of the student, as well as the funding level of the college or university. Depending on the dollar amount of the award, students typically work between ten and twelve hours per week. Each school that participates in this program is responsible to award work-study based on student eligibility. Institutions are allotted a specific dollar amount on an annual basis towards this program. Seven percent of all work study positions must be in community service.

The Higher Education Act of 1965 provided student financial aid for colleges and universities, and was intended to expand opportunity for postsecondary education, especially for low-income and minority students. Every five years Congress reauthorizes the act and amendments are often added that change the scope of funding for student financial aid. (Lumina Foundation, 2003)

Also under this act, Congress for the first time provided federal scholarships for undergraduate students who were considered to have “exceptional financial need.” (Goodchild, 1997) This act also authorized the Educational Opportunity Grant program, which created guaranteed subsidized student loans. This program was designed to offer assistance to middle-income students. A subsidized loan is

awarded based on financial need, and eligibility is determined by the college based on the results of the FAFSA. No interest accumulates on this loan before the repayment period. An unsubsidized loan is not need-based, and interest does accumulate before the student is in repayment.

Annual loan limits have been established which dictate the maximum dollar amounts students may borrow annually. Students in their first year of college can borrow \$2625 for the academic year. (The Student Guide, 2003-04.) Although the dollar amount of loan eligibility increases each year, it depends on the institution, and the established credit requirements for grade level progression. A typical progression in loan eligibility is \$3500 at the sophomore level, and \$5500 as juniors and seniors. Currently there has been much debate among Congress to increase the annual loan limits because they have remained the same since the program was introduced. Students also have aggregate loan limits in which their Stafford Loan borrowing may not exceed. Undergraduate students can borrow a maximum of \$23,000, in subsidized loans at the undergraduate level. An example of annual and aggregate loan limits are shown in Table One. (Federal Student Aid Handbook, 2003)

Table 1: Annual and Aggregate Limits for Stafford Loans

Annual and Aggregate Limits for Stafford Loans			
Dependent Undergraduates	Subsidized	Total: Subsidized and Unsubsidized	Aggregate Total
First Year	\$2625	\$2625	
Second Year	\$3500	\$3500	
Third Year and Beyond	\$5500	\$5500	\$23,000
Independent Undergraduates			
First Year	\$2625	\$6625	
Second Year	\$3500	\$7500	
Third Year and Beyond	\$5500	\$10,500	\$46,000
Graduate and Professional	\$8500	\$18,500	\$138,500

The Federal Pell Grant system, introduced in 1972 as the Basic Educational Opportunity Grant, included its own needs analysis formula to determine eligibility. (McPherson, 1999) The goal of federal aid during this time was to provide choices for the student. (The Institute for Higher Education Policy, 2002) Since Pell was a portable grant students could use the award at the college of their choice. This was intended to be the foundation for a student's financial aid package. The target group of this grant was low-income students.

To receive a Federal Pell Grant, a student must demonstrate financial need, which is determined by the results of the completed FAFSA. Every student who completes this application receives an EFC or expected family contribution, which is calculated by the Federal processor. This is defined as the dollar amount that each family can contribute toward their education on an annual basis. The Expected Family Contribution (EFC) formula is used in determining eligibility for the Pell Grant (Federal Student Aid

Handbook, 2003-04) Currently in order for a student to qualify for a Federal Pell Grant they must have an EFC ranging from 0 to 3850. Awards range from \$400 to \$4050 per year.

Several other programs have been developed since the Higher Education Act of 1965, but none as instrumental. The Taxpayer Relief Act and Balanced Budget Act of 1997, created tax benefits for families. These programs were meant to expand educational opportunity by providing taxpayers with a tax credit for educational expenses. (Coomes, 2000) The Hope Scholarship Credit was intended for undergraduate students enrolled at least part-time in their first or second year of school. The maximum credit a taxpayer may claim per year is \$1500 per eligible student in the household. The Lifetime Learning Credit may be claimed for tuition and related expenses for undergraduate or graduate students that are enrolled in at least one course of career school, or professional study. The maximum credit, which can be claimed, is \$2000 per year. For both credits, income limits have been established, which may disqualify the tax filer from claiming either credit. These tax credits were introduced to encourage students to enroll, and benefit from the advantages of a tax credit. At this point in time, little evaluation has been conducted to determine if these credits widened access. (The Institute for Higher Education Policy, 2002)

Student loan interest deductions became available for individuals that were paying interest on the Unsubsidized Stafford loan for the first 60 months in which payments were required after January 1, 1998. Currently the maximum student loan interest deduction is \$2500 per year. These deductions enable borrowers who are still enrolled with unsubsidized loans to take advantage of interest deductions, as well as, for those students who have already graduated and entered repayment.

Several loan forgiveness programs have been developed to provide a cost savings to students who meet certain criteria and who have borrowed through the Federal Stafford and Perkins Loan programs. One of the first programs introduced was the Federal Teacher Loan Forgiveness Program. The purpose was to encourage students to enter the teaching profession, and teach full-time for five consecutive years in schools, which serve low-income families. Students meeting this criterion may be eligible for a total loan forgiveness of \$5000.

Schools can cancel 100% of a Perkins loan if the borrower has served full-time in a school system that serves students from low-income families, is a special education teacher, or a teacher in the field of mathematics, science, foreign language, or bilingual education. (Federal Student Aid Handbook, 2003)

The Federal Child Care Provider Loan Forgiveness Program was created to encourage and retain early childcare professionals in their positions for longer time periods. Individuals must be working full-time for at least three consecutive years as a childcare provider, with an earned associate or bachelor's degree. Forgiveness under this program is not limited to a certain dollar amount, but 100% percent of the loans borrowed by childcare professionals may be forgiven after meeting all of the mandated requirements. Appropriations are set annually by Congress to continue this program. Perkins loans can also be forgiven if the student is an employee of an eligible public or private non-profit child or family service agency that provides service to high-risk children, who are from low-income communities. (Federal Student Aid Handbook, 2003) If the borrower worked full time as a staff member in the educational part of a pre-school program carried out under the Head Start Act, they are eligible to have all of their Perkins Loan forgiven.

Recently the Armed Forces Loan Forgiveness Program was created to recognize the bravery, dedication, and loyalty of servicemen and women who served in the aftermath of September 11, 2001. This program provides a one-time loan forgiveness benefit of up to \$2500, for student borrowers who served in the Armed Forces on active duty between September 11, 2001, and June 30, 2004, and meet the eligibility requirements. In regard to Perkins and military cancellation, schools must cancel 50% of a Federal Perkins Loan if the borrower has served a period of full-time active duty in the armed forces, and the service must be in the area of hostilities or imminent danger. (Federal Student Aid Handbook, 2003) Also, the United States Army offers repayment incentives, if the borrower enlists and serves.

In Pennsylvania, the Pennsylvania Higher Education Assistance Agency (PHEAA) introduced the "Healthier Futures Program," to deal with the nursing shortage. This program was designed to increase the number of students enrolling in and graduating from nursing education programs, as well as, increase the number of working nurses. This program was to encourage licensed nurses to return to school to earn

registered nursing degrees, and increase the number of nurses attending graduate school. PHEAA, in partnership with employer-sponsored forgiveness programs will forgive up to \$12,500, or 25 percent of the student loan principle over three years of qualifying employment. To qualify students must graduate from an approved nursing program during or after 2003, and maintain full-time and continuous employment after graduation.

Borrowers under the Federal Perkins Loan Program may also be eligible for 100% forgiveness of their loans if the borrower served full time as a qualifying law enforcement or corrections officer. The borrower must work in a local, state, or federal agency, if it is publicly funded and its activities pertain to crime control prevention. The employee must be full-time and working in a position that is considered essential to the agency's primary mission. Borrowers that served in the Peace Corps or ACTION may be eligible for cancellation of up to 70% of the loan. (Federal Student Aid Handbook, 2003)

3.2. INSTITUTIONAL AID INCREASES

Colleges and universities facing declining enrollment in recent years have responded by offering institutional financial aid to their prospective students. "Some public institutions have resorted to using tuition revenue and other resources to create large institutional need-based grant programs without which enrollment would not be possible." (Advisory Committee on Student Financial Assistance, p. 3 2002)

Since the 1980's the use of financial need as the basis of awarding scholarships and institutional financial aid has been declining. Colleges and universities have developed their own criteria for awarding institutional funds in an effort to enroll students that will have a positive impact on the institution, without regard for financial need. (Baum, 1998) Grant aid awarded on the basis of need and non-need has dramatically increased and accounts for nearly 20 percent of total aid available. (College Board, 2000)

“In 1999-2000, postsecondary institutions awarded more than \$10 billion in both need-based and non-need based institutional grants to approximately 2.4 million undergraduates. Since 1990, institutional grant aid has grown by more than 84 percent.” (Redd p. 24, 2002) The average gift aid award for all undergraduates at all institution types was \$4165. Students at private institutions had an average gift aid award of \$6605, while at public universities the average award was \$2573. (NCES, 2001) Spending at four-year institutions on need-based grants to full-time dependent students increased 115% from \$1.72 billion in 1989 to \$3.69 billion in 1995. Also during this same time period, overall spending increased by 111%. (Heller, 2001) Spending on non need-based grants increased 99%. (Heller, 2001) In fact during the years from 1989 to 2000, the number of undergraduate students that received institutional grants rose from 15 to 115%. (National Center for Educational Statistics, 2001).

As a result analysts have concluded that increased spending for institutional aid has an effect on increasing the price of tuition. (The Institute of Higher Education, 1999) Institutions are being forced to increase funding on financial aid. (Nielsen, 1999) As a result tuition increases are on the rise. Institutional expenditures to pay for additional grant assistance have been one of the largest cost increases in higher education. (The Institute for Higher Education Policy, 1999) As a result many colleges and universities are spending 25% to 30% of their own funds in comparison to 10% in the 1980's. (Nielsen, 1999)

Many less well-endowed institutions compete aggressively for good students. As part of the enrollment process, colleges offered merit aid as a tool to attract high achieving students. (Lumina Foundation, 2003) In fact between fiscal years 1990 and 1996 spending on all types of scholarships from all sources increased 69% at public institutions and 67% at private institutions. In comparison, spending on all types of financial aid from institutional sources increased 105% at public institutions and 92% at private institutions. (Heller, 2001) The number of colleges that have become involved in awarding institutional aid based on merit has also dramatically increased. From 1989 to 1996, four-year private schools had an increase of 15% in merit aid.

(Redd, 2000) There has also been a dramatic increase in the overall spending of scholarships at all institutions during this seven-year period. Spending on scholarships increased 163% at four-year public institutions and 231% at four-year private institutions, illustrated in Table Two below.

Table 2: Percentage Increase in Non-Need Based Scholarship

Type of College	Percentage Increase
Four Year Private College or University	231%
Two Year Public College or University	191%
Four Year Public College or University	163%
Vocational/Technical School	89%
Proprietary School	2%

Also institutional aid not based on merit increased 114% at public institutions and 104% at private institutions. (National Center for Education Statistics, 1999) These increases in merit aid indicate that many higher education institutions use their institutional dollars for enrollment purposes, rather than meeting a student's need. (Redd, 2000)

The need for scholarship aid is escalating per institution and overall, because many colleges and universities are trying to offer competitive financial aid packages to match or better their competitors. (Fulley, 2001) In recent years college and universities facing declining enrollments have offered scholarships to applicants to increase their enrollment. College officials whose institutions disburse merit awards say that without such awards, their schools would not attract as many academically talented students. Some schools indicate without these awards, they would not be able to fill their classes.

(Lumina Foundation, 20003) Scholarships and fellowships average more than 10% of the budgets of private institutions but constitute less than 5% of the budgets of public institutions. (Hauptman, 1997)

3.3. TUITION DISCOUNTING

During the 1980's many four-year private college and universities started discounting tuition to meet enrollment and revenue goals. (Redd, 2000) This is referred to as tuition discounting, which is defined as "the use of institutional need and non-need grants by college and universities to meet revenue and enrollment targets." (Redd p. 27, 2000)

Institutions use grants to reduce costs students would have to pay through other types of financial aid such as Stafford or alternative loans. Students have become more knowledgeable regarding financial aid and are trying to reduce or eliminate loan liability. School administrators believe that providing discounts to students and having more students are better than having fewer students and empty classrooms. However with fewer students and a high discount rate, schools are not increasing tuition revenue. (McPherson and Schapiro, 1998) Institutional aid dollars spent wisely can help increase tuition revenue and enrollments, versus if no institutional dollars were used. (Baum, 2000) With the increase of tuition at most institutions, students and their families are choosing the college that offers the largest amount of institutional grants.

When an institution decides to discount tuition they must analyze the annual enrollment goals. If they decide upon a high discount rate, but do not meet the enrollment goals, they will lose revenue. When a higher discount rate is set and more students are enrolled, the discount is offset by the increase in students.

Over a six year time period the average discount rate for all institutions rose from 21% to 30%. (Redd, 2000) From 1990-91 to 1996-97, the average tuition and fee price at private colleges and universities increased from \$12,526 to \$15,210, while average institutional aid grew from \$2313 to \$4148. For every dollar that the institution increased their price, on average they provided 68 cents for each undergraduate in terms of a discount in the form of institutional aid. The average undergraduate paid 32 cents of each dollar of tuition, while at more selective institutions discounts covered 70 cents of each dollar of tuition. At less selective institutions, discounts paid 74 cents of each dollar of tuition increase. (Redd, 2000) Tuition discounts offered through financial aid, have the most impact on enrollment decisions. (DesJardins, 2001)

3.4. INSTITUTIONAL FINANCIAL AID AND ENROLLMENT

Financial considerations are important decisions made by students and their families. Finances can affect the initial college entry decision and the number of credits students take. Students are forced to limit the number of credits they take because in some instances they cannot afford to be registered as a full time student. As a result these students are working more to cover college costs and registering for fewer credits. The impact of finances occurs before or at the point of entry into higher education. Family finances also influence educational goals, which can affect whether or not to attend college, as well as, which college to attend. (Tinto, 1993) College and tuition prices become important to students during the college choice process and are most influential during the senior year of high school. (Hossler, Schmit, and Vesper, 1999) As a result, financial aid makes a difference in affordability at virtually all types of institutions. (St. John, 2000) Some institutional studies indicate that financial aid can have a negative association with first-time enrollment decisions by admitted students in public and private colleges.

(Somers and St. John, 1997) In their initial college choice, students evaluate their college choices in relation to their personal financial situations. (St. John, 2000)

Financial aid also effects a student's enrollment decision in different ways. For example a student may decline a generous aid package, from some institutions. However if a more prestigious college admits them without any aid, they may reconsider their choice. More academically attractive students typically will be awarded larger scholarships to influence their enrollment decisions.

Institutional aid influences enrollment decisions of first-year students. Financial aid factors including a discount in the form of institutional aid has the greatest impact on the enrollment decision. (Desjardins, 2000) Student aid, at least in the form of grants, increases the enrollment of students. (Heller, 1997) Grants are more effective in promoting enrollment than other forms of aid because there is no repayment responsibility. Students who received a \$1000 increase in grants and scholarships would increase their probability to enroll by 7.8%. (Heller, 1997) "Research has shown that grants have the most influence on the college-access needs of students." (Lumina Foundation p. 23, 2003) These increases suggest that students are sensitive to aid awards, especially when they make their initial enrollment decision. Decreases in aid lead to declines in enrollment, with the effects differing on the type of aid awarded. (Heller, 1997) For example, a student may not attend an institution that decreased gift aid and relied on the students to borrow more loans. A grant aid award has more influence, than other types of aid to encourage students to enroll in college. (Advisory Committee on Student Financial Assistance, 2002)

The following studies examine financial aid and its influence on enrollment. They include different institutions and financial aid types. Some are institutional specific, while others focus on specific types of aid. Models are also used to explain the effects that changes in aid have on enrollment based on changes in award amounts and income levels.

According to a study by Chapman and Jackson (1984) freshmen that were accepted by two or more colleges, and switched from their first college choice, did so because of finances. Over 50% of the students who switched colleges, 27.4% did so because of financial aid awards, while another 23.1%

switched because of lower costs. (Chapman and Jackson, 1984) They also found it takes \$4000 in financial aid to move a second choice institution to a student's first choice. It takes \$6000 in financial aid to move a third college choice to the first.

Cockriel's and Graham's (1988) study consisted of data from alumni gathered through the ACT Alumni Survey. Sixty-eight percent of the surveyed alumni chose financial aid, specifically scholarships, as the primary reason for attending the college of their choice. Educational grants were rated by 38% of alumni, as being the reason to attend; while 36% felt the student loan program was reason enough to influence choice. (Cockriel and Graham, 1988)

A study conducted by Somers and St. John's (1993) analyzed 2558 first-year enrollment applicants at a public institution. In one analysis the impact of total aid on first-time attendance, resulted in an increase in enrollment. Students offered more aid from low and high-income groups were more likely to attend, regardless of the amount. The average aid applicant was 6.2% more likely to attend per \$1000 in aid awarded. (Somers and St. John, 1993) In an additional analysis only scholarships were associated with increasing first-time enrollment, while these applicants were 23.5% more likely to attend for every \$1000 of aid awarded. (Somers and St. John, 1993)

A similar study by Kane (1999) determined that a \$1000 decrease in tuition was related to a 5-6% increase in the chance that a student would enroll. When he analyzed data from the National Education Longitudinal Study he discovered that a \$1000 decrease in tuition only increased the chance that a student would attend a four-year college by 0.8 percent, and a two-year college by 4.5 percent.

DesJardins (2001) conducted a study to determine how non-Iowa residents who were financial aid applicants would be affected by offering a new institutional scholarship. He developed two models to analyze the impact of the new award. For every dollar increase of the institutional scholarship, enrollment changes were studied. As a result of the simulation model it was determined by awarding scholarships at \$1000, \$1500, or \$2000 increments the award would increase enrollment of these students by 160. (DesJardins, 2001) Another institutional study conducted at the University of Nebraska, determined that scholarships received and the cost of tuition were important factors in deciding to attend.

Seventy-six percent of students indicated that a scholarship was an important reason for attending the school. (Petr and Wendel, 1998)

A recent institutional-based study by Spaulding (2003) analyzed initial enrollment decisions at the University of Washington during 2001. Variables were divided into socio-demographic, academic, and financial aid awards. The results of the study found that financial aid was not sufficient to overcome other factors involved in the enrollment decision. Specific types of financial aid awards were also studied and it was determined that all of the variables had a negative effect on the decision to enroll. (Spaulding, 2003)

St. John's (1990) study used data from the National Center for Education Statistics' High School and Beyond Survey, in which he estimated the effects that a change in tuition or financial aid had on enrollment. He found that students were more responsive to an increase in financial aid, rather than a decrease in tuition for the same amount. (St. John, 1990) Enrollment decisions are more responsive to student aid, then to tuition decreases, while low-income students are more responsive to grants than loans. An increase in aid rather than a decrease in tuition has a greater influence on low-income students. Students that are classified as middle-income are more responsive to loans, than grants. (St. John, 1990)

In 1997, St. John and Somers compared admissions, financial aid, and registration data from four colleges and universities. Applicants offered more aid were less likely to enroll, which indicated that the amount of aid offered was not sufficient to encourage enrollment. Two of the four schools were doctoral granting institutions, while the others included both public and private institutions. Each school had different tuition costs and financial aid awarding strategies. Different types of aid influenced enrollment in different ways. At the public university, low-income aid applicants were less likely to attend than non-aid applicants. At the private institution increases in the amount of aid offered improved the yield of minority applicants. The analysis of the first Doctoral institution found that middle and high-income aid applicants were less likely to attend when the amount of aid was considered. The second Doctoral institution discovered that Hispanic students were more likely to enroll when the amount of aid was

examined. (Somers and St. John, 1997) The results of this study indicate that each college or university must adopt the financial aid awarding practice that best meets the needs of their specific institution.

Student sensitivity to tuition and financial aid were examined by Hossler, Hu, and Schmit in 1999. Their findings indicated that males are less sensitive to financial aid awards than females, while higher parental income for either gender reduces the importance of financial aid in the college choice process. Female students find low tuition costs more important than males. Also students, who received more information about financial aid, felt it was not important in their enrollment decision. Students who obtained more institutional information were also less likely to be influenced by financial aid packages, but students who frequently requested information from the institution indicated financial aid would affect their college choice. Student's still collecting information in the final stages of the decision process would choose the institution based on financial factors. The more confident students were with the financial process, as well as, the fact their parents would financially contribute, were less likely to change their mind about college choice if offered a large financial aid award. (Hossler, Hu, and Schmit, 1999)

Based on Heller's study in 1997, students who received a financial aid award positively affected that the student would enroll at the college. In fact, the "timing of when students (and their parents) learn about actual or possible financial aid packages can influence the planning for going to college, even at the very early stages of the process. "(Hossler p. 83, 2000) Institutions need to develop policies in regard to the timing of when financial aid packages are mailed to students. If packages arrive too late, students may have already decided to enroll at another institution.

Financial aid can promote choice by increasing the variety of institutions that students can consider. Based on Flint's (1991) re-analysis of an earlier study, students who applied for financial aid, college budget, selectivity, and affluence levels had no correlation with the college they attended. Also the same financial aid applicants had different income levels, selected and attended institutions with different costs, selectivity, and affluence. Based on these findings, financial aid enabled students to consider a wider variety of colleges with different prices ranges. (Flint, 1991)

3.5. COLLEGE ENROLLMENT: ARE THERE OTHER FACTORS?

Financial aid offers from colleges and universities play a critical role in the initial enrollment decision. However there are other factors, which are influential in the decision to enroll. From the student's perspective, institutional characteristics, including school location, spaces available, and programs offered are quite important in the decision making process. Findings from prior research suggest that the "most important predictors of students' choice of institution are: academic ability and achievement, institutional selectivity, parental encouragement, and educational aspirations." (Perna p. 19, 1998) Academic factors, such as a student's level of academic preparation, as well as, meeting the admissions criteria are also important factors. "If a school has the necessary characteristics that the student desires, then the student should be able to attend the institution, and monetary factors should not be a barrier to that choice." (The Institute for Higher Education Policy p. 7, 2002) These factors influence a student's choice throughout the different stages of the decision making process.

Research findings indicate the attributes that "most often determine where students decide to enroll are cost, financial aid, programs, location, quality, and social atmosphere. "(Paulsen p. 8, 1990) Even though, financial aid has promoted choice, it does not eliminate the other obstacles students need to overcome when deciding on a college. (Perna, 1998) In fact parent's preferences and aspirations for their children are critical in college choice. (Welki and Navratil, 1987)

Financial factors are not the only variables that influence enrollment and may not even be the most important. (St.John et al., 1996) Two studies (Manski and Wise, 1983, Hearn, 1998) found that students with higher academic qualifications, better-educated parents, and higher parental incomes were likely to apply and attend more expensive colleges. Compared to academic ability and parents' education, parents' income is relatively an unimportant influence in the college application process. (Manski and Wise 1983)

Parents also influence the college decision process. For example, if a parent informs their child they will attend the school, which offers the best financial package, in most instances that is the institution

they will attend. (Hossler, Schmit, Vesper, 1998) Parents also feel that size, costs, and programs of study are important in the decision-making process. They also use price as a factor to eliminate choices of schools, but they feel price represents the quality of the institution. (Quigley et al, 1999)

Students and parents are most concerned with the sticker price, when they are trying to determine which college to attend. Sticker price is the cost of the college; minus the financial aid the student is receiving. This figure is the price that the student will need to finance out of pocket. However, even though sticker price can be the deciding factor, there are other influences regardless of the sticker price involved. In fact fifty percent of full-time undergraduates with a sticker price above \$12,000 indicated that institutional reputation was a reason for enrolling, in comparison to 41 percent of those with sticker prices below \$12,000. Twelve percent of students with higher sticker prices also indicated that the receipt of financial aid was a reason for enrolling, while only six percent had similar feelings at lower priced colleges.

Parents are often the most influential because they visit the campus with their children, and based on their relationship they can easily discuss their choices. (Martin and Dixon, 1991) Parents rank as the most important in the college selection process, and are most interested in academic excellence when examining schools. (Flint, 1992) While the effects of student aid may be minimal compared to other factors such as family background and student academic preparation, they do have a positive influence on enrollment. (St. John, 1991)

There are many factors important to students in the college choice process. The most frequently mentioned characteristics listed are: institutional reputation, tuition costs, financial aid availability, faculty reputation, job placement, and location. (Chapman and Jackson, 1987). In 2001 Lee conducted a study in which he examined the reasons for college attendance, as well as, the strength of each of the components. These reasons are outlined in Table Three. His study grouped students into three classes by different sticker prices, including undergraduates in all four-year institutions with sticker prices above \$12,000, and undergraduates in public research universities and other four-year universities, with sticker prices below \$12,000. Institutional reputation (50.2%) as a reason for attendance was the greatest at institutions

with higher sticker prices, but in fact this reason was the most popular for all student groups regardless of sticker price. The second most popular reason for attendance at all institutions regardless of sticker price was that the institution was close to home. Only 12.3% of students classified in the group with a sticker price of \$12,000 or higher felt that more financial aid was the reason they made their enrollment decision. Students often weigh academic status against the sticker price. They will maximize the benefits of their choices by attending either an institution that has offered a scholarship or has low tuition and fees if the school has an acceptable academic reputation. (Dixon and Martin, 1991)

TABLE 3: REASONS FOR ATTENDANCE

Reasons	Undergraduates with High Sticker Prices (above \$12,000)	Undergraduates in Public Research Universities (below \$12,000)	Undergraduates in Other Four Year Universities (below \$12,000)
Institution reputation was a reason for attendance	50.4	41.1	28.4
Institution reputation was not a reason for attendance	49.6	58.9	71.6
More financial aid was a reason for attendance	12.3	5.5	3.9
More financial aid was not a reason for attendance	87.7	94.5	96.1
Faculty reputation was a reason for attendance	7	2.2	2.2
Faculty reputation was not a reason for attendance	93	97.8	97.8
Job placement was a reason for attendance	4.6	1.2	2.2
Job placement was not a reason for attendance	95.4	98.8	97.8
Institution close to home was a reason for attendance	17.4	30.8	36.6
Institution close to home was not a reason for attendance	82.6	69.2	63.7
Low tuition was a reason for attendance	0.8	9.8	5.4
Low tuition was not a reason for attendance	99.2	90.2	94.6
Friends/spouse attending was a reason for attendance	3.3	7.5	7
Friends/spouse attending was not a reason for attendance	96.7	92.5	93
Live at home was a reason for attendance	1.8	4.5	6
Live at home was not a reason for attendance	98.2	95.5	94

3.6. UNMET NEED

Unmet need is the difference between the institution's costs and the EFC or expected family contribution, which is the student's and family's ability to pay, based on federal guidelines. Unmet need is first funded through need-based aid, institutional aid, and ultimately student loans. Unmet need coupled with work and loan obligations have an impact on enrollment. (Advisory Committee on Student Financial Assistance, 2002) The 2002 National Postsecondary Student Aid Study found that the average unmet need for all students was \$2500, but exceeded \$5000 for low-income students. (Nelsen, 2003)

Based on annual data from the United States Department of Education, from 1992 to 1999, students from families with an income less than \$25,000, at four-year public colleges and universities had an average annual work and loan burden of \$7528. At four-year private institutions for the same income group, this figure was \$11,450. (Advisory Committee on Student Financial Assistance, 2002) Students with a large percentage of unmet need try to choose a less expensive school, or one that will cost less after financial aid and tuition discounts. Students from low-income families facing high unmet need are less likely to enroll in college, especially a four-year institution. (Advisory Committee on Student Financial Assistance, 2002) Thirty-three percent of low-income students with an average unmet need of \$3800, after loans and work are accounted for attend any four-year college, while 37% of this group did not attend any college. (U.S Department of Education, NCES, 1997)

Remaining expenses after gift aid can deter "college-qualified, low and moderate-income high school graduates from enrolling in college." (Advisory Committee on Student Financial Assistance p. 32, 2002) As overall college expenses continue to rise with increases in tuition, the unmet need becomes higher and more of a burden for student's and their families.

With the average unmet need for all income levels at \$3200 annually at two year public colleges, \$3800 at four year publics, and \$6200 at four year private colleges, the enrollment of students that cannot afford out of pocket expenses may result in enrollment decreases. An increase in grant aid to this same

group of students would eliminate or substantially reduce the amount of unmet need, leading to increases in enrollment. (Advisory Committee on Student Financial Assistance, 2002). Students would then spend less time working to cover expenses, and accumulate less debt as a result of their enrollment. This burden discourages high school graduates from enrolling and persisting to degree completion. Those who persevere in spite of unmet need often end up working long hours to fill the gap, jeopardizing their ability to keep up with their studies. (Lumina Foundation, 2003)

Researchers say many students have unmet need because most college and universities lack the resources to provide complete financial aid packages for all of those that need help. “There are some needy students for whom we are able to put together reasonable aid packages, but we can’t for others,” says Anna Griswold, Assistant Vice President for Enrollment Management and Student Aid at Penn State University. (Lumina Foundation p. 19, 2003) She estimates that the Penn State system would need to boost its \$370 million financial aid budget to around \$440 million, which is nearly a 20% increase to cover all unmet need. (Lumina Foundation, 2003)

Twelve percent of students enrolled in institutions with a sticker price of \$12,000 or more received more financial aid, which influenced their enrollment decision. Eighty-seven percent of students, who enrolled at the same high priced schools, indicated that more financial aid did not affect their enrollment decision. (Lee, 2001) In public universities with a sticker price below \$12,000, 5.5 percent of students enrolled because of more financial aid, while 94.5 received more financial aid, but it had no influence on their enrollment decision. Of the other undergraduates at other four-year institutions, 6.4 percent attended because of additional financial aid, while 93.6 received more aid, but it did not influence their decision. (Lee, 2001)

3.7. ARE ONLY INSTITUTIONS RESPONSIBLE FOR FINANCIAL AID?

The Higher Education Act of 1965 and the Federal Student Aid Programs primary purpose was to ensure equal access to all who desired to attend college regardless of family income. These programs have not kept pace with rising tuition, and have not eliminated the gap that students need to pay for out of pocket expenses in the form of loans or work. In the early 1990's providing choice was no longer the mission of the Federal Pell Grant program because the costs of attending a college of choice were declining as tuition rates began to rise. Today Pell grants account for half of the tuition paid at public four-year colleges. (Lumina Foundation for Education, 2003)

In fact the purchasing power of Federal Pell Grants has diminished over time, limiting students opportunities, and options, thus is not as effective at today's tuition rates as it was in the 60's. For example an increase in the Pell Grant from 3750 to 4000, in 2001, boosted the grant's purchasing power, but this award would have had to almost double for the purchasing power to be fully restored. This award now covers 42% of average fixed costs (tuition, fees, room, and board) at four-year public colleges, and 16% at four-year private colleges. (College Board, 2003) This is half of the purchasing power the maximum grant had almost two decades ago when it covered 84% of the average fixed costs at four-year public institutions. The average Pell Grant covered only 57% of tuition at a typical four-year college in 1998, which was down from 98% in 1986. (Lumina Foundation, 2003)

Currently the maximum Federal Pell Grant eligibility per academic year is \$4050. (Advisory Committee on Student Financial Assistance, 2002) Today on average, the purchasing power of the Pell Grant covers barely half of the tuition charges at a public four-year college. In fact Congress would have to double Pell Grant funding from \$10 billion to \$20 billion to restore the grants full purchasing power. (Lumina Foundation, 2003)

During the 2001-02 Academic Year, 89.6 billion dollars in financial aid was awarded to students. Of this figure 9.9 billion was in the form of Federal Pell Grants, whose funding increased by 23%

between the years 2000 and 2002. The increase over a ten-year period from 1991 to 2001 was just 8%. Spending on all Pell Grants and all financial aid fund types is shown in Figure One. This figure provides a comparison between all types of financial aid, and how much was spent during the 2001-02 Academic Years. Institutions spent almost 17 billion in grants, in comparison to the Federal Government, which only spent 10 billion in Pell, which indicates the downfall of the Pell Grant purchasing power.

The inability of federal and state funding to keep pace with rising tuition has forced many families to pay closer attention to college cost during the selection process. (Astin, 1998) In a 1996 study by Hossler, Braxton, & Coopersmith, a strong association was discovered between the student's final college choice, and the institution's net cost or sticker price, which is the cost of attendance minus gift aid.

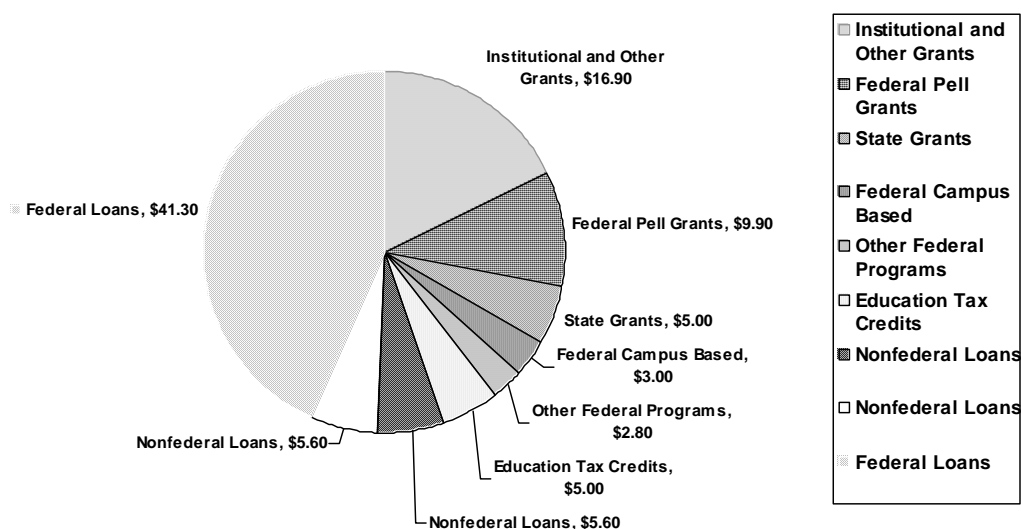


Figure 1: Estimated Student Aid by Source for Academic Year 2001-02

According to the Advisory Committee on Student Financial Assistance (2002), an unmet need of at least \$3800 at public four-year colleges decreases the enrollment of low and middle-income high school

graduates. An increase in total grant aid in that amount to each student would equalize unmet need and encourage enrollment. The increase in grant aid would decrease the amount of loan burden and work that students rely on. If the Title IV programs were developed to meet the unmet need in this manner, students would be able to make enrollment decisions based on institutional fit, instead of the institution which is the least expensive or offers the best financial aid package. Federal efforts to improve student access must ensure that students do not compete with financial barriers. The Federal government needs to determine innovative ways to increase the amount of federal aid awarded to students to enable them to attend the college of their choice. As a result of funding levels not keeping pace with rising tuition costs and educational expenses, additional efforts must be developed to assist students in funding their education and limiting their loan liability.

Since 1991-92, the estimated amount of institutional grant assistance has more than doubled. In 1991, for example, 6.4 million was in the form of institutional grants while in 2001-02, this figure was 16.9 million. (College Board, 2003) Tuition continues to rise, but family income is not rising at the same rate. During the 1980's tuition increased by 60% at both public and private four year institutions. Median income for families most likely to have children in college (parents aged 45-54) rose much more slowly over this same time period, while student aid per full-time student hardly increased. During the years 1991 to 2001, income rose by eight percent, aid per full-time student nearly doubled, and tuition prices rose by 38%. Most of the aid increase was as a result of student loans, which grew over 120% during this ten-year period. These changes in aid, tuition, and family income are shown in Figure Two.

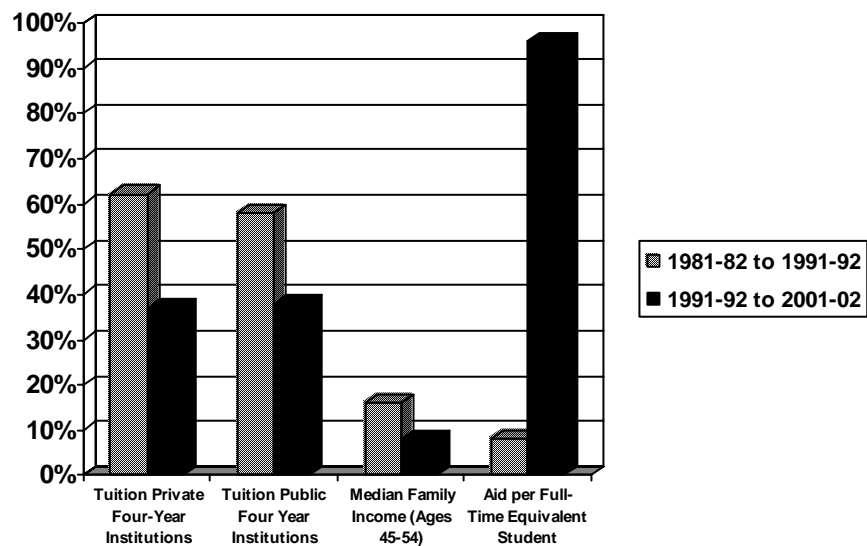


Figure 2: Inflation Adjusted Changes in Tuition, Family Income, and Student Aid

3.8. SUMMARY

Financial aid influences enrollment of students in undergraduate higher education. Financial aid and its influence on enrollment continue to be a topic of importance, which requires additional research. Institutions need to conduct their own analysis to determine how enrollment is being affected by financial aid. This will continue to be an issue as tuition costs rise at most institutions, and the need for attractive financial aid packages are at the forefront of student's enrollment decisions.

Schools facing declining enrollments must understand the financial needs and income levels of the students they are recruiting. Loan debt will continue to be a concern for a large percentage of

students. With this greater concern over loan indebtedness, students will continue to research and obtain the best financial aid packages, while also meeting their educational needs.

4. RESEARCH METHOD

4.1. DESIGN

This study incorporated survey research as the primary means for data analysis, however a variety of institutional reports and databases were used to collect the data. This analysis included student applicants who enrolled at Chatham College, and student applicants that did not enroll at Chatham College during the 2002-03 and 2003-04 Academic Years. A separate analysis was conducted for each group of students. For both groups of students a survey was sent via e-mail. If a valid e-mail address was not available, the survey was sent via postal mail. Each group of students was asked specific questions to answer the research questions of the study.

Several data elements were obtained from the Free Application for Federal Student Aid (FAFSA). The first item used were the six college choice data that student applicants listed on the FAFSA. Students are able to list a total of six colleges on the FAFSA, however not all student list this many. For the students that did enroll, I determined the other schools they listed, as well as, where Chatham was listed as part of this total.

A second item used from the FAFSA was the Fiscal Operations Report and Application to Participate (FISAP) Total Income (FTI). This income was derived from the FAFSA and was used because it is the combined income of both the student and parent (if applicable). For the students that did not enroll, this income amount was compared against the college costs of the institution in which they enrolled. Students were then divided into subgroups based on the FTI. For each subgroup I calculated an average income and average cost these students would incur at the current institution in which they are

enrolled. For the students that did enroll at Chatham, I completed a similar analysis dividing students into subgroups by income level. This is discussed in the data analysis section for these specific students.

Another item used from the FAFSA was the state of legal residency reported. This state was then compared to the state of the college in which the student actually enrolled. The purpose was to determine if students were more likely to enroll in colleges located in the state in which they lived. Since not all of the non-enrolled students completed the FAFSA, I also obtained the information from Chatham College's Admissions database.

Current enrollment information for the students that did not enroll was obtained from the National Student Loan Database System (NSLDS). This system stores enrollment and Title IV financial aid information for students that ever received federal aid. As a result students who did not receive federal financial aid were not listed in this system. Once I obtained the enrollment information for the available students, I gathered cost information from each college's websites. Also for each of the sites I determined the state in which the college was located as well as the type of institution. The purpose of this was to determine at what types of institutions Chatham's student applicants have enrolled.

4.2. SAMPLE/DATA COLLECTION

All prospective students offered financial aid packages during the 2002-03 and 2003-04 academic years were surveyed. This included all FAFSA and non-FAFSA filers. The first group included students who were offered financial aid packages, but did not enroll at Chatham College during the 2002-03 and 2003-04 Academic Years. This group was studied to determine:

- If the financial aid package was their primary reason for not enrolling.

- If the financial aid package was their primary reason for not enrolling, what improvements could be made to the package to increase their willingness to enroll?
- What elements of the financial aid package were problematic?
- If the financial aid package did not influence their decision to enroll, what factors did?

For the students that did not enroll, the survey was administered via Zoomerang, a web-based Internet survey management tool. For those students the college did not have valid e-mail addresses, the surveys were sent using postage mail. Surveys were sent to the permanent address provided to the Admissions Office upon application. The sample size for the 2002-03 Academic Year for students that did not enroll was 132, and for the 2003-04 Academic Year this number was 85. The total sample of students that did not enroll at Chatham College for both years is 217.

The second group included students who accepted their financial aid packages and enrolled at Chatham College in either the 2002-03 or 2003-04 Academic Year. This group was studied to determine:

- If the financial aid package influenced their decision to enroll?
- What components about the package were the most influential or beneficial?
- What components about the package were the least influential or beneficial?
- What other factors about Chatham College influenced their decision to enroll?

The sample size for the 2002-03 Academic Year for the students that did enroll was 95 students, and for the 2003-04 Academic Year this number was 75. The total sample of students that did enroll at Chatham College for both years was 170.

This survey was administered via e-mail through Zoomerang.com. This is a secured website that allowed students to complete their survey electronically. The students that initially enrolled at Chatham, but withdrew were sent a survey using postal mail. All of the students in each group were surveyed.

4.3. DATA ANALYSIS

In addition to survey data, various other items were used in the analysis. This included information reported on the FAFSA by the student applicant, institutional financial aid databases and internal reporting. A scale was created to summarize the responses from the questionnaire. For each respondent I extracted the FISAP total income reported by the student applicant on the FAFSA. This information has been used because it is a total income of both parents and students. The reason for examining this was three-fold. First it was necessary to determine where recruited students fell in terms of income level and second if Chatham was attracting more students in lower income brackets versus higher ones. Finally I wanted to determine if a pattern existed between total income level and the merit component in each financial aid package. For example were students from lower or higher incomes receiving more or less merit aid? It had been estimated that 70% of each class is offered a merit scholarship.

A second item extracted from the FASFA, were the six college choices that each student applicant might list. For both groups the researcher looked at the six college choices to determine among those six, where Chatham was listed in terms of preference. In most cases students list their top choice as the college they are most interested in attending, and the other institutions follow. For the students that enrolled at Chatham I wanted to determine where the institution was listed in regards to preference. This information was obtained from the Institutional Student Information Report (ISIR), which is the electronic copy of the FAFSA that the institution receives.

The National Student Loan Database System (NSLDS), which stores enrollment and federal financial aid information on students, provided current enrollment information on those students that did not enroll at Chatham. An analysis was completed comparing Chatham to the other institutions in terms of cost, institutional type, and characteristics.

For both groups it has been determined if the student received a revised aid award from Chatham due to negotiation from the student or parent. For example, were financial aid increases made at the

institutional level to encourage those students to attend? Based on my experience at Chatham, students that received revised award packages, either did not enroll, or ceased enrollment after starting.

The results of the surveys were analyzed through Zoomerang, which offered reporting functionalities and the ability to cross tabulate questions from both surveys. For the web applicants the responses were stored via Zoomerang. The other data, which included all survey responses, income level, college choice data, and financial aid awards, were stored in Excel. Information could then be sorted on the necessary criteria to answer each research question.

5. RESULTS

5.1. INTRODUCTION – RESEARCH QUESTION ONE

In order to effectively answer each research question the question is listed and the data analysis involved for each. Research question one was: How and to what extent do financial aid packages affect initial enrollment of students in undergraduate higher education? In order to answer this question, surveys were sent to both the enrolled and non-enrolled students at Chatham College. A total of 217 surveys were sent to the students that did not enroll. Fifty-one students completed the survey, a total of 24%. A total of 170 enrolled students were sent the survey and 91 students, or 54% completed the questionnaire. The total sample size for both groups was 387, and the total completed was 37%.

5.1.1. Research Question One – Non Enrolled Students

The first group of students analyzed included those who were offered a financial aid package, but did not enroll at Chatham College. The first question on the survey asked the respondent if the financial aid package at Chatham College was the primary reason they did not enroll. Although 12 students strongly agreed the financial aid package was the primary reason they did not attend, 14 students strongly disagreed to this same question. Six students agreed to this question, eight students neither agreed nor disagreed, and ten students disagreed. Even though a total of 18 students either strongly agreed or agreed, the respondents who disagreed or strongly disagreed totaled 24, which is greater than those students in agreement. The survey results for this question are displayed in Table Four.

Table 4: Survey Question One – Non Enrolled Students

Question One: The financial aid package I was offered by Chatham College was the primary reason that I did not attend.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	12	24%
Agree	6	12%
Neither Agree nor Disagree	8	16%
Disagree	10	20%
Strongly Disagree	14	28%
Total	50	100%

More respondents felt although the financial aid package was not the primary reason they did not enroll, it did have some influence on their decision. Fourteen students strongly agreed, and 11 students agreed the financial aid package influenced their enrollment decision. Three students disagreed, and 14 strongly disagreed. Although the number of students that strongly agreed and strongly disagreed were the same, each with 14 responses, the total number of students who either agreed or strongly agreed was 25. The same number of students as in the first question remained neutral, neither agreeing nor disagreeing. There was a stronger association with the aid package influencing enrollment versus being the primary reason for not attending. The responses for this question are located in Table Five.

Table 5: Survey Question Two – Non Enrolled Students

Question Two: The financial aid package I was offered influenced my decision not to enroll at Chatham College.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	14	28%
Agree	11	22%

Table 5 (continued)

Neither Agree nor Disagree	8	16%
Disagree	3	6%
Strongly Disagree	14	28%
Total	50	100%

A cross tabulation was completed on the two questions above, survey questions one and two. When these questions were cross tabulated nine of the respondents who strongly agreed the financial aid package offered by Chatham was the primary reason for not attending, also strongly agreed the financial aid package influenced their decision not to enroll. Three students who agreed the financial aid package was the primary reason they did not attend, also strongly agreed financial aid influenced their decision not to attend. Thirteen of the students strongly disagreed on both questions. Based on the cross tabulations, for these two questions, a relationship does exist between the two, with more students who indicated the financial aid package influenced their decision, but was not the primary reason for them not to attend Chatham College. The cross tabulation for these two questions is displayed in Table Six.

Table 6: Cross Tabulation - Non Enrolled Students

<u>Rows:</u> The financial aid package I was offered by Chatham College was the primary reason I did not attend						
<u>Columns:</u> The financial aid package I received influenced my decision not to enroll at Chatham College						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	9	3	0	0	0	12
Agree	3	2	1	0	0	6

Table 6 (continued)

Neither Agree Nor Disagree	1	4	3	0	0	8
Disagree	0	2	4	3	1	10
Strongly Disagree	1	0	0	0	13	14
TOTALS	14	11	8	3	14	50

Survey question number three asked applicants if the cost of Chatham College was an important factor in why they did not attend. The same number of respondents, 25, either strongly agreed, with 13 responses, or agreed, with 12 responses regarding the fact that the cost of Chatham College was an important factor in their decision not to attend. Ten students remained neutral on this question, and only a total of 15 students disagreed or agreed. The results of this question are located in Table Seven.

Table 7: Survey Question Three - Non Enrolled Students

Question Three: The cost of Chatham College was an important factor in why I did not attend.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	13	26%
Agree	12	24%
Neither Agree nor Disagree	10	20%
Disagree	7	14%
Strongly Disagree	8	16%
Total	50	100%

The cost question was also cross tabulated with the survey question, which asked students if financial aid was the primary reason they did not attend. This was completed to determine if an association existed between financial aid and cost. Based on the results of this analysis cost and financial aid do affect the enrollment decision. Ten students agreed or strongly agreed on both questions. Two students strongly agreed on cost, but only agreed on aid. One student strongly agreed financial aid was the primary reason for not attending, but strongly disagreed cost was the reason they did not attend. Six students disagreed or strongly disagreed aid was the primary reason they did not attend, but six agreed cost was a factor. Eight students strongly disagreed on both questions. The results of this cross tabulation are shown in Table Eight.

Table 8: Cross Tabulation - Non Enrolled Students

<u>Rows:</u> The financial aid package I was offered by Chatham College was the primary reason I did not attend						
<u>Columns:</u> The cost of Chatham College was an important factor in why I did not attend						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	10	1	1	0	0	12
Agree	2	2	1	1	0	6
Neither Agree Nor Disagree	0	3	2	3	0	8
Disagree	0	5	3	2	0	10
Strongly Disagree	1	1	3	1	8	14
TOTALS	13	12	10	7	8	50

The cost question was also cross tabulated with the question that asked whether the aid package influenced the enrollment decision. Nine students strongly agreed the aid package influenced their decision not to enroll and also that cost was an important factor. Three students strongly agreed the aid package had some influence, but just agreed cost was an important factor. One student strongly agreed the aid influenced her decision, but disagreed cost did. Four students agreed on both questions, while three students agreed on the aid, but disagreed on the cost. Eight students strongly disagreed on both. More students seemed to agree financial aid influenced their decision more than cost in this analysis. This cross tabulation is displayed in Table Nine.

Table 9: Cross Tabulation - Non Enrolled Students

<u>Rows:</u> The financial aid package I was offered influenced my decision not to enroll at Chatham College						
<u>Columns:</u> The cost of Chatham College was an important factor in why I did not attend						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	9	3	1	1	0	14
Agree	3	4	1	3	0	11
Neither Agree Nor Disagree	1	2	3	2	0	8
Disagree	0	2	1	0	0	3
Strongly Disagree	0	1	4	1	8	14
TOTALS	13	12	10	7	8	50

Respondents were asked to rank ten financial aid sources in order of importance, as to which types of financial aid were the most important in covering their education costs. The results of this

question were condensed into a total of five responses for reporting purposes. The highest rated response was Institutional Merit Scholarship with a total of 28 students who felt this aid source was the most important in covering their costs. Eleven students ranked the scholarship as being the least important. Institutional grant were ranked the second highest with 27 respondents who ranked the aid source as the most important, while 11 applicants indicated the institutional grant was the least important. It is possible the students who listed both the institutional grant and scholarship as the least important did not receive one of these awards from Chatham. Thirteen students ranked the Federal Pell Grant as the least important, while 17 students felt the grant was not very important. Approximately 44% of all students at Chatham College received the Federal Pell Grant during the 2003-04 Academic Year. The national average for Pell Grant recipients is 28%, which indicates Chatham had an exceptionally needy population. As a result of this factor, I was surprised by the number of students who indicated the grant was least important. However, as mentioned in the literature review, the Pell Grant has lost the majority of its purchasing power. This may have contributed towards the response ratio for this fund type.

Only a total of seven students indicated the Supplemental Educational Opportunity Grant (SEOG) was the most important. The largest number of responses in this category was fifteen who indicated the grant was the least important. The answers to this question may be contributed to the fact that Chatham is only allocated a small amount of SEOG funds from the Federal Government each year. As a result, few students would have received this award, which may have contributed to the response rates. Respondents, if they never received this award, may not have been familiar with the fund type.

Students, who responded to the state grant question, were divided in terms of its importance. Only eleven students felt the award was the most important, and eleven felt it was the least important. Also, this award when compared to an institutional scholarship or grant is minimal in regard to dollar amount. The maximum state grant award was \$3300, which would not be ranked as important to a student who received a scholarship for \$10,000.

Federal student employment was also not ranked very high in order of importance. Fifteen students indicated this award was of most importance and nine of least importance. Filling student

employment positions at Chatham have always been a challenge, even though many students are eligible. It is difficult to encourage students to work on campus for fewer hours and less pay compared to an off campus position. Also, the financial aid office had a greater number of students who declined their awards and do not want to work while enrolled. Last year, the financial aid office awarded 343 student employment awards and only 217 students accepted their awards and worked on campus.

Stafford and Perkins loan responses were distributed fairly evenly between the various ranking possibilities. Nine students indicated the Stafford loans were the most important, while eight felt this fund source was the least important. Perkins loans also only received seven responses as being the most important, but 14 students indicated it was the least important. Similar to SEOG, Chatham only received a small amount of allocated funds for the Perkins Loan Program from the Federal Government, so a large percentage of students would not have received this loan.

Parent loans for undergraduate students (PLUS) received nine responses in regard to being the most important, and 18 as being the least important. The popularity of this loan has declined over recent years for several reasons. First, parents no longer want the responsibility of borrowing a loan in their name, or contributing to the student's education financially. Before the introduction of private loans, PLUS was one of the few options to finance a student's education. Since the private loans are so popular and the loan is in the student's name, the PLUS has lost its appeal. Also, the PLUS used to enter repayment immediately, which has now changed that the parent has the option to defer the loan until after the student graduates or withdraws. Although in the long run, the PLUS provides more of a cost savings due to the interest rate and borrower repayment benefits, it is not a popular choice for students.

Private loans as mentioned earlier are an extremely popular choice for students who need additional funding to cover their educational expenses. Nine students indicated this loan was the most important in comparison to other aid types, while eighteen students responded this loan was the least important. Obviously since they need repaid, loans will not be as popular in comparison to aid which is not repaid. All financial aid sources and responses noted above are displayed in Table Ten.

Table 10: Survey Question Four - Non Enrolled Students

Question Four: Please rank in order of importance, the types of financial aid that are the most beneficial in covering your current educational costs. (1 = most important and 10 = least important)					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Institutional Merit Scholarship	28	6	2	2	11
Institutional Grant	27	8	1	1	11
Federal Pell Grant	13	8	7	3	17
SEOG	7	11	10	4	15
State Grant	11	9	11	5	11
Federal Student Employment	15	12	8	3	9
Stafford Loans	9	10	10	10	8
Perkins Loans	7	8	9	9	14
PLUS Loans	9	6	9	5	18
Private Loans	9	2	11	6	18

Question number five contained eight factors in which respondents were asked to rank in order of importance, those factors which influenced their decision to enroll at another institution. These responses were then consolidated into four categories for reporting purposes. The weights of the responses were based on one as having the most weight and ten having the least. Cost received the highest number of responses with a total of 28 listed as being the most important factor in their enrollment decision. The second most popular response for their enrollment at another college were the majors offered. Reputation of the school and location ranked as the third most popular reason with a total of 14 who ranked this as most important in their decision. Faculty was considered to be the next most important with 17 responses. Student activities ranked at number six, with a total of 15 students who enrolled at their current institution because of activities. Sports received a total of 12 responses as the most important factor as to what influenced enrollment. Only 11 students indicated they wanted to attend a women's

college which was ranked the lowest on the list. These responses and factors are displayed in Table Eleven.

Table 11: Survey Question Five - Non Enrolled Students

Question Five: Please rank, the following factors that influenced your decision to enroll at another institution. (1 = most important and 8 = least important)				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Cost	28	11	3	9
Location	18	11	5	15
Reputation of the School	18	8	8	14
Faculty	17	13	3	15
Wanted to attend a women's college	11	3	10	25
Student Activities	15	11	8	15
Majors Offered	21	11	7	10
Sports	12	7	7	23

Question number six on the survey for students who did not enroll, asked if they could have enrolled at their current institution without the financial aid received. An overwhelming number of students, twenty-two, strongly agreed they could not have enrolled without their financial aid package. Ten students also agreed, for a total of 22 who either strongly agreed or agreed. Eight students strongly disagreed, while seven disagreed. This question documented the importance of financial aid with regard to enrollment. The responses are noted in Table Twelve.

Table 12: Survey Question Six - Non Enrolled Students

Question Six: I could not have enrolled at my current school without the financial aid I received.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	22	44%
Agree	10	20%
Neither Agree nor Disagree	3	6%
Disagree	7	14%
Strongly Disagree	8	16%
Total	50	100%

This question was cross tabulated with the question that asked if the financial aid package offered by Chatham was the primary reason they did not enroll. Eight students strongly agreed to both questions. Four students strongly agreed they could not have enrolled at their current school without financial aid, but agreed financial aid was the primary reason they did not attend Chatham. Seven students who either disagreed or strongly disagreed the aid package was the primary reason for not attending, strongly agreed they could not have enrolled at their current school without financial aid. Five students, who strongly disagreed about aid being the primary reason for not enrolling, agreed they could not have enrolled at their current college without financial aid. Six students, who strongly disagreed or disagreed about Chatham aid, strongly agreed or agreed they, needed aid at their current school. Two students, who strongly agreed that aid was the primary reason for not attending, either strongly disagreed or disagreed about needing aid at their current school. This information is presented in Table 13.

Table 13: Cross Tabulation: Non Enrolled Students

Rows: I could not have enrolled at my current school without the financial aid I received Columns: The financial aid package I was offered by Chatham College was the primary reason I did not attend						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	8	4	2	3	4	21
Agree	2	1	2	3	2	10
Neither Agree Nor Disagree	0	0	1	1	1	3
Disagree	1	0	2	3	1	7
Strongly Disagree	1	1	1	0	5	8
TOTALS	12	6	8	10	13	49

Question number seven was developed because students, in some cases, indicated their financial aid package was not enough to cover their expenses. I wanted to determine if respondents felt the financial aid package was fair based on the results of the FAFSA. Eight students strongly agreed their aid package from Chatham was fair, and eighteen agreed, for a total of 26. Fourteen students were neutral on the question, while seven disagreed, and only one strongly disagreed their aid package was fair. The results of survey question seven are shown in Table 14.

Table 14: Survey Question Seven - Non Enrolled Students

Question Seven: The amount of financial aid I was awarded by Chatham College was fair based on the information provided by me on the FAFSA, as well as, my academic qualifications.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	8	17%
Agree	18	38%
Neither Agree nor Disagree	14	29%
Disagree	7	15%
Strongly Disagree	1	2%
Total	48	100%

The FAFSA question was cross tabulated with the question which asked if the financial aid package from Chatham was similar compared to other colleges in which the students applied. Only one student strongly agreed the aid package from Chatham was fair based on the results of the FAFSA, and similar to aid packages from other colleges. Four respondents strongly agreed or agreed the aid packages were similar, but either strongly disagreed or disagreed that the aid from Chatham was fair. Ten students agreed to both questions, and four were in disagreement on both. Five students agreed Chatham's aid package was similar compared to other schools, but were neutral based on the results of the FAFSA being fair. Only one student strongly disagreed to both. There does not appear to be much of a relationship between these two questions. The individual survey questions indicated more students who either strongly agreed or agreed to both questions. This information is provided in Table 15.

Table 15: Cross Tabulation - Non Enrolled Students

Rows: The amount of financial aid I was awarded by Chatham College was fair based on the information provided by me, on the FAFSA, as well as, my academic qualifications Columns: The financial aid package I was offered by Chatham College was similar to other colleges I applied to in terms of distribution of awards						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	1	3	0	1	3	8
Agree	1	10	5	2	0	18
Neither Agree Nor Disagree	0	5	3	5	1	14
Disagree	0	1	1	4	1	7
Strongly Disagree	0	0	0	0	1	1
TOTALS	2	19	9	12	6	48

Question number eight was designed to determine if the aid packages these students received from Chatham were similar to other aid packages received from other institutions in which they applied. The highest response to this question was a total of 19 students who agreed the aid package from Chatham was similar to other colleges in regards to distribution of awards. Three students strongly agreed for a total of 22 students who had some level of agreement the packages were similar. A total of 18 students either disagreed, or strongly disagreed. Table 16 displays the results of this survey question.

Table 16: Survey Question Eight - Non Enrolled Students

Question Eight: The financial aid package I was offered by Chatham College was similar to other colleges that I applied to in terms of distribution of awards		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	3	6%
Agree	19	39%
Neither Agree nor Disagree	9	18%
Disagree	12	24%
Strongly Disagree	6	12%
Total	49	100%

Although the above question was asked on the survey about whether the aid packages were similar, it was also necessary to determine how each fund source compared to other institutions. Respondents were first asked to indicate whether Chatham offered a larger merit scholarship than other schools to which they applied. Twenty-two students indicated Chatham's scholarship award was larger. Thirteen students, remained neutral in their response, which may indicate the award was similar at their current school. If this is the case, it supports the response to the above question. A total of 15 students either disagreed or strongly disagreed their scholarship from Chatham were larger. The results of this survey question are in Table 17.

Table 17: Survey Question Nine - Non Enrolled Students

Question Nine: The financial aid package I was offered by Chatham College compared to other colleges to which I applied, provided larger dollar amounts in merit scholarships.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	10	20%
Agree	12	24%
Neither Agree nor Disagree	13	26%
Disagree	10	20%
Strongly Disagree	5	10%
Total	50	100%

This scholarship question was cross-tabulated with the question, which asked respondents if the financial aid package influenced their decision not to attend. Only one student strongly agreed the aid package influenced their decision not to attend, but that the scholarship offered from Chatham was larger. Three students strongly agreed aid influenced their enrollment decision and that Chatham awarded a larger scholarship, while three were in agreement. Five respondents who strongly agreed aid affected their enrollment decision, disagreed their scholarship awards were larger. Four students, who agreed aid influenced their enrollment, strongly disagreed their Chatham scholarship was larger. Seven students strongly disagreed aid influenced their decision not to attend, but agreed the scholarship awarded by Chatham was larger. For this cross tabulation more students seem to be in agreement that aid did influence their enrollment decision, but disagreed, their merit scholarship from Chatham was larger than other schools. This information is displayed in Table 18.

Table 18: Cross Tabulation - Non Enrolled Students

Rows: The financial aid package I was offered influenced my decision not to enroll at Chatham College						
Columns: The financial aid package I was offered by Chatham College compared to other colleges to which I applied, provided larger dollar amounts in merit scholarships						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	1	3	2	5	2	13
Agree	0	3	4	2	2	11
Neither Agree Nor Disagree	2	1	3	1	1	8
Disagree	0	1	2	0	0	3
Strongly Disagree	7	4	2	1	0	14
TOTALS	10	12	13	9	5	47

The next question asked the opposite as to whether Chatham's scholarship offered was smaller in regard to dollar amount compared to other schools. Only four students strongly agreed they were offered a larger scholarship at other institutions, and eleven students agreed they were given more money elsewhere. Eleven students remained neutral, which should imply the awards, were similar at other colleges. A total of 23 students either disagreed or strongly disagreed the scholarships from Chatham were smaller. For this question, 22 students agreed Chatham provided larger scholarships, which is almost the same number of responses. Table 19 lists all the responses for this question.

Table 19: Survey Question Ten - Non Enrolled Students

Question Ten: The financial aid package I was offered by Chatham College compared to other colleges to which I applied, provided smaller dollar amounts in merit scholarships		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	4	8%
Agree	11	22%
Neither Agree nor Disagree	11	22%
Disagree	16	33%
Strongly Disagree	7	14%
Total	49	100%

Since Chatham also offered institutional grants to these students it was necessary to determine how the awards compared to other colleges. Only two students strongly agreed the grants from Chatham were larger compared to other schools, which is the lowest single response on any other question on the survey. Seven students both agreed that Chatham's grants were larger and 21 remained neutral on the subject. Thirteen students disagreed the grants were larger, and five strongly disagreed. Based on these responses the grants offered by the College are not as comparable to other institutions as much as the scholarships. The results of this question are in Table 20.

Table 20: Survey Question Eleven - Non Enrolled Students

Question Eleven: The financial aid package I was offered by Chatham College compared to other colleges to which I applied, provided larger dollar amounts in grants.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	2	4%
Agree	7	15%
Neither Agree nor Disagree	21	44%
Disagree	13	27%

Table 20 (continued)

Strongly Disagree	5	10%
Total	48	100%

This question was also reversed to determine if Chatham offered smaller grants compared to other colleges in which these students applied. Four students strongly agreed Chatham's grant awards were smaller, while eleven students agreed. As a result a total of 15 students felt the awards were smaller. Twenty-four students, which were the highest number of responses for any question on the survey, were neutral on the question. The reason for this higher response could be related to the fact that not every student in this sample would have received a grant from Chatham College, so they would not have a response. This number is close to the neutral category above with twenty-one responses. It appears due to the similar responses in these two categories for the grants, it may have been because the students who answered in this manner did not receive the award. The results of this question are found in Table 21.

Table 21: Survey Question Twelve - Non Enrolled Students

Question Twelve: The financial aid package I was offered by Chatham College compared to other colleges to which I applied provided smaller dollar amounts in grants.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	4	8%
Agree	11	23%
Neither Agree nor Disagree	24	50%
Disagree	4	8%
Strongly Disagree	5	10%
Total	48	100%

The next two questions are in regard to student loans, and whether or not the financial aid package from Chatham required them to borrow more or less loans in comparison to other schools. A total of twenty-eight students either strongly agreed or agreed the financial aid package from Chatham required them to borrow more loans. Only twelve students either disagreed or strongly disagreed. Eight students were neutral on the subject. Only four students strongly agreed Chatham would have required them to borrow fewer loans. Eight students agreed they would have borrowed less to attend Chatham. The results of this question are located in Table 22.

Table 22: Survey Question Thirteen - Non Enrolled Students

Question Thirteen: The financial aid package I was offered by Chatham College compared to other colleges to which I applied, required me to borrow more money.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	14	29%
Agree	14	29%
Neither Agree nor Disagree	8	17%
Disagree	7	15%
Strongly Disagree	5	10%
Total	48	100%

Twenty-eight students, either strongly disagreed or disagreed they would have borrowed less at Chatham. I was not surprised by the results of these two questions, and am more confident the loan indebtedness was a factor in enrollment because the responses to these questions are identical in regard to having to borrow more to attend, or less to attend the other schools. This survey question and responses are in Table 23.

Table 23: Survey Question Fourteen - Non Enrolled Students

Question Fourteen: The financial aid package I was offered by Chatham College compared to other schools to which I applied, required me to borrow less money		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	4	8%
Agree	8	16%
Neither Agree nor Disagree	10	20%
Disagree	14	28%
Strongly Disagree	14	28%
Total	50	100%

5.1.2. Research Question One – Enrolled Students

The second group of respondents analyzed included students who were offered a financial aid package, and enrolled at Chatham College. The first question on the survey asked the respondent if the financial aid package offered by Chatham College was the primary reason they enrolled. Nineteen students strongly agreed the financial aid package was the primary reason they enrolled and 36 students agreed. Sixteen students were neutral on their response, and 24 students either disagreed or agreed about the financial aid package. These results are listed in Table 24.

Table 24: Survey Question One - Enrolled Students

Question One: The financial aid package I received was the primary reason I enrolled at Chatham College.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	19	21%
Agree	32	35%
Neither Agree nor Disagree	16	18%

Table 24 (continued)

Disagree	15	16%
Strongly Disagree	9	10%
Total	91	100%

The responses to the second question, which asked respondents if the financial aid package influenced their decision to enroll, showed a dramatic increase in the number of students who strongly agreed or agreed to this question. Thirty-six students strongly agreed and 31 students agreed the aid package influenced their enrollment decision. Based on these two numbers, 74% of the students who completed the survey based an enrollment decision on financial aid. Eleven students were neutral on the question, and only 13 students disagreed or strongly disagreed to this question. Table 25 lists survey responses to this question.

Table 25: Survey Question Two - Enrolled Students

Question Two: The financial aid package I received influenced my decision to enroll at Chatham College.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	36	40%
Agree	31	34%
Neither Agree nor Disagree	11	12%
Disagree	7	8%
Strongly Disagree	6	7%
Total	91	100%

The first two survey questions were cross tabulated to determine if a relationship existed. Eighteen students strongly agreed the financial aid package was the primary reason they enrolled at

Chatham and the financial aid package influenced their decision to enroll. Thirteen students strongly agreed the aid package influenced their enrollment decision and agreed financial aid was the primary reason they enrolled. One student agreed the aid package influenced her decision to enroll and strongly agreed the aid package was the primary reason she attended. The responses tabulated in disagreement were fewer with one student who disagreed, aid influenced her decision, but strongly agreed the aid was the primary reason she enrolled. Three students agreed the aid influenced their attendance, but disagreed it was the primary reason to enroll. Based on these results the financial aid package did influence enrollment, and was also the primary reason for attendance. All of the results for this cross tabulation are in Table 26.

Table 26: Cross Tabulation - Enrolled Students

<u>Rows:</u> The financial aid package I received was the primary reason I enrolled at Chatham College <u>Columns:</u> The financial aid package I received influenced my decision to enroll at Chatham College						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	18	1	0	0	0	19
Agree	13	18	1	0	0	32
Neither Agree Nor Disagree	4	9	3	0	0	16
Disagree	1	3	4	6	1	15
Strongly Disagree	0	0	3	1	5	9
TOTALS	36	31	11	7	6	91

Question number three contained nine factors respondents were asked to rank in the order of importance which influenced their decision to enroll at Chatham College. The responses were then grouped together for reporting purposes. The responses were weighed in order of importance, with the number one response having the greatest weight and number nine carrying the least weight. Financial aid received the highest number of responses, which totaled 47 as the most important factor in their enrollment decision. The next most popular answers were location with 43 responses and majors offered with 33 total responses. Faculty was listed as the fourth most popular reason, which totaled 30 who ranked this as most important in their decision. Cost was considered to be the next most important with 29 responses. Reputation of the school ranked sixth had a total of 27 responses. The fact students wanted to attend a women's college was ranked seventh, with a total of 25 responses. Fifteen students indicated they enrolled because of sports for their eighth choice. Student activities, was ranked last as the most important by 11 students. These responses are outlined in Table 27.

Table 27: Survey Question Three - Enrolled Students

Question Number Three: Please rank the following factors in order of importance that might have influenced your decision to enroll. (1 = most important and 9=least important)					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Location	43	22	14	9	3
Reputation of School	27	32	12	17	2
Faculty	30	24	13	13	9
Wanted to attend women's college	25	18	18	14	23
Student Activities	11	21	29	19	11
Majors Offered	33	20	21	10	7
Sports	15	10	9	14	42
Cost	29	14	22	13	13
Financial Aid	47	12	16	5	10

There was an overwhelming response by the enrolled students since 53 students strongly agreed they could not have enrolled at Chatham College without the financial aid package they received. Fifteen students agreed to this question, for a total of 68 students or 75% percent of respondents who were in agreement. This question received one of the highest numbers of responses on either questionnaire. Nine students remained neutral to the question, and 14 students either disagreed or strongly disagreed. Table 28 indicates the results of the fourth survey question.

Table 28: Survey Question Four - Enrolled Students

Question Four: I could not have enrolled at Chatham College without the financial aid I received.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	53	58%
Agree	15	16%
Neither Agree nor Disagree	9	10%
Disagree	7	8%
Strongly Disagree	7	8%
Total	91	100%

A cross tabulation was completed to compare responses between the question that asked if students could not have enrolled at Chatham, without the financial aid package they received and if the financial aid package was the primary reason they enrolled. Fifteen students strongly agreed to both questions, while 23 agreed financial aid was the primary reason they enrolled, but strongly agreed they could not have enrolled without their financial aid. Five students disagreed and two strongly disagreed financial aid was the primary reason they enrolled, but strongly agreed they could not have enrolled without financial aid. Similar to the results on the individual questions, the majority of students indicated

financial aid was very important in their enrollment decision. Table 29 shows the cross tabulations for these two questions in their entirety.

Table 29: Cross Tabulation - Enrolled Students

Rows: I could not have enrolled at Chatham College without the financial aid package I received Columns: The financial aid package I received was the primary reason I enrolled at Chatham College						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	15	23	8	5	2	53
Agree	2	3	4	5	1	15
Neither Agree Nor Disagree	0	2	1	1	5	9
Disagree	1	2	1	3	0	7
Strongly Disagree	1	2	2	1	1	7
TOTALS	19	32	16	15	9	91

Question number five was developed because students have indicated their financial aid package is not sufficient to cover their expenses, and is unfair based on college costs. I wanted to determine if respondents felt the financial aid package was fair based on the results of the FAFSA. Twenty-two students strongly agreed their aid package from Chatham was fair, and 33 agreed, for a total of 55. Twelve students were neutral on the question, while seventeen disagreed, and seven strongly disagreed their aid package was fair. Although the students in agreement outweigh the students in disagreement, I was surprised there were only 24 students, or 27% who felt the aid package was unfair. All responses to this survey question are in Table 30.

Table 30: Survey Question Five - Enrolled Students

Question Five: The amount of my financial aid package at Chatham College was reviewed fairly based on the information provided by me on the FAFSA, as well as, my academic qualifications.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	22	24%
Agree	33	36%
Neither Agree nor Disagree	12	13%
Disagree	17	19%
Strongly Disagree	7	8%
Total	91	100%

Students at Chatham College are awarded scholarships when initially start classes based on academic qualifications determined by the Admission Office. It has been discussed students should receive increased or initial scholarships if they excel academically once enrolled. This question was added to the survey to determine if additional scholarships should be awarded to students who excel academically once enrolled. This question received an overwhelming response as all but three students either strongly agreed or agreed. Sixty-seven students agreed and 21 agreed. All responses are outlined in Table 31.

Table 31: Survey Question Six - Enrolled Students

Question Six: Additional scholarships should be awarded to students who excel academically once enrolled at Chatham.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	67	74%
Agree	21	23%
Neither Agree nor Disagree	3	3%
Disagree	0	0%
Strongly Disagree	0	0%
Total	91	100%

The two survey questions discussed in the preceding two paragraphs were cross tabulated. Nineteen students strongly agreed their financial aid package offered from Chatham was fair based on the results of the FAFSA and that students should be awarded additional scholarships if they excel academically once enrolled. Twenty three students strongly agreed that additional scholarships should be awarded to students, and also agreed their financial aid package was fair. Ten students also agreed additional scholarships should be awarded, as well as, that the results of the FAFSA and their aid packages were fair. There were also some students who disagreed between the two questions. In fact thirteen students who disagreed and five that strongly disagreed their aid package was fair, strongly agreed additional scholarships should be awarded. Based on the majority of students in agreement there is a relationship between the fairness of aid packages and scholarship awards. Table 32 shows the entire cross tabulation results for these two survey questions.

Table 32: Cross Tabulation - Enrolled Students

Rows: The amount of my financial aid package at Chatham College was reviewed fairly based on the information provided by me on the FAFSA, as well as, my academic qualifications Columns: Additional scholarships should be awarded to students who excel academically once enrolled at Chatham						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	19	2	1	0	0	21
Agree	23	8	2	0	0	33
Neither Agree Nor Disagree	7	5	0	0	0	12
Disagree	13	4	0	0	0	17
Strongly Disagree	5	2	0	0	0	7
TOTALS	67	21	3	0	0	91

It was also necessary to determine if the aid packages these students received from Chatham were similar to aid packages received from other institutions in which they applied. The highest number of responses to this question included a total of 19 students who agreed the aid package from Chatham was similar to other colleges in regard to distribution of awards. Although only two students strongly agreed, and twenty agreed, based on the results of the other questions the aid packages offered by Chatham influenced them to enroll. Twenty-six students neither agreed nor disagreed to this question. Twenty-eight students disagreed and 12 strongly disagreed, for a total of 40 or 44%. It is better more students were in disagreement to this question because by disagreeing it implies Chatham's aid packages were better. The results of this question are outlined in Table 33.

Table 33: Survey Question Seven - Enrolled Students

Question Seven: The financial aid package I received from Chatham College was similar to other colleges to which I applied to in terms of dollar amounts and distribution of awards.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	2	2%
Agree	20	23%
Neither Agree nor Disagree	26	30%
Disagree	28	32%
Strongly Disagree	12	14%
Total	88	100%

Although the above question was asked on the survey whether the aid packages were similar, it was also necessary to determine how each fund source compared the aid packages at other colleges. Respondents were first asked to indicate whether Chatham offered a larger merit scholarship compared to other colleges in which they applied. Only seven students strongly agreed Chatham's scholarship awards

were larger, however, 28 students agreed. Thirty-nine students, remained neutral in their response, which could imply the awards were similar, or they couldn't remember, since some of these students would have already been enrolled for two years since the initial application process. A total of 15 students either disagreed or strongly disagreed their scholarship from Chatham were larger. All results to this question are listed in Table 34.

Table 34: Survey Question Eight - Enrolled Students

Question Eight: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered larger dollar amounts in merit scholarships.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	7	8%
Agree	28	31%
Neither Agree nor Disagree	39	44%
Disagree	10	11%
Strongly Disagree	5	6%
Total	89	100%

The next question was to determine if Chatham's scholarship offered was a smaller dollar amount compared to other schools. Only seven students strongly agreed they were offered a larger scholarship at other institutions, and ten students agreed they were given more money elsewhere. Forty students remained neutral, which should imply the awards, were similar to other colleges. A total of 32 students either disagreed or strongly agreed the scholarships from Chatham were smaller. The majority of non-enrolled students also responded that Chatham's scholarships were larger. This survey question and responses are listed in Table 35.

Table 35: Survey Question Nine - Enrolled Students

Question Nine: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered smaller dollar amounts in merit scholarships.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	7	8%
Agree	10	11%
Neither Agree nor Disagree	40	45%
Disagree	27	30%
Strongly Disagree	5	6%
Total	89	100%

Since Chatham also awarded institutional grants it was necessary to determine how these awards compared to other colleges. Only seven students strongly agreed the grants from Chatham were larger compared to other colleges, which is one of the lowest single responses\ on any other survey question. Nineteen students agreed Chatham's grants were larger. Forty-two students were neutral on the subject, which the responses may indicate the dollar amounts of grants offered were similar at other institutions. Seventeen students disagreed the grants were larger, and two strongly disagreed. Based on the small number of respondents in agreement, the grants offered by the College are not as comparable to other institutions as much as the scholarships. All results to this question are in Table 36.

Table 36: Survey Question Ten – Enrolled Students

Question Ten: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered larger dollar amounts in grants.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	7	8%
Agree	19	22%
Neither Agree nor Disagree	42	48%

Table 36 (continued)

Disagree	17	20%
Strongly Disagree	2	2%
Total	87	100%

This question was then reversed to determine if Chatham offered smaller grants compared to other colleges in which these students applied. Only three students strongly agreed Chatham's grant awards were smaller, while eleven students agreed. As a result a total of 14 students felt the awards were smaller, which was almost the same as the non-enrolled students, in which thirteen agreed. Forty-four students, which is another one of the highest number of respondents on the survey answering the same, were neutral on the question, which could imply the awards were similar at other colleges. However the higher response may indicate not every student in this sample received a grant from Chatham College, so they would not have a response. This number is similar to the neutral response in the above question with forty two responses. It appears due to the similar responses in the two grant categories, these students may not have received this award. Twenty-nine students were in disagreement the awards were smaller. Table 37 lists all results to this question.

Table 37: Survey Question Eleven - Enrolled Students

Question Eleven: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered smaller dollar amounts in grants		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	3	3%
Agree	11	13%
Neither Agree nor Disagree	44	51%
Disagree	22	25%
Strongly Disagree	7	8%
Total	87	100%

Two questions were cross tabulated, which examined if Chatham College offered larger merit scholarships and larger grants compared to other colleges. Four students strongly agreed both awards were larger. Two students agreed the grants offered by Chatham were larger, and strongly agreed that the merit scholarships were larger. Twelve students agreed both grants and scholarships were larger at Chatham compared to other schools. Four students disagreed the grants offered by Chatham were smaller, but agreed the scholarships were larger. Both questions had a high number of respondents, which neither agreed nor disagreed. Twenty-eight students were neutral in relation to the dollar amounts for both grants and scholarships. The largest response in the neutral category was 42 students for the grants question. Table 38 outlines the entire cross tabulation for these two questions.

Table 38: Cross Tabulation - Enrolled Students

Rows: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered larger dollar amounts in merit scholarships Columns: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered larger dollar amounts in grants						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	4	2	0	1	0	7
Agree	2	12	10	4	0	28
Neither Agree Nor Disagree	1	4	28	3	1	37
Disagree	0	1	4	5	0	10
Strongly Disagree	0	0	0	4	1	5
TOTALS	7	19	42	17	2	87

The larger merit scholarship question was cross tabulated with whether or not the financial aid package from Chatham was similar to other colleges in terms of dollar amounts and distribution of awards. Twenty-two students were neutral on both of these questions, and only one student agreed the scholarships awarded by Chatham were larger and agreed the package offered by Chatham were similar. Eleven students agreed Chatham offered larger scholarships, but the distribution of awards from other colleges were similar. Eleven students also disagreed the distribution of awards were similar and agreed Chatham offered larger scholarships. Based on the individual responses for the distribution of awards, the majority of students were neutral or disagreed. Based on the individual response for the larger scholarships, most students were in agreement, but the majority was neutral. The results to this cross tabulation are in Table 39.

Table 39: Cross Tabulation - Enrolled Students

Rows: The financial aid package I received from Chatham College was similar to other colleges to which I applied to in terms of dollar amounts and distribution of awards Columns: The financial aid package I received from Chatham College compared to other colleges to which I applied, offered larger dollar amounts in merit scholarships						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	0	1	1	0	0	2
Agree	2	11	7	0	0	20
Neither Agree Nor Disagree	1	1	22	2	2	26
Disagree	3	11	6	8	8	28
Strongly Disagree	1	4	2	0	0	12
TOTALS	7	28	38	10	10	88

The next two questions were related to student loans, and whether or not the financial aid package from Chatham required the student to borrow more or less loans compared to other colleges. A total of 31 students either strongly agreed or agreed the financial aid package from Chatham required them to borrow more loans. Twenty-two students either disagreed or strongly disagreed. Thirty-four students were neutral on the subject, which could imply the loan liability would have been similar at other colleges. Results to this question are outlined in Table 40.

Table 40: Survey Question Number Twelve - Enrolled Students

Question Twelve: The financial aid package I received from Chatham College compared to other schools to which I applied, required me to borrow more money.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	18	21%
Agree	13	15%
Neither Agree nor Disagree	34	39%
Disagree	20	23%
Strongly Disagree	2	2%
Total	87	100%

Eighteen students agreed and five students strongly agreed they borrowed less to attend Chatham. Thirty-six students neither agreed nor disagreed, which implied borrowing levels at other colleges were similar. In fact, thirty-four students were neutral to the above question that Chatham required more borrowing, which indicates consistency in the answers. Thirty students, either strongly disagreed or disagreed they would have borrowed less at Chatham, which is again similar to the non-enrolled in which there were twenty-eight responses to these two categories. This is the same number of students who either strongly agreed or agreed if they attended Chatham, they would have borrowed more money. I

was not surprised by the results of these two questions, and as a result am even more confident that loan indebtedness is a factor affecting enrollment choices because the responses to these questions are identical in regard to borrowing more or less to attend. Table 41 outlines the responses to this survey question.

Table 41: Survey Question Twelve - Enrolled Students

Question Twelve: The financial aid package I received from Chatham College compared to other schools to which I applied, required me to borrow less money.		
<u>Response</u>	<u>Number of Responses</u>	<u>Response Percentage</u>
Strongly Agree	5	6%
Agree	18	20%
Neither Agree nor Disagree	36	40%
Disagree	17	19%
Strongly Disagree	13	15%
Total	89	100%

The two loan questions were also cross tabulated. Twelve students agreed they had to borrow less money at Chatham, and disagreed they had to borrow more money. Thirty-one students were neutral on both questions and neither agreed or disagreed. Ten students agreed they had to borrow more money and disagreed they had to borrow less at Chatham. Based on the cross tabulations and the individual responses the majority of students indicated they neither agreed nor disagreed in terms of loan borrowing. As a result it leads the researcher to assume the loan borrowing at Chatham compared to other schools in which they applied was similar. Table 42 shows the entire results of the cross tabulation.

Table 42: Cross Tabulation - Enrolled Students

Rows: The financial aid package I received from Chatham College compared to other schools to which I applied required me to borrow more money Columns: The financial aid package I received from Chatham College compared to other schools to which I applied required me to borrow less money						
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	TOTALS
Strongly Agree	0	1	1	4	12	18
Agree	1	2	0	10	0	13
Neither Agree Nor Disagree	1	1	31	1	0	33
Disagree	2	12	4	2	0	20
Strongly Disagree	1	1	0	0	0	2
TOTALS	5	17	36	17	12	86

The final survey question instructed respondents to rank the different financial aid fund sources in order of importance as to which types of financial aid were the most important in covering their education costs. These responses were then consolidated into five categories for reporting purposes. The weights of the responses were based on one as having the most weight and ten having the least. The Chatham grant received the highest number of responses, which totaled 49 students who felt this type of aid was the most important in covering their costs. The non-enrolled students, listed institutional scholarships as the most important aid source. Chatham merit scholarships were ranked the second highest with 48 responses. Stafford loans were the third most popular choice, with 44 responses, compared to being ranked sixth by the non-enrolled students. Fifteen students felt this fund source was the least important.

Forty-two students felt the Supplemental Educational Opportunity Grant (SEOG) was the most important. The second largest response in this category was 20 students who indicated the grant was the least important. The answers to this question may be related to the fact Chatham is only allocated a small

amount of these funds from the Federal Government each year. As a result, very few students would have received this award, which may have contributed to the response rates. Respondents, if they never received the award, may not have been familiar with this fund type.

Thirty-seven students ranked the Federal Pell Grant as the most important, while 15 students felt the grant was not very important. This grant was ranked fifth in order of importance for this group of students, but ranked fourth in order of importance for the non-enrolled students. State grants were ranked sixth in order of importance with a total of 36 responses.

Federal student employment was ranked seventh in order of importance. Thirty-three students indicated the award was of most importance and 17 of least importance. As mentioned students are not interested in working on campus due to low pay and fewer hours. Also, an increasing number of students do not want to work while enrolled. The majority of students who do work are primarily employed off-campus.

Private loans received 24 responses as being the most important, but 32 students indicated they were the least important. Perkins loans were next in order of importance by the student respondents, with a total of 23 students who ranked them as such. Twenty-five students felt Perkins were not important. Again this could be related to the fact that a small percentage of our students received Perkins loans. Also, with the interest rates on the Stafford loans at 2.77, which is an historic low, and the interest rate on the Perkins at 5.0, they do not have the same appeal.

Parent loans for undergraduate students (PLUS) received 20 responses in regard to being the most important, and 35 as being the least important, which included the highest number of responses as being the least important. These loans were ranked last on the survey. The popularity of this loan has declined over recent years for several reasons. First, parents no longer want the responsibility of borrowing a loan in their name, or contributing to the student's education financially. Before the introduction of private loans, PLUS was one of the few options to finance a student's education. Since private loans have become so popular and the loan is in the student's name, the PLUS has lost its appeal. In the past PLUS entered repayment immediately, but the loan now has deferment options available. Although in the long

run, the PLUS provides more of a cost savings due to the interest rate and borrower repayment benefits, it is not a popular choice for students. All results to this question are listed in Table 43.

Table 43: Survey Question Fourteen - Enrolled Students

Question Fourteen: Please rank in order of importance the components of your financial aid package that are most beneficial in covering your current educational costs. (1 = most important and 10 = least important)					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Chatham Merit Scholarship	48	9	8	2	15
Chatham Grant	49	14	4	6	16
Federal Pell Grant	37	15	16	4	15
SEOG	42	9	13	8	20
State Grant	36	14	11	6	17
Federal Student Employment	33	13	21	4	17
Stafford Loans	44	22	13	7	15
Perkins Loans	23	15	12	9	25
PLUS Loans	20	12	8	7	35
Private Loans	24	11	13	3	32

5.2. INTRODUCTION –RESEARCH QUESTION TWO

Research question two: How was Chatham College ranked among the six college choices on the Free Application for Federal Student Aid (FAFSA) for those students who enrolled at Chatham, and those students that did not? The six college choices for the non-enrolled students who did not enroll at Chatham College were analyzed. For each student who completed a FAFSA for the 2002-03 and 2003-04 Academic Years, all colleges were extracted from each student in the order they were listed on the application. My main interest was to determine the other schools students listed besides Chatham, as well

as, the school in which the student enrolled. A question was included on their survey to indicate the college in which they were enrolled. Since I anticipated not all surveys would be completed, I obtained current enrollment information on this same group of students by accessing their data on the National Student Loan Database System (NSLDS). This system stores Title IV Financial Aid and enrollment information for all student recipients. If a student did not receive any Title IV Financial Aid at the college in which they are currently enrolled, or are not enrolled in any college, I was unable to obtain this information. For the students that I was able to verify enrollment, I studied the type of institution that they enrolled, as well as, the total cost of the institution, which for my analysis included tuition, room, board, and fees for the academic year.

5.2.1. Research Question Two – Non Enrolled Students

The first item examined was the actual school in which each student was currently enrolled. Of the 217 students in this sample, I obtained current enrollment information on 121 students, or fifty-eight percent. For twenty-one students their enrollment information was obtained strictly from the survey, as these students did not have information on NSLDS. There were 28 international students in the sample, and I was unable to obtain enrollment information on 25 of these students.

There were few commonalities between the colleges these students were attending. The most popular college listed was Penn State University. Although this was the college in which most students were enrolled the total number of students totaled only eight, or 6% of the 121 that I was able to verify enrollment. The second most popular institutions were Carlow College and the University of Pittsburgh, each with a total of seven students. All of the students who chose either Carlow or Pitt were residents of Pennsylvania. The next series of colleges, which only had three students enrolled from this group, were Duquesne University, Agnes Scott College, and Point Park University. Students enrolled at Duquesne and Point Park were all from Pennsylvania, and all of the Agnes Scott students were from Georgia, which is where the college is located. Of this group only two were women's colleges. Of the entire analysis,

which included eighty-five different institutions there were only eleven women's colleges students were attending, with 19 students total. Only 22% of this population actually enrolled at a women's college. Based on this analysis and the small number of women's colleges students are actually attending, it is questionable whether these students were interested in a women's college when applying. A listing of the other colleges students listed on the FAFSA are included in Table 44.

Table 44: College and University Listings for Non Enrolled Students

Name of College or University	Number of Students Enrolled
Agnes Scott College	3
Allegheny College	2
Barnard College	1
Bethany College	1
Bryn Mawr College	1
Carlow College	7
Carnegie Mellon University	1
Case Western Reserve	1
Cedar Crest College	2
Central State University	1
College of Charleston	1
Colorado College	1
Cornell College	1
Daemen College	1
Dartmouth College	1
Delaware Valley College of Sciences and Agriculture	1
Dickinson College	2
Duquesne University	3
Edinboro University	1
Elmira College	1
Fairmont State College	1
Fisk	1
Florida Atlantic University	2
Florida Atlantic University	1

Table 44 (continued)

Gannon University	1
Hampton College	1
Hanover College	2
Hollins University	1
Hood College	1
IADT – Fairmount	1
Juniata College	1
Kings College	1
Louisiana State University	1
Loyola University	1
Luther College	1
Lycoming College	1
Marietta College	1
Mercyhurst College	1
Michlelet Bet Rivka (Israel)	1
Millersville University	1
Minnesota State University	1
Montgomery College	2
Mount Holyoke College	2
Niagara University	1
Norfolk Community College	1
North Harris College	1
Northeastern University	1
Ohio State University	1
Old Dominion University	1
Penn State University	8
Point Park University	3
Quinnipiac University	1
Randolph Macon Women’s College	1
Rensselaer Polytechnic Institute	1
Saint Anselm College	1
Saint Bonaventure University	1
Saint Francis University	1
Scripps College	1
Simmons College	1
Slippery Rock University	3
South Connecticut State University	1
Spelman College	1
SUNY – Binghamton	1
SUNY – Stony Brook University	1

Table 44 (continued)

Sweetbriar College	1
Tacoma Community College	1
Texas Christian University	1
The College of Mount Saint Joseph	1
The College of Wooster	1
Thiel College	1
University of Alabama	1
University of Denver	1
University of Findlay	1
University of Hartford	1
University of Houston	1
University of Massachusetts at Amherst	1
University of New Hampshire	1
University of Northern Colorado	1
University of Pittsburgh	7
Villanova University	1
Wake Technical Community College	1
Washington and Jefferson College	1
Washington College	1
West Virginia University	2
Westmont College	1
Xavier University	1
York College of Pennsylvania	1

A second item examined in relation to college choice was cost. Of the eighty-five different institutions, thirty-eight of the chosen colleges, or forty-eight percent, had total costs less than Chatham College. These costs ranged from \$800 to \$28,900 per year. For the eleven women's colleges, six had total costs higher than Chatham, with the most expensive, Bryn Mawr, at \$38,330 per year.

Also extracted from NSLDS was loan borrowing history. Nine percent of students with Title IV financial aid information on NSLDS, had not borrowed any loans to attend, but were receiving Federal Pell Grants. Seventy-seven students or 55% had all borrowed Stafford loans to finance their education. In fact, sixteen percent or twenty-three of these students also had parents, who borrowed through the PLUS

(Parent Loan for Undergraduate Students) program. These loans are typically used to finance the remainder of the education that other types of financial aid are unable to cover.

Another area analyzed was state of legal residence reported on the FAFSA. This was compared to the state in which the college was located where the student actually enrolled. Thirty students (21%) within the group in which enrollment information was obtained, enrolled at a college not located within their state of legal residency. Seventy-nine percent of these students, enrolled in a college located in the state in which they lived. Seven students who listed Pennsylvania as their state of residency decided to enroll in colleges outside of the state of Pennsylvania. For these seven students there was no definite trend in terms of state in which they enrolled, because only two students enrolled in the same states, which were Maryland and West Virginia. The other states in which Pennsylvania students enrolled were Ohio, New York, and Massachusetts. Eighty-six percent of the total Pennsylvania residents enrolled in an institution within the state.

Another area in regard to state analyzed for this group of students was the state reported on the Admissions application. I wanted to determine the geographic areas in which Chatham College applicants are recruited. The majority of these applicants, a total of seventy-nine were from Pennsylvania. Ohio applicants accounted for 12, and New York had the second highest with ten. California, Massachusetts, New Jersey, and West Virginia, each had five applicants from each state. There were a total of 28 states represented, which was higher than anticipated. A comparison of states in which the student applicants actually enrolled is discussed in the next section. The state of residency for these students is located in Table 45.

Table 45: State of Residency for Non Enrolled Students

State	Number of Students
Alabama	1
Arizona	3
California	5
Colorado	3
Connecticut	3
Florida	3
Illinois	3
Louisiana	3
Maryland	2
Massachusetts	5
Michigan	3
Missouri	1
Montana	2
Nebraska	1
New Hampshire	1
New Jersey	5
New York	10
North Carolina	4
Ohio	12
Oklahoma	1
Oregon	1
Pennsylvania	79
South Carolina	1
Texas	4
Vermont	2
Virginia	2
Washington	3
West Virginia	5

Another area examined in relation to where the students enrolled is the Fisap Total Income. The Fisap Total Income (FTI) was recorded for all students who did not enroll but completed a FAFSA. This income is a total of parent (if applicable) and student income per year. For the 120 students who had

enrollment information, I was able to obtain FTI for 74 or 62% of the applicants. The purpose of reviewing the income was to compare this figure to the cost of the college in which the student actually enrolled versus the cost of Chatham, which is \$29,046 per year. This includes tuition, room, board, and fees, which are the figures included in all college costs of this analysis. Since Chatham costs are expensive and may be a deterrent to enrollment, it was necessary to study the number of different income levels, and the colleges these students enrolled to compare costs. The only limitation to this analysis is that I had no indication as to the financial aid package each student received.

For all 74 students, the average FTI was \$58,458 per year, while the average college costs for this entire group of students was \$22,945 per year. To compare FTI and college costs each category was divided into income increments of \$10,000. For each student the financial aid package offered from Chatham was included to determine an estimated dollar amount they may need to pay out of pocket at their current college. In the \$0 to \$10,000 income range there were only a total of 2 students. Based on an average of their FTI and college costs, each of these students would need an average of \$28,039 per year to attend the colleges they selected. At Chatham these students had an average aid package of \$28,875. Based on these figures, they would have had enough aid to cover their costs.

In the \$10,001 to \$20,000 income range there were a total of 12 students. The average income for this group was \$16,460 and the average college cost was \$27,424. At Chatham on average, these students had a financial aid package, which totaled \$23,024. Each student would need approximately \$4100 out of pocket. At this income level, as well as, the lowest included in the analysis, students and families are not going to be able to contribute financially towards their education.

For students in the income range of \$20,001 to \$30,000, the average income was \$23,726 and the costs were \$23,370. Although the average income is beginning to barely exceed college costs, there are still issues of affordability. Students in this category were offered an average aid package from Chatham of \$20,682. These students would need an additional \$2688 to cover their costs for an academic year.

The next income range, \$30,001 to \$40,000, began to improve, as the college costs do not exceed the income, but most families in these ranges are not going to contribute out of pocket, what they are

expected to pay. The average income of \$34,541 exceeds the average cost of \$23,661, but not by a substantial amount. The average financial aid packaged offered to these students was \$18,024. They would need to contribute an additional \$5637 towards their education that their financial aid would not cover.

In the fifth income analysis, with a maximum income of \$50,000, the average income was \$46,719, and the average college costs were \$22,234. Up to and including this subgroup, as the income levels increased, the college costs decreased. For this group the average financial aid package offered from Chatham was \$16,935. Each of these students would need to finance approximately \$5389 for the year.

Students with a maximum income of \$60,000 had an average yearly income of \$54,620, and average college costs of \$26,630. Income levels for each group continued to rise, which was not a true indication of the family's ability to contribute towards their education. In this group with an average aid package of \$20,725, each student would need to pay \$5905 per year.

With an average yearly maximum income of \$70,000, for the next group, they were enrolled at colleges in which the costs were approximately \$25,593 per year. If their average aid package were \$20,856 per year, they would need \$4737. Students included in the next category, with an income of \$80,000 and costs of \$13,594, would need \$7217 per year if their average aid package were at least \$16,377.

The final subgroup included all yearly incomes greater than \$80,001. There were a total of 20 students in this category. Their average college costs equaled \$20,552, while their aid package was \$14,869. Each of these students would need \$5683, with that aid package. This category, which had the greatest concentration of students, had a maximum income of \$216,114. The above analysis of FTI and costs are displayed in Table 46.

Table 46: FISAP Total Income and Cost Analysis for Non Enrolled Students

Income Range	Number of Students	Average FTI	Average College Costs	Average Aid Package	Additional Dollars Needed
\$0 - \$10,000	2	\$7572	\$28,039	\$28,875	\$0
\$10,001 - \$20,000	12	\$16,460	\$27,124	\$23,024	\$4100
\$20,001 - \$30,000	6	\$23,726	\$23,370	\$20,682	\$2688
\$30,001 - \$40,000	11	\$35,541	\$23,661	\$18,024	\$5637
\$40,001 - \$50,000	4	\$46,719	\$22,324	\$16,935	\$5389
\$50,001 - \$60,000	8	\$54,620	\$26,630	\$20,725	\$5905
\$60,001 - \$70,000	8	\$65,152	\$23,593	\$20,856	\$4737
\$70,001 - \$80,000	3	\$56,391	\$23,954	\$16,377	\$7217
\$80,001 - higher	20	\$113,244	\$20,552	\$14,869	\$5683

In addition to reviewing college costs and state information for these schools, institutional classification was analyzed to determine if the college was private, public, community, state or for profit. Of the 141 students, 70 students or 50% enrolled at private institutions. Twenty-seven students or 20 percent enrolled at a public institution while eight students enrolled at a state college or university. Five students enrolled at community colleges, and one student enrolled at a for-profit trade and technical school. Based on the survey results, two students were not enrolled at any institution. It is helpful to

know the types of institutions our applicants enroll. There may have been a cause for concern if a greater number of our student applicants were enrolled in any other type of institution besides private.

For the students who did not enroll at Chatham College, I extracted the other schools they listed on the Free Application for Federal Student Aid (FAFSA). I was unable to obtain this information for 21 students who did not complete a FAFSA. Next the order in which Chatham was listed on the FAFSA was determined. The student had the option when completing the FAFSA to list up to six college choices. The alternate choices were then researched to determine institutional type, and costs of the other college.

There were 217 students included in the sample who did not enroll at Chatham College. Included in the 217 were 128 students who did not complete the FAFSA. Twenty six of the students in this analysis were international, so they would not file a FAFSA, and the other students may have only been interested in institutional aid in which a FAFSA is not required. Since these students did not complete a FAFSA, I was unable to determine other schools to which they applied. College choice listings were then obtained for 89 applicants.

Twenty-seven students listed Chatham College as their first choice on the FAFSA, which is 30% of the total. The same number of students also chose Chatham as their second college choice, while 24% or 21 students listed Chatham as their third choice. A total of twelve students had Chatham as their fourth choice, and ten students had Chatham listed fifth. Only one student listed Chatham as their sixth choice on the FAFSA. This information is displayed in Table 47.

Table 47: Six College Choices and Ranking of Chatham for Non Enrolled Students

Ranking of Chatham on FAFSA	Number of Students	Percentage
First	27	30%
Second	27	30%
Third	21	24%
Fourth	12	13%
Fifth	10	11%
Sixth	1	1%

Also for this same group of students, other enrollment choices besides Chatham were verified for 121 applicants, even though not everyone completed a FAFSA. Twelve students in this group completed a FAFSA, but they did not enroll at any of the institutions listed on the FASFA. Twenty students decided on the first choice college listed, while nine students opted for choice number two. Seven students selected their third choice, while only five students settled for their fourth. Three students selected number five, and no students in this study enrolled at the college, which was listed sixth.

There was no pattern in choice for the students who enrolled at the first school listed on the FAFSA. Only two students chose the same school, which was West Virginia University, in, which were both residents of the state. As a result in cost comparison between the two, these students would have substantial costs savings attending West Virginia University because of in state tuition. Neither of these students completed the survey, so I was unable to determine what influenced their decision to attend West Virginia.

In addition, only four of these students enrolled at a women's college. These institutions included Randolph Macon, Hollins University, Spelman College, and Carlow University. Costs to attend Randolph Macon per year are \$29,970, which costs only \$924 more than attending Chatham. Unfortunately three of these four students did not complete the survey, so I was unable to determine

reasons for enrollment. The student that enrolled at Hollins University had yearly costs of \$28,900, which is only a difference of \$146 dollars. Based on the costs figures for each of these institutions it does not appear cost was a factor in their decisions, since all of the above institutions are relatively close in price. The women's colleges applicants listed on the FAFSA are included with costs in Table 48.

Table 48: Women's Colleges Listed on the FAFSA with Costs

College Name	Annual Costs
Spelman College	\$23,230
Carlow College	\$24,936
Sweetbriar College	\$27,740
Hollins University	\$28,900
Chatham College	\$29,046
Cedar Crest College	\$29,195
Randolph Macon Women's College	\$29,970
Agnes Scott College	\$30,250
Simmons College	\$34,310
Barnard College	\$37,103
Scripps College	\$38,000
Bryn Mawr College	\$38,330

The third student, who enrolled at Spelman College, had annual costs of only \$23,230. This also represented cost savings of \$5815 per year in comparison to Chatham. The fourth student, who enrolled at Carlow, completed the survey. The annual price at Carlow was \$24,936, which represented a costs savings of \$4110 per year. However this student indicated on the survey the financial aid package offered by Chatham did not influence her enrollment decision not to attend Chatham, but instead that student activities and sports influenced her decision to enroll at Carlow. She responded her scholarship at Carlow was higher, and she needed to borrow more money to attend Chatham.

There was only one other student from this group who enrolled at their first college choice and completed the survey. She enrolled at Duquesne University, which had annual costs of \$26,907, when compared to Chatham's yearly costs of \$29,046, offered a cost savings at Duquesne. This student indicated the financial aid offered by Chatham had no influence on her decision not to enroll at Chatham. In fact, she indicated location and reputation were the deciding factors in her enrollment decision. She answered that Chatham offered her a larger merit scholarship, but at Duquesne she needed to borrow more in student loans.

5.2.2. Research Question Two – Enrolled Students

All of the school choices listed by the enrolled students on the FAFSA were reviewed. Special attention was noted to where of those six, Chatham was listed. Of the 170 students who enrolled at Chatham, 119 students, or 70% listed Chatham as their first choice. Included in the 170 are 21 students who did not file a FAFSA. If only the 149 students who completed a FAFSA are included, the total that listed Chatham first is 80%. Of these 119 students, who listed Chatham first, twenty-six students listed only Chatham and no other colleges. These students may have listed Chatham exclusively because it was the only school they wanted to attend, or the only school they were accepted. There did not appear to be any trend in regard to the other institutions listed first.

Sixty-four students listed only one institution out of the optional six. Besides Chatham the second most popular first choice was the University of Pittsburgh with a total of four students. Bryn Mawr and Carlow College were the other two women's colleges listed as first choices. Based on the number of students who listed Chatham as their first choice, the FAFSA college section provides a good indication of whether the student is going to enroll.

Fourteen students listed Chatham College as their second college choice on the FAFSA. There was not much consistency with this group, as the two most popular first choices listed for these 14

students, were Duquesne University and the University of Pittsburgh. Each of these universities only had three Chatham students list them each. Bryn Mawr and Carlow University were the only two women's institutions listed as first choices for two students who listed Chatham second. The other schools listed first with one student were the Community College of Allegheny College, Dickinson College, Edinboro University, Oberlin College, Southern Connecticut University, and the State University of New York. The most popular second choice listed besides Chatham was the University of Pittsburgh with 13 students, or eight percent. Thirty-two students only listed two college choices on the FAFSA.

Seven students who enrolled at Chatham had the college listed as their third school choice on the FAFSA. However for these students, there was no trend in either their first or second choices and none of the institutions were women's colleges. The colleges listed first for these students included, Coe College, Carnegie Mellon University, Miami University, University of Pittsburgh, South Western Texas University, and Brigham Young. Their second choices included Beloit College, Drexel University, Ohio State University, University of Pittsburgh – Johnstown, Salisbury State, University of Pittsburgh, and University of New Orleans. Fifteen students listed three college choices on the FAFSA.

Chatham College was listed as a fourth school by only four students. Based on this analysis the likelihood of enrollment declines as the school is listed past the first choice. None of the other schools listed in choices one through four for these students were a women's college. Only eighteen students listed four college choices on the FAFSA. A breakdown of the six college choices and Chatham's ranking is displayed in Table 46.

Two students listed Chatham as their fifth choice. These two students had the University of Pittsburgh and Saint John's University as their first choices. Consistent with the other students, there were no women's colleges in any of the choices for these two students. Sixteen students listed five choices on the FAFSA. Chatham was not listed as sixth choice for any students, and only four students actually listed a total of six schools.

Table 49: Six College Choices and Ranking of Chatham for Enrolled Students

Ranking of Chatham on FAFSA	Number of Students	Percentage
First	119	80%
Second	14	9%
Third	7	5%
Fourth	4	3%
Fifth	2	1%
Sixth	0	0%

State of residency was also examined to determine if Chatham College was only capturing the local market for enrollment, or if opportunities existed in other states, which were not being marketed. The majority of all student applicants enrolled at Chatham were residents of Pennsylvania, which included a total of 124 students or 73%. Based on these numbers the college had a large local market for enrollment. Similar to other areas already discussed in regard to school choice, no pattern or trend exists in state of residency with the exception of Pennsylvania. Other states besides Pennsylvania may have no students enrolled at Chatham, or as few as one. This data makes it difficult to determine if students are being recruited from the other states, or if the students who do enroll are prospects that inquired on their own. Ohio and Texas each had four students who enrolled from these states. Each of the states and the number of students in attendance are displayed in Table 50.

Table 50: State of Residency for Enrolled Students

State of Residency	Number of Students
California	3
Connecticut	1
Florida	2
Georgia	1
Iowa	1
Illinois	3
Indiana	1
Maryland	2
Michigan	1
Minnesota	1
New York	3
Ohio	4
Pennsylvania	124
Texas	4
Vermont	3
Washington	2
West Virginia	1

5.3. INTRODUCTION –RESEARCH QUESTION THREE

Research Question Three: How do financial aid applicants rank in terms of income level? The financial aid applicants were separated into two groups, students who enrolled at Chatham College, and students who did not enroll. Only students offered a financial aid package were included in this analysis. Although all of these students were offered a financial aid package, it does not mean they completed a FAFSA. In fact some students chose not to complete the FAFSA, or were not eligible for federal financial aid, as in the case of international students. The only way to determine the income level of the

financial aid applicants was to study the students who completed the FAFSA information. These are the only students for which I was able to obtain income information. The income information used in this study was the Fisap Total Income (FTI), which is a total combined income of both students and parents.

5.3.1. Research Question Three – Non Enrolled Students

For the students who did not enroll, I extracted the FTI from the FAFSA filers. This information was stored in an Excel spreadsheet for each student in the sample who completed the FAFSA. This sample includes 217 applicants and income information was obtained for 104, or 48%. Income levels were subdivided into groups by increments of \$10,000. Incomes ranged from \$0 to \$216,114. Similar to the college cost analysis, which compared FTI, an average income was calculated for each group. From \$0 to \$10,000, there were a total of four applicants with an average income of \$5915 per year. In the next group with incomes ranging from \$10,001 to \$20,000, there were a total of 15 applicants with an average income of \$16,249 per year. Seven applicants had an average income of \$24,495 in the next category, while thirteen had incomes, which averaged \$35,154. Six applicants had incomes of \$47,210, while another ten had incomes of \$54,527 per year. Almost half of the applicant pool had average yearly income ranging from \$0 to \$54,627. Based on this data it appears the majority of student applicants who did not enroll were from families with incomes less than \$55,000 per year. These students would need the most assistance to finance their education. For future research it would be important to determine why Chatham is attracting the majority of undergraduate applicants from lower income levels.

The other forty-nine applicants included in the analysis had average yearly incomes greater than \$62,725 per year. One of the largest income levels in this analysis included applicants with an average yearly income ranging from \$82,165, to \$216,114. There were a total of 30 students in this sub-group. Although Chatham College attracted a majority of applicants with lower incomes, 29% had substantially higher incomes. As a result the college is attracting students from families with higher incomes, but the

ultimate task is to attract more of these students because they would be less of a financial aid expense to the institution. The income levels for these students are included in Table 51.

Table 51: FISAP Total Income Levels for Non Enrolled Students

Income Levels	Average Incomes	Number of Applicants
\$0 - \$10,000	\$5915	4
\$10,001 - \$20,000	\$16249	15
\$20,001 - \$30,000	\$24,494	7
\$30,001 - \$40,000	\$35,154	13
\$40,001 - \$50,000	\$47,210	6
\$50,001 - \$60,000	\$54,527	10
\$60,001 - \$70,000	\$65,725	12
\$70,001 - \$80,000	\$73,616	7
\$80,001 - higher	\$111,258	30

5.3.2. Research Question Three – Enrolled Students

For the enrolled students, FTI was extracted from the FAFSA filers. This information was stored in an Excel spreadsheet for each student in the sample who completed the FAFSA. This sample totaled 170 applicants, and income information was obtained for 118, or 69%. Income levels were subdivided into groups by increments of \$10,000. Incomes ranged from \$0 to \$228,939. From \$0 to \$8868, there were a total of 12 applicants with an average income of \$2788 per year. Compared to the non-enrolled group there were eight additional students in this low income bracket and the average income was \$3127 less. However in the next income range with a maximum of \$20,000, there were only a total of two students, with an average income of \$14,567.

The next income group which contained students with household incomes between \$20,001 and \$30,000, had a total of 14 students with an average income of \$25,127. Although the majority of these students had received gift aid from Chatham College, loans will also be needed from multiple sources on an annual basis until degree completion. This is especially true, in the first three subgroups of incomes, in which they will not be able to contribute financially to their education. Although the survey results were discussed in research question one, I reviewed the answers for the students who were included in these income categories. Thirty-five percent of the students in the above income categories either strongly agreed or agreed the financial aid package received was the primary reason they attended Chatham.

The next income range, with a maximum of \$40,000, included 15 students with an average income of \$33,606. For the non-enrolled students there were a total of 11 students in this category with an average income of \$35,452. Even at this income level students are unable to contribute towards the costs of higher education without financial assistance. There were also 15 students in the following category with an average income of \$45,423. In both the \$50,000, and \$60,000 levels there were a total of nine in each subgroup, with average incomes between \$54,522 and \$66,303. There were four students in the \$70,000 range with an average income of \$74,069.

In the final income category with family incomes of \$80,001 or higher there were a total of 38 students, which included eight more than in the same income category for the non-enrolled students. The average income was \$116,051 for the enrolled students, compared to \$111,258, for the non enrolled. Although there were fewer students in the sample of non-enrolled students there were greater differences in the amount of students in the lower end of the income ranges and in the highest income category. The income levels and number of applicants are included in Table 52.

Table 52: FISAP Total Income Levels - Enrolled Students

Income Levels	Average Incomes	Number of Applicants
\$0 - \$10,000	\$2788	12
\$10,001 - \$20,000	\$14,567	2
\$20,001 - \$30,000	\$25,127	14
\$30,001 - \$40,000	\$33,606	15
\$40,001 - \$50,000	\$45,243	15
\$50,001 - \$60,000	\$54,523	9
\$60,001 - \$70,000	\$66,303	9
\$70,001 - \$80,000	\$74,069	4
\$80,001 – higher	\$116,051	38

5.4. INTRODUCTION –RESEARCH QUESTION FOUR

Research question four: What is the relationship between income level and scholarship recipient? The FISAP Total Income (FTI) used to answer research question two was also used in this analysis. The FTI was obtained for both enrolled and non-enrolled students. This information was obtained from the FASFA that each student aid applicant completes. Since not all applicants completed a FAFSA in both groups, the FTI was only available for those students who completed the form.

Merit scholarship information was obtained on all students regardless if they completed a FAFSA. Scholarships were awarded on the basis of academic merit, which included high school grade point average and SAT scores. No consideration was given for financial need in the awarding of scholarships, which was completed by the Admissions Office. Scholarships ranged from \$500 to \$15,000 per year and are renewable on an annual basis for a total of eight terms of full-time study as long as the student is maintaining a 2.8 cumulative grade point average.

The actual scholarship awards were obtained from the internal financial aid management system at Chatham College. This information was converted into an Excel spreadsheet and a comparison was completed between the FTI and merit scholarship. This research question was included in the analysis to determine if there was a relationship between income level and students who received scholarships. There was always an assumption students from families with higher incomes had better academic records, and as a result received more merit scholarship. Although the total number of merit recipients was higher than what was used in the analysis below, I was only able to compare income information for the students who completed the FAFSA.

5.4.1. Research Question Four – Enrolled Students

The total number of enrolled students in the sample was 170. Fifty-one, or 30% of the students in this analysis did not receive a scholarship. As a result 70% of enrolled students received a merit scholarship ranging from \$500 to \$12,000 per year. Twenty nine of the merit recipients did not complete the FAFSA. The lowest scholarship amount of \$500 was awarded to one student. The largest concentrations of scholarship awards were at the \$5500 level, which included 14 students, the \$6000 level which included 18 students, and the \$3000 and \$10,000 level which each included 10 students.

In the first part of the analysis I focused on students who received scholarship and had total incomes higher than \$50,000. The total income for the \$500 scholarship recipient was \$91,225. At the \$2000 level there were a total of 3 scholarship recipients of seven, or 43% with an average income of \$95,664. At the \$2500 level there was one recipient of two or 50% that had an income of \$82,071. Thirty percent received a \$3000 scholarship that had an average income of \$70,721. Only one student, 20% of the total received a \$3000 scholarship, and 25% received a \$4000 scholarship. The average incomes for each group were \$100,311, and \$92,446. Four of seven students received a \$5000

scholarship and had an average income of \$66,250. The most frequently awarded scholarship to ten of fourteen students was \$5500 with an average income of \$106,592. Thirty-three percent of the students with yearly incomes over \$50,000 received a \$6000 award, and had an average income of \$112,204. There was one recipient that received an award of \$7000 with an income of \$132,712. There were no awards at the \$7500 level with incomes of \$50,000 or greater. Sixty-six percent of the total awards at \$8000 had average incomes of \$130,826, while at \$9000; only one student or 25% had an income of \$115,424. Three of the students that received the \$10,000 award had an average income of \$84,565. At both the \$11,000 and \$12,000 awards there were each only one recipient with incomes averaging \$137,696, and \$80,674. Based on this analysis there were 40 students total who received a scholarship with income greater than \$50,000 per year. As a result the remaining 50 students who received scholarships had yearly income less than \$50,000 per year. Students with lower income levels received more scholarship. Students with incomes higher than \$50,000 are included in Table 53.

Table 53: Scholarship Recipients by Income Levels - Incomes Greater than \$50,000 - Enrolled Students

Scholarship Amount	Average Income	Number of Students	Percentage of Students
\$500	\$91,225	1 out of 1	100%
\$2000	\$95,664	3 out of 7	43%
\$2500	\$82,071	1 out of 2	50%
\$3000	\$70,221	3 out of 10	30%
\$3500	\$100,311	1 out of 5	20%
\$4000	\$92,446	2 out of 8	25%
\$5000	\$66,250	4 out of 7	57%
\$5500	\$106,592	10 out of 14	71%
\$6000	\$112,204	4 out of 12	33%
\$7000	\$132,712	1 out of 3	33%
\$8000	\$130,826	4 out of 6	66%
\$9000	\$115,424	1 out of 4	25%
\$10,000	\$84,565	3 out of 7	43%

Table 53 (continued)

\$11,000	\$137,969	1 out of 2	50%
\$12,000	\$80,674	1 out of 1	100%

The second part of the scholarship and income analysis included students whose yearly family income ranged from \$0 to \$50,000, and received a merit scholarship from Chatham College. The awards in this analysis ranged from \$2000 to \$12,000 per year. Fifty-seven percent of the scholarship recipients received a \$2000 award at this income level. Their average income was \$23,418, while the average income of the one \$2500 recipient was \$45,065. Seven of ten students were awarded \$3000, with average incomes of \$25,806. The four recipients of the \$3500 award had an average income of \$14,142. The four students who received the \$4000 scholarship had an income of \$25,207. Those students with an average family income of \$38,020 received a \$5000 award. Twenty-nine percent of the \$5000 awards were from families with average incomes of less than \$21,554 per year. Eight of 12 students received a \$6000 scholarship and sixty-seven percent of the recipients had an award of \$7000. There was one \$7500 scholarship, and two students received an \$8000 award that had average incomes of \$33,336. Seventy-five percent, or three students with an award of \$9000 had an average income of \$15,959. At the \$10,000 level, four students had an average income of \$43,648, while one student received the \$11,000 award. The results of this analysis are outlined in Table 54.

Table 54: Scholarship Recipients by Income Levels - Incomes Less than \$50,000 - Enrolled Students

Scholarship Amount	Average Income	Number of Students	Percentage of Students
\$2000	\$23,418	4 out of 7	57%
\$2500	\$45,065	1 out of 2	50%
\$3000	\$25,806	7 out of 10	70%
\$3500	\$14,142	4 out of 5	80%
\$4000	\$15,207	5 out of 8	63%
\$5000	\$38,020	4 out of 7	57%
\$5500	\$31,554	4 out of 14	29%
\$6000	\$30,440	8 out of 12	67%
\$7000	\$37,475	2 out of 3	67%
\$7500	\$29,003	1 out of 1	100%
\$8000	\$33,336	2 out of 6	33%
\$9000	\$15,959	3 out of 4	75%
\$10,000	\$43,648	4 out of 7	57%
\$11,000	\$30,070	1 out of 2	50%
\$12,000	0	0	0%

5.4.2. Research Question Four – Non Enrolled Students

The total number of non-enrolled students in the sample was 217. One hundred twenty-six, or 58% of the students in this analysis received a scholarship, which ranged from \$3000 to \$14,000 per year. Sixty two of the merit recipients did not complete the FAFSA, so they were not included in this analysis because income information was not available. Of the 126 students who received an award, 64 students completed the FAFSA for which income information was obtained. The largest concentrations of scholarship awards were at the \$6000 level, which included 14 students, and the \$8000 level, which included eight students. There were no awards at the \$5000 level.

The first part of the analysis included students who received scholarships with total incomes, which ranged from \$0 to \$50,000. At the \$3000 award level there was one scholarship recipient of two, or 50%, at this award level with an average income of \$16,294. At the \$4000 level there were two recipients of three or 67% who had average incomes of \$7477. The average income for the four students who received a \$6000 award was \$35,766. No students in the \$0 to \$50,000 income range received a \$7000 scholarship. Five of nine students received an \$8000 award with an average income of \$33,826. Forty percent of the scholarship recipients received a \$9000 award, and had average incomes of \$28,460. There were two recipients who each received an award of \$10,000 with an income of \$13,979. There were two awards at the \$11,000 level with an average income of less than \$13,778. Sixty-seven percent of the total awards at the \$12,000 level each had average incomes of \$44,314, while at \$13,000, two students or 40% had an income of \$37,916. One of three students who received the \$14,000 award had an income of \$17,000. Based on this analysis there were 23 students who received a scholarship with average incomes less than \$50,000 per year. As a result the remaining 41 students who received scholarships had yearly incomes greater than \$50,000 per year. These income ranges and scholarship amounts are included in Table 55.

Table 55: Scholarship Recipients by Income Levels - Incomes Less than \$50,000 – Non Enrolled Students

Scholarship Amount	Average Income	Number of Applicants	Percentage of Applicants
\$3000	\$16,294	1 out of 2	50%
\$4000	\$7477	2 out of 3	67%
\$6000	\$35,766	4 out of 14	29%
\$8000	\$33,826	5 out of 9	56%
\$9000	\$28,460	2 out of 5	40%
\$10,000	\$13,979	2 out of 9	22%
\$12,000	\$44,314	2 out of 3	67%
\$13,000	\$37,916	2 out of 5	40%
\$14,000	\$17,000	1 out of 3	33%

The second part of the scholarship and income analysis included applicants whose yearly family incomes were higher than \$50,000, and also received a merit scholarship from Chatham College. The awards in this analysis ranged from \$3000 to \$14,000 per year. At this income level, one applicant was awarded \$3000, with an average income of \$148,032, and a second \$4000 recipient with an income of \$73,192. The \$6000 scholarship level had the highest number of recipients, which totaled ten, with average incomes of \$83,448. The three recipients of the \$7000 award had an average income of \$93,459. The four students who received the \$8000 scholarship had an income of \$82,731. Those students with an average family income of \$297,040 received a \$9000 award. Seventy-seven percent of the \$10,000 awards were from families with average incomes of \$100,232 per year. Five of 8 students received an \$11,000 scholarship and 67 % of the recipients had an award of \$12,000. There were three \$13,000 scholarships, and two students received the \$14,000 award with average incomes of \$71,632. These awards and income levels are outlined in Table 56.

Table 56: Scholarship Recipients by Income Levels - Incomes Greater than \$50,000 - Non Enrolled Students

Scholarship Amount	Average Income	Number of Applicants	Percentage of Applicants
\$3000	\$148,032	1 out of 2	50%
\$4000	\$73,192	1 out of 3	33%
\$6000	\$83,448	10 out of 14	71%
\$7000	\$93,459	3 out of 3	100%
\$8000	\$82,731	4 out of 9	44%
\$9000	\$99,013	3 out of 5	60%
\$10,000	\$100,232	7 out of 9	77%
\$11,000	\$65,059	5 out of 8	63%
\$12,000	\$76,638	2 out of 3	67%
\$13,000	\$64,545	3 out of 5	60%
\$14,000	\$71,632	2 out of 3	67%

Compared to the enrolled students for the same analysis of income versus scholarship awarded, the non-enrolled students who received scholarships came from families with higher income levels. In fact 41 students or 64% of the applicants had incomes higher than \$50,000 per year. For the enrolled students, only 44% of the scholarship recipients had incomes of greater than \$50,000 per year. These percentages indicate a larger percentage of student applicants with incomes higher than \$50,000 have enrolled at other schools. It could be assumed these students were strong academically and may have received scholarships from different colleges, and not just Chatham.

5.5. INTRODUCTION – RESEARCH QUESTION FIVE

Research question five: How should the financial aid packaging policies at Chatham College be restructured in order to better meet the financial needs of attractive potential first-year students to encourage their enrollment?

5.5.1. Research Question Five

Respondents were asked to rank financial aid sources and answer questions about specific financial aid types and compare these awards included in the financial aid package from Chatham to other schools in which they applied. Based on the survey results for the students who did not enroll, the highest rated fund source in order of importance was the merit scholarship.

Chatham needs to continue to invest in the scholarship program. Scholarships should continue to be offered at higher dollar amounts and marketed to prospective students. There were a large percentage

of students who were offered scholarships, but did not show enough interest in the college to complete a FAFSA. If the scholarship amounts offered when the student is initially accepted, was a larger dollar amount, more students may be interested enough to complete a FAFSA to determine if they will receive additional financial aid from Chatham College. The larger scholarships offered may encourage the students to pay a tuition deposit and enroll. These students need to be encouraged to complete the FAFSA, and based on the students that received a scholarship and did not complete a FAFSA, it can be assumed the award was not enough to interest them to enroll. Also, students that are offered scholarships from Chatham are the top students academically. It can be assumed they are also being offered scholarships from other schools based on the competition between institutions to enroll the best students.

However these students were also asked to decide if the scholarship award offered from Chatham was larger than other schools in which they applied. The majority of students indicated the scholarship offered was larger compared to other schools. Even though they ranked the scholarship as the most important, these applicants agreed Chatham offered a larger scholarship. Based on the results of the survey, financial aid is very important to these students and did affect their enrollment decision, but it was not the primary reason they did not enroll. As a result, the other factors these students listed as reasons they enrolled at their other schools. Cost and majors offered receive the highest number of responses from this group.

I would recommend Chatham increase the two top scholarship awards only. The top scholarship awards should be increased only because these awards would encompass the best students who have applied. Based on the scholarship analysis the majority of students who enrolled, received scholarships ranging from \$5000 to \$6000. This amount would still include academically strong students, but they would not be at the top of the class. Since the greatest award concentration is at this level, Chatham needs to focus on methods to attract and retain the students being offered the higher awards. Also by making the change at this level only, it would help control the discount rate because more than likely there would still be a greater proportion of students receiving the lower scholarship amounts.

Applicants also ranked the institutional grants as being the most important after the scholarships. These students were also asked to decide if the grants offered from Chatham were larger or smaller compared to other schools in which they applied. For the larger grant question, the majority of the responses were neutral, with the numbers being very close to respondents who felt the grant awards from other schools were larger. The neutral responses indicate based on my experience that the students, who answered this question in this manner, did not receive a grant in their financial aid package, and only a scholarship. Their responses to these questions could have only been answered in this manner if this was the case.

Grants from Chatham area awarded based on academic strength and financial need. It is possible, depending on the student's need to receive both an academic scholarship and a Chatham grant. However students and parents, tend to react more positively to their aid award when there is a scholarship included compared to a grant. Based on my experience this is the case because a scholarship is a reflection of a student's academic strength and dedication to their studies as a high school student, and the grant is not. Although based on these results the grant are not the most important to these applicants.

I would recommend not increasing the grant amounts to prospective students. Students, who typically receive a larger grant award, are not the best students academically. As mentioned earlier, Chatham needs to focus on the highest rated students academically, which is consistent with the mission of the college. Although the grants are important to these students, based on the survey results of the enrolled students the highest number of responses for the grant comparison category were again in the neutral category. These students may not have received the grant, but a scholarship instead, or they did receive a grant, which was similar to other colleges. Also, based on the analysis, it appears the scholarship award is most influential to encourage enrollment.

6. SUMMARY AND CONCLUSIONS

The next chapter includes the summary and conclusion to the study, as well as, potential limitation and implications for future research.

6.1. SUMMARY OF THE FINDINGS

Research question one, which was answered primarily from the results of the survey, had big differences in the answers for both groups. The non-enrolled students indicated financial aid influenced their enrollment decision, but was not the primary reason they did not enroll. These students listed others factors, which influenced their enrollment, such as cost and majors, offered at other colleges. The majority of all the enrolled students indicated financial aid was the primary reason they enrolled at Chatham College. An even larger percentage of these students, 74% responded financial aid influenced their enrollment decision. Both groups agreed Chatham required them to borrow more in student loans compared to other schools. Based on the results of both groups, financial aid packages do affect the enrollment of students

Research question two was answered by obtaining the six college choice listed on the FAFSA for both groups of students. Thirty percent of the students who did not enroll listed Chatham as their first college choice and second college choice on the FAFSA. Twenty-four percent of these students had Chatham listed third, twelve students had the College listed third, twelve listed Chatham fourth, and ten students listed the school as their fifth choice. Only one student listed Chatham as their sixth choice. Only four students from this group enrolled at another women's college. For the enrolled students, 80% of the FAFSA filers listed Chatham as their first choice institution. Only 14 students listed the College

second and seven listed them third. Four students listed Chatham fourth, while two students listed the institution fifth. No students listed Chatham as the sixth choice on the FAFSA.

The order of colleges listed on the FAFSA provides a good indication of where the student may enroll. This was especially obvious for the enrolled students and how Chatham was listed on the application. As the school ranking goes down, so does the likelihood the student will enroll.

Research question three was answered by obtaining income from all of the FAFSA filers for both groups of students included in the analysis. The majority of student applicants who did not enroll had yearly family incomes of greater than \$50,001, per year. Based on these numbers Chatham College is attracting students from families from higher incomes, but these students are not enrolling in the institution. There were thirteen additional students in the categories with incomes less than \$50,001, per year for the enrolled students compared to the non enrolled students. However even for the enrolled students, there were a larger percentage of students with family incomes higher than \$50,001. Overall the majority of student applicants who apply at Chatham College had family incomes greater than \$50,000.

Research question four was answered by obtaining the FISAP Total Income (FTI) used on the FAFSA, as well as, scholarship award information from the institutional database. Seventy percent of enrolled students received a scholarship from Chatham College. Fifty of the enrolled students who received scholarships had family incomes of \$50,000, or less. The remaining number of students, which totaled 40, were from families with incomes of greater than \$50,001. As a result, students who enrolled at Chatham College and received scholarship had incomes lower than \$50,000. The results for the non-enrolled students were quite different. There were 23 students who did not enroll who were awarded scholarships, with family incomes less than \$50,000 per year. The remaining 41 students who did not enroll and were awarded scholarships had incomes greater than \$50,001 per year. The results for this question correspond to the findings for research question three which indicated that based on income levels the majority of students who enrolled had incomes greater than \$50,000 per year, and the students who did not enroll had family incomes greater than \$50,001.

Research question five was answered by analyzing all data collected in the study. My recommendations were to increase the two top scholarship awards only. Only these two scholarship awards should be increased because they are given to the most academically capable students. Based on the results of both groups, the majority of the scholarships awarded to these students are between \$5000 and \$6000, and fewer have the larger awards. As a result even if academically strong students are applying to Chatham and being awarded the scholarship, it is not enough to encourage enrollment. I also recommended not increasing the Chatham grant for potential students because the institution needs to focus on recruiting all students, but pay particular attention to students who are the strongest academically.

7. LIMITATIONS

The limitations to this study were primarily based on the non-enrolled students, who were the most challenging for whom to obtain information. The limitations to this study are explained in further detail in the following sections.

7.1. INSTRUMENTATION AND METHODOLOGY

The response rate, if higher, would have provided greater reliability for the non-enrolled students, and allowed me to gather additional information in regard to the data analysis in several critical areas. The first area included information reported on the FASFA. For students who did not complete a FAFSA, I was unable to obtain income information, and the six college choices listed on the FAFSA. The college choice information was critical because it provide insight as to Chatham's competition in relation to

institutional type, and cost. Also, without a completed FAFSA, I was unable to obtain income information on all the students. Again, this was important to answer two of the research questions that focused on income as the major factor in data analysis.

Second, current enrollment information was limited to students who did not complete a FAFSA. For several students who did not complete a FAFSA, I was either able to obtain this information from NSLDS, or from a completed survey. Although I could not study all students in this group, I did have a backup source existing where this information could be collected. Without NSLDS access, I would have been limited in my ability to answer the research questions which included enrollment information.

Third, without a completed survey I was unable to determine how students felt about financial aid in regard to their enrollment, and if it was a primary reason for not attending. Although I was able to confidently answer the research questions based on the response rate, a larger number of completed surveys for this group would have added to the strength of the analysis.

On the instrument itself, there were certain questions which not all respondents answered. I am unsure if this indicates the question was unclear, if the question did not pertain to that particular respondent, or if they just didn't answer the question. It may be helpful for future study to include an answer where the respondent could indicate the question did not pertain to them. This was true for both groups of students in the sample. Also, a large percentage of respondents indicated a response of neither agree nor disagree on the survey. It is difficult to speculate from this answer what the respondents meant or how this answer should be interpreted.

The survey also included students from two academic years. It is possible that when since some of these students had to recall their financial aid packages from as far back as the fall of 2002, they did not clearly remember. To obtain the most accurate information from these students it would be best to initiate this type of survey to students immediately following their enrollment decision, when the enrollment and financial aid process would be clear in their minds.

All of the students included in this survey received financial aid. However, not all students received a scholarship or grant from this institution. As a result it may have been difficult for those

students to answer questions about these fund sources, when they did not apply to them. It is discussed in the recommendations that a response of not applicable be added to the survey replacing neither agree nor disagree. This would provide a more adequate response for those questions.

It could be argued the FISAP income and costs analysis for non-enrolled students is unrealistic based on the dollar amount the student might actually pay out of pocket. Based on Chatham's costs and the financial aid package offered from this college, this analysis can provide some indication as to how much financial aid these students may need. However the aid packages offered by other colleges may be more or less than what was used in this analysis. Also, the aid packages used for all income levels were based on Chatham's costs. As a result, some of the college costs analyses included may be higher or lower than Chatham's costs. It is also important to note the Chatham College financial aid packages include Stafford loans and in some cases Perkins loans. As a result the out of pocket figure for each group would have to be financed by some other type of loan. Assumptions can be drawn as to the amount of financial aid these students received from their current institution, but without knowing the total of their aid package it is difficult to predict their out of pocket costs. As previously mentioned, the costs used in this analysis were based on tuition, fees, room, and board only. Students may incur additional living expenses, which are not included in this analysis.

Critics could also argue the Expected Family Contribution (EFC) or the family's ability to pay based on a calculation of income and assets by the Federal Processor should have been analyzed. The EFC was not used for three reasons. First this calculation was developed in 1965, and there have been only slight modifications to the formula. Second, the EFC is not a true indicator of what students and parents can pay. Finally, I have reviewed the students EFC when awarding financial aid, and have never analyzed actual income and how it relates to the student's aid package. Adding EFC to this analysis is a recommendation for further study.

7.2. BIAS OF THE RESEARCHER

Based on my current position as Director of Financial Aid, there was some bias on my part, which prompted me to study this topic for my dissertation. Based on my experience, students are quick to blame financial aid for reasons of non-attendance, even though other underlying factors may have been involved which influenced their decision. When I started this analysis, I felt financial aid would be important to many of respondents, but I also had some understanding because of working with these students on a daily basis, it was not the primary reason for not enrolling.

7.3. GENERALIZABILITY

Without a higher response rate it is not an absolute this analysis would apply to all Chatham students who applied for financial aid. However, based on the data analysis and the results obtained, it is probable the analysis pertains to all students included in the two academic years studied. It is not conclusive, because it is always possible the remaining respondents, especially the non enrolled students may have answered the questions differently or come from different economic backgrounds.

7.4. IMPLICATIONS FOR FUTURE RESEARCH

There are a variety of areas, which could be studied in the future. The first item to include would be the Expected Family Contribution (EFC) in the income analysis. As mentioned in the analysis in this

particular section, there were reasons to exclude the EFC. However, the EFC could be included in the future, to provide a more in-depth look at this population in regard to personal finances.

Academic information should also be examined, specifically ACT or SAT scores, and high school GPA. This would be important to analyze for all students and not just those who received a scholarship. Even though based on the scholarship awards it can be determined where these students ranked academically, it would be easier to analyze with the actual scores. Also, since the scholarships are awarded by the Admissions Office only, a pressure may exist to award a student a larger scholarship to recruit them, and not because of their academic strength. This would provide a better indication as to the academic strength of students who have applied.

Additional questions should be included on the survey in relation to college choice to determine factors, which would be necessary to move a student's second choice college to a first choice. The answers to these questions are critical to recruitment and could provide a greater in-depth look at these students and their enrollment decisions.

7.5. DISCUSSIONS

Based on the results of the data analysis financial aid does influence enrollment of undergraduate students in higher education. Students who did not enroll at Chatham College indicated financial aid influenced their enrollment decision, but it was not the primary reason they did not enroll. These students listed major and cost as the most important factors in why they did not enroll at Chatham. However students who enrolled at Chatham College indicated financial aid was the primary reason they enrolled, and also that it affected their enrollment decision.

The study found that for both groups of students the category, which was ranked one of the lowest in regard to attending, is the fact that the institution is a women's college. Students were asked to rank factors that encouraged them to enroll. In both cases, the fact Chatham was a women's college was ranked low on the list as a reason to attend. Based on this analysis financial aid is definitely a concern for students, however the college is suffering from declining enrollment due to the fact it is a women's college. There are a record number of students attending college at this time, so there is not a shortfall of students who want a college education. However there are a low number of students attending women's colleges. As a result, the college needs to reassess the mission of the college to determine their goals and objectives to encourage enrollment. They need to make sound policy decisions and implement them in regard to enrollment.

The survey used in this study included a response of neither agree nor disagree for a large percentage of questions. If this survey were to be used in a future study, it would be necessary to change this response for some questions. A response of not applicable may provide greater insight into the actual data analysis component. A larger number of students also chose this response for many of the survey questions. In some cases it is difficult to speculate if the student chose this answer because it did not apply to them, they did not receive the type of financial aid in question, or they simply could not remember.

This study was a beginning attempt to analyze a specific institution and the affect that financial aid has on enrollment. Research is needed in different areas of financial aid, but is especially important at the institutional level. Research at the institutional level must be conducted to understand the financial needs of the student population. Knowing the types of financial aid packages first-year students are likely to consider in their college choice process are important in order to develop new packaging procedures.

This study also provides insight to school administrators the effects of high tuition, and the result it is has on enrollment in higher education. It also provides reassurance that without financial aid, the majority of students would be denied access to higher education. This needs to be reiterated, as Federal budgets are cut, and tuition is increased, more potential students are denied access to education.

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