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A DESCRIPTIVE STUDY ABOUT THE CHANGE IN ACADEMIC PROGRAMS AS A RESULT OF RETRENCHMENT AT SMALL, CATHOLIC LIBERAL ARTS COLLEGES

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A DESCRIPTIVE STUDY ABOUT THE CHANGE IN ACADEMIC PROGRAMS AS A RESULT OF RETRENCHMENT AT SMALL, CATHOLIC, LIBERAL ARTS COLLEGES

By

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ABSTRACT

A DESCRIPTIVE STUDY ABOUT THE CHANGE IN ACADEMIC PROGRAMS AS A RESULT OF RETRENCHMENT AT SMALL, CATHOLIC, LIBERAL ARTS COLLEGES

By

Frank Osage, F.S.C.

The investigator secured the perceptions of college presidents concerning the change in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges. In assessing change, the investigator examined perceptions about retrenchment. Factual data were collected on those similarities considered important in determining their relationship to the concept of retrenchment.

The population included 59 small, four-year, bachelor's-degree-granting, Catholic, liberal arts colleges with a head count between 1,000 and 2,500 students. The respondents included only the executive-level administrator holding the position of president/chief executive officer. Hypotheses were developed from the questions for investigation. After a thorough review of the literature, a pilot-tested questionnaire was administered by mail to the president/chief executive officer of the 59 institutions chosen for the study. Thirty-two usable responses (54%) were received and included in the study. Data were analyzed and hypotheses tested

using a logical deduction process from the SPSS-X Advanced Statistics Guide.

The findings indicated that the institutions in this study did not delete undergraduate academic courses and/or programs as a result of a shift in or reduction of financial resources. A statistically significant relationship was found between retrenchment and a decrease in the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty for the 1980-1981 academic year.

Of the respondents who indicated their institution was retrenched, only one said that undergraduate academic courses and/or programs for nontraditional college-age students had been added to generate more revenue. Of the respondents who indicated their institution experienced retrenchment, only one said that nontraditional graduate academic programs had been added to generate more revenue.

Institutions in this study had experienced some of the characteristics associated with retrenchment. However, only two respondents classified their institution as retrenched.

This work is dedicated to my parents, Frank and Mary Osage,

for their love, support, and many sacrifices.

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THE QUEST FOR QUALITY

Pirsig, in his book Zen and the Art of Motorcycle Maintenance (1985), uses the character named Phaedrus to describe the philosophical discourse between two groups: the classic and the romantic. These two groups concern themselves with understanding the concept of Quality.

The examination of the concept of Quality begins with Phaedrus, who, while teaching a class, raised the issue of dropping grades. Phaedrus argued that grades motivated people for the wrong reasons--simply for grades alone--rather than for knowledge. Knowledge, he believed, should be the sole motivation for people seeking it.

Phaedrus refused to define Quality because he thought that Quality could not fit into any intellectual rule. Therefore, the aesthetician had nothing more to say because the definition of Quality was missing. He believed that, by not defining Quality, the debate between the classic and romantic philosophical stances would be resolved. Quality existed whether defined or not. If one defines Quality, then one has to prove its existence through the scientific method, which attempts to make a valid distinction between true and false in nature.

Phaedrus believed Quality was the source of all subjects and objects. He said, "Romantic Quality and classic Quality together

may be called the 'mystic.' Reaching from mystery into deeper mystery, it is the gate to the secret of all life. Quality is all prevailing" (Pirsig, 1985, p. 227). "Quality is the continuing stimulus which causes us to create the world in which we live" (p. 317). "The Quality which creates the world emerges as a relationship between man and his experience. He is a participant in the creation of all things" (p. 338).

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES

CHAPTER I

INTRODUCTION

Higher education is in a period of declining resources such as student tuition due to declines in enrollment, reductions in state and federal student financial aid, and donation of private gifts. As these resources shrink, institutions compete more intently for the resources that remain available in order to survive and so that quality may be maintained.

Research has indicated that as the traditional college-age population declined, college enrollment decreased correspondingly. With fewer students attending colleges and universities, income generated from tuition was also reduced. Current projections point to a 22% decrease in the traditional college-age student population (18 to 22 years of age) by 1995 (Petrovich, 1985). Further support for a forecast of declining enrollments was detailed in the Fact Book for Academic Administrators (1981-1982) and the 1977 edition of Projections of Education Statistics (Andersen, 1982; Centra, 1980). While lower enrollments were foreseen for public and private institutions of higher education, the projected enrollment decline was exacerbated for the small, Catholic, liberal arts college (Centra, 1980).

In addition to fewer tuition dollars being available due to the enrollment decline, a growing federal budget deficit and legislative attempts to curb the deficit through the Gramm-Rudman-Hollings law forced further cutbacks in the appropriations to higher education ("Details of House and Senate Measures," 1986). Even with budget constraints, federal spending on higher education increased slightly but did not keep up with inflation. In addition, although the Higher Education Act was extended for another five years (1986 to 1991), student aid was restricted and limited to fewer students ("Details of House and Senate Measures," 1986). Thus, institutions of higher education were competing for increasingly limited amounts of federal aid. In addition, there was limited financial assistance from states to private institutions such as small, Catholic, liberal arts colleges. These institutions lacked generous endowment funds and access to large donors and faced an extremely difficult financial crisis (Kacmarczyk, 1984).

Higher education responded to these shrinking resources by reducing programs, personnel, and expenses through a process called retrenchment (Deutsch, 1983). While the danger existed that retrenchment could result in the loss of quality programs, it was essential in terms of survival that quality be maintained for those programs retained by small, Catholic, liberal arts colleges (Conrad & Pratt, 1985). The effective small, Catholic, liberal arts college has to be more concerned with its "mission than with economy, more to do with goals and purposes than with unit costs and conservation

of resources, more to do with quality and diversity than with quantity" (Lawrence, 1984, p. 22).

The small, Catholic, liberal arts college has become more dependent on tuition and private funds than in the past (Howe, 1979). The major issue for small, Catholic, liberal arts colleges is to preserve that which makes them unique, different, competitive, and selective. Institutions that do not maintain these qualities become more vulnerable to external environmental conditions and suffer the possibility of extinction (Hammond, 1984).

Nature of the Study

A review of the pertinent literature regarding retrenchment revealed a substantial amount of material concerning the causes and processes of institutional retrenchment, but there was no clear definition of a "retrenched" institution. In addition, there was a limited amount of literature on change in academic programs as a result of retrenchment. There was little literature on the small, Catholic, liberal arts colleges and how those institutions were affected by the change in academic programs as a result of retrenchment.

This study was primarily descriptive in nature; the investigator attempted to describe the change in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges with a head count between 1,000 and 2,500 students. The investigator assessed the perceptions of administrators who participated in the study of the change in academic programs as a

result of retrenchment through: (a) reductions in undergraduate academic program budget, (b) an increase in part-time undergraduate teaching faculty and a corresponding decrease in full-time undergraduate teaching faculty, (c) an increase in undergraduate student-faculty ratio, (d) addition of undergraduate academic courses and/or programs for nontraditional college-age students in order to generate more revenue, and (e) addition of nontraditional graduate academic programs in order to generate more revenue.

The study included the entire population of such colleges, hypotheses were tested to determine if there was a significant difference in the findings related to the hypothesis being tested. The hypotheses were based upon the research questions.

Rationale for the Study

The small liberal arts college was the predominant form of higher education in the United States for more than two centuries. Many of these small colleges were established by, or developed an association with, a religious denomination. The important features of these schools were "concern for the individual student and his or her personal development, smallness, and value orientation" (Jonsen, 1978, p. 5). These features are still vital to what constitutes the small, Catholic, liberal arts colleges. The small, Catholic, liberal arts colleges of today must respond to their external environment--that is, economic, social, and political factors--if they are to adapt effectively and survive. Thus, their administrators must have accurate information about current trends

that affect the quality and mission of their institution. The external environmental conditions that have the greatest effect on higher education include declining enrollment, shrinking state and federal student financial aid, and dwindling donations of private gifts as a source of funding. These external environmental factors are causing an adverse effect on higher education (Mingle, 1981). Higher education is in a period of fiscal and enrollment decline and in many instances has had to institute a reduction in curricular offerings, faculty and staff positions, services, and maintenance in order to maintain its existence.

A considerable amount of literature on retrenchment was available, but there was little information on the change in academic programs as a result of retrenchment in small, Catholic, liberal arts colleges. Similarly, while there was considerable literature about academic programs in the broad area of American higher education, such literature did not, for the most part, include consideration of the change in academic programs as a result of retrenchment.

As well, the literature was not clear on how academic programs were changed as a result of retrenchment. Some of the literature suggested that quality could be lost through retrenchment of personnel and programs. King (1981), in discussing retrenchment, indicated the importance of developing criteria to evaluate program effectiveness in order to determine where funds were allocated and what programs were to be discontinued based on whether or not these programs contributed to the institution's fulfilling its mission.

Other factors that affected change in academic programs at an institution included an increase in the number of part-time teaching faculty, faculty teaching outside of their specialty, an increase in faculty course load, and an increase in the student-faculty ratio (Mingle, 1981).

The small church-related colleges have existed for more than two centuries and for many years served as the foundation of the American higher education system. Their success and longevity were attributed to the use of creative responses to society's needs through a liberal arts curriculum, vocationalism, and course electives. This was especially true of the small, Catholic, liberal arts colleges which have responded to the needs of society. These institutions provided an internal environment that was a friendly, warm, community atmosphere. Small, Catholic, liberal arts colleges depended on tuition as the primary source of revenue, and on endowments; there was little to no support from the Catholic church (Jonsen, 1978).

The stewards of these small, Catholic, liberal arts colleges must make difficult decisions in order to survive while maintaining quality. For the chief administrators of these institutions to make appropriate decisions, information will be needed about change in academic programs as a result of retrenchment and how this change could affect their institutional mission.

Purpose of the Study

The investigator proposed to determine the perceptions of the college presidents concerning the change in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges. In assessing that change, the investigator examined perceptions about retrenchment. Factual data were collected on institutional size, composition of the student population, budget allocations for undergraduate teaching faculty, undergraduate student-faculty ratio, undergraduate academic courses and/or programs developed for the purpose of reaching the nontraditional college-age student, nontraditional graduate academic programs, state and federal student financial aid, donation of private gifts, and full-time-equivalent enrollment figures, in relationship to the concept of retrenchment (Astin, 1982; Astin & Solomon, 1981).

The fundamental purpose and anticipated benefit of this study was to provide information to chief administrators of small, Catholic, liberal arts colleges about the potential effect of retrenchment on academic programs.

Research Questions

The research questions were developed following a review of the pertinent literature on the change in academic programs as a result of retrenchment at small private colleges. Specifically, the investigator surveyed the college presidents at small, Catholic, liberal arts colleges who responded to the following questions:

1. Is the institutional size a significant variable in a retrenched institution?

2. Is the composition of the student body a significant variable in a retrenched institution?

3. Will retrenchment require an institution to reduce the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses?

4. Will retrenchment require an institution to reduce the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic programs?

5. Will retrenchment require an institution to decrease the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty?

6. Will retrenchment require an institution to increase the undergraduate student-faculty ratio?

7. Will retrenchment require an institution to add undergraduate academic courses for nontraditional college-age students in order to generate more revenue?

8. Will retrenchment require an institution to add undergraduate academic programs for nontraditional college-age students in order to generate more revenue?

9. Will retrenchment require an institution to add nontraditional graduate academic programs in order to generate more revenue?

10. What external environmental characteristics contribute to an institution being retrenched?

Null Hypotheses

The ten research questions presented above served as the basis for the formulation of the ten hypotheses presented below.

Hypothesis 1: There is no relationship between the college president's perception of his/her institution being retrenched and institutional size.

Hypothesis 2: There is no relationship between the college president's perception of his/her institution being retrenched and the composition of the student body at an institution.

Hypothesis 3: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses.

Hypothesis 4: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic programs.

Hypothesis 5: There is no relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty.

Hypothesis 6: There is no relationship between the college president's perception of his/her institution being retrenched and an increase in the undergraduate student-faculty ratio.

Hypothesis 7: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students in order to generate more revenue.

Hypothesis 8: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic programs for nontraditional college-age students in order to generate more revenue.

Hypothesis 9: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs in order to generate more revenue.

Hypothesis 10: There is no relationship between the college president's perception of his/her institution being retrenched and the external environmental characteristics.

Limitations of the Study

This study has the following limitations:

1. The findings of this study were relevant to small, four-year, Catholic, liberal arts colleges which share similarity in basic characteristics. The extent to which the findings may fit or be applicable to other small, Catholic, liberal arts colleges depended upon their similarity to those included in the study. This study included 59 small, four-year, Catholic, liberal arts colleges granting bachelor's degrees in the United States with a head count between 1,000 and 2,500 students.

2. The investigator attempted to determine the change, if any, in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges. Although an institution can retrench in many areas of the college, (e.g., student affairs programs, administration, and deferred maintenance, and so on), this study was limited in its focus only to academic programs.

3. This study reflected only the perceptions of the individual respondents. Cumulative data from a single institution did not imply official institutional policy, decision, or direction.

4. The investigator realized that might not be a perfect fit between national, local, and regional rates of economic inflation.

Furthermore, the national inflation rate is based on the calendar year while college and university data were collected by academic year. Therefore, these factors could affect the findings, which, in turn, could affect the conclusions of this study.

5. The investigator realized that the small size of the administrative staff at these institutions might be an obstacle to respondents' completing the instrument. Some of these individuals may not have had the information from previous academic years to respond to some part(s) of the instrument due to insufficient data collection and storage. These factors could affect the percentage of completed and usable instruments, which, in turn, could affect the generalizability of this study.

Assumptions of the Study

The following assumptions were integral to this investigation:

1. Data were gathered through a survey technique, which is considered an acceptable methodology in the social sciences (Norusis, 1985).

2. Those surveyed comprehended the questionnaire items, responding honestly and with their best professional judgment in providing reliable data.

3. The responses to the questionnaire were not significantly affected by using the inflation rate built on the calendar year while the data were collected for the academic year.

4. Administrators selected (president/chief executive officer) had sufficient information, professional experience, and an

institution-wide perspective to respond adequately to the survey and, therefore, provided reliable information on the status of their institution's mission and academic programs.

Definitions

The following concepts were central to this study and were defined as follows:

Academic programs: "Curriculum or combination of courses in a particular field of study" (Page & Thomas, 1977, p. 274). Logistically, this term includes financial support, personnel, and programs.

Composition of the student body: "An institution may have a student body that is comprised of all female, all male, or coeducational" (Dejnozka, 1984, p. 30).

Elimination: "The act or process of dropping an undergraduate academic course or program from a curriculum at an institution" (Good, 1973, p. 209).

External environment: External forces that have an influence upon an organization and to which the organization must respond, including enrollment decline and shrinking resources. These resources include state and federal student financial aid and private donations.

Full-time-equivalent: "The amount of time spent or required in a less than full-time activity divided by the amount of time normally spent or required in a corresponding full-time activity

during regular academic year, usually expressed as a decimal fraction to the nearest tenth" (Good, 1973, p. 253).

Full-time undergraduate teaching faculty: Faculty employed at an institution teaching a full load of classes, having other responsibilities that are normally assigned to full-time members, and whose primary instruction is with students who may be pursuing a bachelor's degree.

Generate more revenue: "The additions of cash or other current assets that are expendable and do not increase any liability or reserve" (Good, 1973, p. 500).

Institution: "An organization, such as a college or university, designed to serve some social purpose or end" (Good, 1973, p. 304).

Institutional size: The number of students enrolled at an institution on a full-time-equivalency.

Nontraditional college-age students: Students who choose not to attend college directly after high school and usually are not between the ages of 18 and 22.

Nontraditional graduate academic programs: "Curriculum or a combination of courses in a particular field of study leading to a certificate, master's or doctoral degree" (Page & Thomas, 1977, p. 224). "It may include a provision for assessment of learning already acquired, which may be applied in partial fulfillment of the degree program. The student may learn through classroom instruction, independent reading and research" (Mitzel, 1982, p. 1339). The place of delivery may be at a different location other

than the institution (e.g., another city, hospital, and so on). The institution may jointly sponsor these academic programs (e.g., with a hospital, corporation, or another college).

Part-time undergraduate teaching faculty: Faculty employed at an institution to teach one or more courses, but not equal to a full-time teaching load and whose primary instruction is with students who may be pursuing a bachelor's degree. Usually, these persons do not have any other academic duties that are normally associated with a full-time teaching faculty member's responsibilities.

Perceived retrenched institution: An institution that is perceived as retrenched by its president. An institution may experience a decrease in enrollment, state student financial aid, federal student financial aid, and donation of private gifts, which will require it to respond to these external environmental conditions.

President/chief executive officer: The primary administrator responsible for the overall direction of all aspects of a college or university. The holder of this position is responsible to the board of trustees of the college or university.

Reduction: An administrative decision to cut back allocation of funds to a specific unit or activity.

Resources: Sources of revenue used to support a college financially; these include tuition, state and federal student financial aid, and private donations.

Retrenched institution: An institution is retrenched when it responds to its external environment through across-the-board cuts and/or reductions in academic programs (Deutsch, 1983, Levine, 1978; Mingle, 1981).

Retrenchment: An organization's response to a hostile external environment that usually results in reductions in personnel and programs in order to maintain stability.

Total undergraduate academic program budget: Budget allocations including program expenses but excluding salaries distributed to specific academic departments over a specific period of time.

Undergraduate academic courses: "A total study undertaken by a student in a year or leading to a bachelor's degree" (Page & Thomas, 1977, p. 90).

Undergraduate academic program: "Curriculum or combination of courses in a particular field of study leading to a bachelor's degree" (Page & Thomas, 1977, p. 274).

Undergraduate student-faculty ratio: An institutionally established ratio between the number of students and the number of full-time teaching faculty members in an undergraduate academic program that must be retained to be cost effective.

Methodology

Selection of the Population

The population included 59 small, four-year, bachelor's-degree-granting, Catholic, liberal arts colleges in the United States with

a head count between 1,000 and 2,500 students. The list of participants was generated from The HEP '87 Higher Education Directory published by Higher Education Publications. Because of the small and manageable number of institutions, the entire population was included in the sample.

The respondents included the executive-level administrator holding the position of president/chief executive officer. If the titles differed at an institution (e.g., acting president, chancellor, and so on), the individual whose responsibilities corresponded to the same general areas was surveyed. The persons holding this position were part of the study because, by virtue of their responsibilities, they were assumed to hold an institution-wide perspective and decision-making authority.

The Instrument

The data were collected through the administration of a printed survey. The instrument was developed to determine the college presidents' perceptions of the change in academic programs as a result of retrenchment through: (a) reductions in undergraduate academic program budgets, (b) an increase in part-time undergraduate teaching faculty and a corresponding decrease in full-time undergraduate teaching faculty, (c) an increase in undergraduate student-faculty ratio, (d) addition of undergraduate academic courses and/or programs for nontraditional college-age students in order to generate more revenue, and (e) addition of nontraditional graduate academic programs in order to generate more revenue.

The instrument comprised 102 forced-answer and opinion questions. The questions requested responses to institutional size, composition of the student body, budget allocations for undergraduate academic programs, the percentage of full-time and part-time undergraduate teaching faculty members, undergraduate student-faculty ratio, addition of undergraduate academic courses and/or programs for nontraditional college-age students in order to generate more revenue, addition of nontraditional graduate academic programs in order to generate more revenue, state and federal student financial aid, private donations, and full-time-enrollment (FTE) figures in relationship to the concept of retrenchment.

The survey instrument requested the respondents to indicate what characteristics contribute to a need for retrenchment at an institution, whether their institution had experienced any of the characteristics that contributed to retrenchment from 1980 to the present time, and if they would classify their institution as retrenched.

The instrument was pretested for clarity and reliability by administrators at two institutions in Michigan, as well as by a qualified Michigan State University research consultant, who reviewed the instrument before its distribution.

So as not to contaminate the findings of this study, the two institutions used in the pilot study were not included in the population that was studied.

Data Collection

Information was gathered by mailing the questionnaire to each participant, requesting its completion and return to the investigator. The instrument, consent form, a personally addressed cover letter containing basic information on the purpose of this study, and a self-addressed stamped envelope were sent to each participant by September 1, 1987. Respondents were guaranteed that their responses would be kept confidential. The institutional data were placed on a separate sheet of paper. When the instrument was returned to the investigator, the page containing the institutional data was destroyed before recording the data from the instrument to maintain institutional anonymity. An inducement for responding to the instrument was a promise by the investigator to provide each respondent with an abstract of the completed study.

Respondents were requested to complete the instrument and return it to the investigator by September 25, 1987. A personalized follow-up letter, instrument, consent form, and self-addressed stamped envelope were sent to all nonrespondents by September 28, 1987.

Data Analysis

The data from each questionnaire were entered into the Michigan State University IBM 3090VF mainframe computer for analysis. Data were analyzed using programs from SPSS-X Advanced Statistical Guide (Norusis, 1985). Descriptive information was tabulated using the

subprogram Frequencies. Measures of association and chi-square were calculated through the use of the subprogram Crosstabulation.

Ten hypotheses were tested. The hypotheses were retained or not retained by logical deduction from the results of the descriptive information, measures of association, chi-square, and the t-test. The logical deduction process included two factors. For Hypotheses 1, 2, 7, 8, and 9 the following logical deduction process was applied because the data yielded ordinal and nominal measures. First, if the frequency of the data related to the hypothesis tested of those respondents who classified their institution as retrenched and the dependent variable was greater than the median, the hypothesis was not retained. The investigator wanted to determine if the median was significant by applying a second test. Second, the chi-square test was applied to determine whether the distribution of frequencies in a crosstabulation of two variables differed significantly from that expected by chance (Glass & Hopkins, 1984).

For Hypotheses 3, 4, 5, 6, and the central hypothesis, the following logical deduction process was applied because the data yielded interval measures. First, if the frequency of the data related to the hypothesis tested of those respondents who classified their institution as retrenched and the dependent variable was greater than the median, the hypothesis was not retained. The investigator wanted to determine if the median was significant by applying a second test. Second, if the frequency of the data

related to the hypothesis was greater than two standard deviations from the mean, the hypothesis was not retained by a significant variability in the data (Glass & Hopkins, 1984). The .05 alpha level was selected as the criterion of significance. All p-values for the chi-square and t-test were reported to give more information of the reasonableness for decision making.

Organization of the Study

Chapter II, Review of the Related Literature, contains a review of the pertinent literature about the external environment of higher education; retrenchment in higher education; quality as a measure to determine change in higher education; the role of the small, Catholic, liberal arts college in higher education; and the possible change in academic programs as a result of retrenchment in small, Catholic, liberal arts colleges.

Chapter III, Research Methodology and the Design of the Study, contains a description of the methodology, the testable hypotheses, the selection of the population, the development of the instrument, data collection, and data analysis.

Chapter IV, Presentation and Analysis of the Findings, includes the data analysis and findings of the study.

Chapter V, Summary, Findings, Conclusions, and Recommendations, contains a summary of the purposes of the study, presentation of major findings, an interpretation of the findings, and conclusions drawn from these findings. This chapter also includes applications

of the findings and conclusions as well as recommendations for future research.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The review of literature relevant to the change in academic programs as a result of retrenchment in small, Catholic, liberal arts colleges has been divided into five areas, as follows:

1. The literature pertinent to the external environment affecting higher education includes enrollment decline and shrinking resources for higher education. The literature on resources includes information on tuition, state and federal student financial aid, competition for private gifts, and endowments.

2. The literature on retrenchment presents the options available to institutions so they are able to respond appropriately to their external environment.

3. The third section of the literature review contains a discussion of the various measures of quality in higher education. Presented in this discussion is the dilemma that quality in higher education is difficult to define and measure.

4. An important part of the literature review deals with the small, Catholic, liberal arts college. This fourth section discusses the role of these institutions and how their size and

selectivity are both an asset as well as a deficit when adverse conditions are present in the external environment.

5. The final section incorporates the essential literature about change in academic programs as a result of retrenchment in small, Catholic, liberal arts colleges. This section presents the concern that quality could be lost as a result of retrenchment.

External Environment of Higher Education

> Higher education in the United States has developed throughout most of its 340 years. Now, for the first time in history, higher education faces a quarter century of little to no growth. Two decades, 1870 to 1880 and 1960 to 1970, stand out as high points in this history when enrollment has doubled and the greatest advances in higher education were made. (Cyert, 1978, p. 344)

Like other organizations in the United States, higher education was built on a growth model of economy, which meant the more that financial resources were available, the more growth occurred. No longer in a period of growth, higher education, like other organizations affected by the state of the American economy, is reacting to the external environmental conditions (Cyert, 1978).

Those external environmental conditions that have the greatest effect on higher education include declining enrollment, shrinking state and federal student financial aid, and competition for private gifts. These external factors are causing an adverse effect on higher education--it is in a period of financial and enrollment decline and has had to institute cutbacks in order to maintain its existence. The results may be loss of quality personnel and programs, which could result in an institution's demise (Centra,

1980; Hearn & Heydinger, 1985; Kacmarczyk, 1984; Mingle, 1981; Wilson, 1983).

Enrollment Decline

The current and projected enrollment decline is explained by the decrease in the birth rate since the 1970s. Because of this decline in births, the market of potential students--usually between 18 and 22 years of age--is decreasing and is expected to continue to decrease to approximately 1995. Current demographic figures project that the population of 18 year olds will decrease 22% by 1995 (Petrovich, 1984). Another study revealed the population decline for 18 to 24 year olds as follows: In 1985 the figure was 27,608,000 but by the year 1990 the figure is projected to be 24,904,000 (Andersen, 1982).

The enrollment projections differ because of various premises made by different researchers. Some of these assumptions include: an increase in the number of part-time versus full-time students, a downward trend in the number of high school graduates, and greater selectivity on the part of the institution in its admission policy (Carnegie Foundation, 1975; Petrovich, 1984).

The Carnegie Council concluded that there are two major categories of institutions that will face more difficulties during the enrollment crunch. One of these categories included "the small liberal arts college that is not as selective as other institutions in admitting students" (Centra, 1980, p. 28).

A major result of the decline in enrollment will be lower revenue from tuition and fees. The decline in tuition revenue is a major concern for small, Catholic, liberal arts colleges since tuition is the primary source of funds (Martimer & Tierney, 1979).

State, Federal, and Private Sources of Funding

The enrollment decline is further exacerbated by an increase in competition for the funds that are available from state, federal, and private sources. Since the beginning of President Ronald Reagan's Administration in 1981, federal appropriations to higher education have been slashed. Most of the federal student financial aid programs have barely kept up with inflation. Recently, the Higher Education Act of 1965 was extended to 1991, but appropriations were cut from previous years. These reductions were in addition to cutbacks resulting from the Gramm-Rudman-Hollings deficit-reduction law ("Details of House and Senate Measures," 1986; Mingle, 1981).

The Pell Grant program, which has experienced a deficit since 1983, is projected to continue to be short of funds. The Reagan Administration suggested that the 1987 and 1988 appropriations must eliminate this debt, which means the Pell Grant program might lose even more money ("Details of House and Senate Measures," 1986).

New federal government requirements have increased the necessary paperwork, which is causing delays in the receipt of financial aid for students. Such delays in receiving aid are causing major problems for some students because of interest charged on their debts by many lending institutions. It is apparent that such delays in

student aid could present some serious problems for small, Catholic, liberal arts colleges, which are almost wholly dependent on tuition revenue to pay expenses ("Details of House and Senate Measures," 1986).

These additional requirements, which include completing a form to verify the applicant's financial need, meeting certain requirements before a Guaranteed Student Loan may be awarded, and requiring students seeking a loan to apply for a Pell Grant before receiving any other type of loan already have caused a reduction in the number of students applying for financial aid. Administrators also fear that additional filing demands will add another obstacle for low-income families and minority groups, which could place a college degree even further from their reach ("Details of House and Senate Measures," 1986).

Another major factor affecting the federal government's role in funding higher education is the overall budget deficit--the cause of much concern by the Reagan Administration and Congress. The Gramm-Rudman-Hollings deficit-reduction law could result in even more severe cuts in aid to higher education ("Details of House and Senate Measures," 1986).

The federal government also is attempting to place more of the financial responsibility for higher education on state governments. However, most state governments are experiencing financial difficulties similar to those of the federal government and are not in a position to provide the additional revenue for higher education

to replace lost federal funds. Besides, the primary responsibility of state government is to provide revenue for the kindergarten through twelfth-grade school system and, then, to the state colleges and universities. If the higher education institution is denominational, more often than not, state assistance is minimal to nonexistent (depending on the state and the corporate status of the institution) (Mingle, 1981).

Although private gifts to higher education are another important source of revenue, they will not keep pace with the demand for funds. Instead, private gifts will be a source of increased competition between institutions (Kacmarczyk, 1984). All higher educational institutions will need additional private support to replace the revenue lost from diminishing state and federal funds.

In summary, the traditional college-age population will continue to decline for at least another 10 years. State and federal funds to higher education will decline and private gifts may increase but will not be able to compensate for the cutbacks in governmental support. Competition among institutions of higher education will intensify for the meager revenues that will be available from governmental and private sources.

Retrenchment in Higher Education

As a result of the decline in enrollment and limited state and federal student financial aid, programs and personnel must be cut back in order for many higher education institutions to continue to exist. Levine (1978) believed that there are two ways organizations

respond to decline--either by resisting it or adapting to it. One way organizations adapt is through retrenchment. Retrenchment occurs as a result of increasing institutional expenses; limited endowments; reductions in total tuition income, which is essential to meeting operating expenses; operating deficits; and declining enrollments (Deutsch, 1983). Writers, however, have not defined what constitutes a retrenched institution.

Higher education responds to retrenchment by employing one of the following responses. The active response "assumes that administrative technique, process, and leadership can reverse a declining situation. The administration must develop a core of effective management that includes planning, flow of necessary information, and redefinition of the institution's mission" (Deutsch, 1983, p. 42). The reactive response is one in which "the institution resists a major reorganization effort until the survival of the school is at stake" (Deutsch, 1983, pp. 42-43). Finally, the transition response occurs when, "after an initial and expected period of confusion, the institution takes the steps necessary to implement effective action" (Deutsch, 1983, p. 43).

In the retrenchment process, the mission statement of the college must be weighed against the goals, objective, and programs to ensure that the various elements are contributing to the achievement of the institutional mission. Therefore, administrators must make their decisions based on the stated mission of the institution. Some of the problems that higher education face, which complicates the retrenchment process, include lack of long-range

planning, insufficient data base, and a determination of programs by budget rather than programs determining budget (Deutsch, 1983).

The planning process begins with an evaluation of the mission statement of the institution. All goals, objectives, and programs must be evaluated in relationship to their importance in contributing to and aiding the institution in fulfilling its mission (Doucette, Richardson, & Fenshe, 1985; Mingle, 1981). Therefore, programs should receive funding because they assist an institution in achieving its mission and not merely because the programs were previously funded. The planning process must develop and improve data collection and analysis in order to aid administrators and trustees in making long-range planning more feasible and to improve retrenchment decisions (Deutsch, 1983).

An institution may respond to retrenchment in several ways. The institution response depends on the severity of the situation.

> Each phase is marked by particular activities. The first phase is hope that retrenchment is temporary. Usually the institution will freeze costs in this phase. In the second phase, the institution decreases new obligations, postponing new programs or building plans. In the third phase, the institution reduces services not absolutely central to the academic program, such as maintenance, student affairs services and programs, and certain administrative functions. And the final phase, the institution cuts parts of the academic program. (Deutsch, 1983, p. 42)

According to Kacmarczyk (1984),

> Institutional responses to financial constraints have a four-step progression. First, the organization seeks to relieve immediate stress by across-the-board reductions. Second, programmatic changes that have little impact on faculty are made. Third, as the financial crisis deepens, faculty adjustments are finally instituted. For example, as full-time faculty members retire an institution may replace these

> positions with part-time faculty members. And finally, only when the crisis assumes significant proportions are faculty adjustments, (lay-offs, early retirements, etc.) actively made. (p. 32)

Generally, higher education has used two retrenchment processes to respond to its environment: through across-the-board cuts and/or reductions in programs. The rationale for the across-the-board cuts is that this approach is more equitable since it was assumed when making the cuts that all programs were equally important and were funded equitably. If these kinds of cuts continued, however, this action could discourage creativity to initiate new programs that could tap into previously unavailable funds. Across-the-board cuts also could damage strong academic departments and discourage talented faculty in a manner that might cause them to leave an institution (Deutsch, 1983; Levine, 1978; Mingle, 1981).

Reduction in support of specific programs, however, could force an institution to evaluate and to make decisions based on the quality, effectiveness, or efficiency of a program, which could add to an institution's achievement of its mission (Mingle, 1981).

> The factors that must be considered when termination of programs becomes an issue. First, the centrality of a program to the mission of the institution must be determined. It is important to understand the extent to which the program is essential to the university or necessary to support other vital programs. Second, the quality of the program must be estimated in relation to similar efforts nationwide and to other comparable programs within the institution. Third, the cost of the program must be determined relative to the cost of comparable programs, both at other schools and within the parent institution. And finally, the effects of redistribution of the resources that will be available as a result of termination of a program must be weighed against costs, lost income, and other negative effects of cutbacks. (Powers, 1982, p. 9)

The sole importance of cutbacks in specific programs is that there is created a definite process for evaluation. If possible, the process of evaluating programs while the institution is in a retrenchment mode should include faculty as part of the planning, evaluation, and decision-making process. Excluding or discounting faculty involvement in planning, evaluating, and decision making while centralizing such activities among administrators leads to dissension, poor morale, poor decision, and even revolt within the academic community (Powers, 1982).

In summary, the retrenchment process is the method an organization employs to adapt to its external environment. The retrenchment process begins with an institution's examining its mission and basing its decision on that mission. An evaluation process, then, must be established to aid an institution in determining the effect a program has on an institution's achieving its mission. Finally, higher education has selected two ways to adapt to its external environment, either by across-the-board cuts or cutting specific programs.

Measuring Quality in Higher Education

Retrenchment can affect the quality of the academic programs at an institution. While measuring quality in higher education is difficult to determine, faculty and administrators alike argue that quality is essential to a specific program or in determining the relative ranking of an institution. Basically, six methods are used to measure the quality of an institution or its programs.

The first is the nihilist approach, which states that higher education programs and institutions are too diverse to measure quality. Therefore, the nihilist approach totally dismisses the possibility of assessing quality (Astin, 1982).

Reputational rating is the second measure of quality programs or institutions. Institutional reputational ratings, which are constant over time, consider enrollment, size, and the selectivity of institutions in the admission process (Astin, 1982; Webster, 1981). Institutions or programs receive an external reputational rating from faculty and those deans who perceive a faculty as scholars. There are major flaws in the reputational rating: The methods mainly consider research institutions, and an institution's previous reputation may also affect the perception of those who are doing the rating (Webster, 1981).

Another measure of quality is an institution's resources, which include faculty and students, as well as finances. The quality of an institution's faculty may be measured by examining the number of faculty with doctoral degrees or the number of recent publications and/or research projects. The quality of students usually is assessed through standardized tests (i.e., Scholastic Aptitude Test [SAT] or American College Testing [ACT] scores of incoming freshmen). The financial resources may be evaluated by examining an institution's endowment, student-faculty ratios, and salaries (Astin, 1985).

A fourth measure of quality is the outcome or result of what the higher education institution produces, namely the graduate of

that institution. The outcome measure attempts to assess the effect an institution or program has on an individual who receives a degree and what effect this individual has on society after graduation. The outcome measure is appropriate for some businesses, but it is difficult to identify what the institution contributes to an individual versus what the individual possesses.

> A major difficulty of using outcomes to assess quality, of course, is that outcome measures, by themselves, do not necessarily tell anything about institutional impact or effectiveness. The fact that many graduates of MIT get doctorates or win graduate fellowships may say more about who MIT attracts than what it does to them after they enroll. As a matter of fact, a wealth of evidence from longitudinal research shows that most output measures depend far more on the quality of students admitted to the institution than on the functioning of the institution or the quality of the program. Indeed, unless output measures are viewed in relation to the student's potential at college entry, they may be misleading indicators of institutional effectiveness or quality. (Astin, 1982, p. 11)

The overall impression of the outcome measure of quality is that it is not an appropriate measure to identify the effect an institution has on its students (Astin, 1982).

The value measure of quality states that an institution is to have a positive effect on its students, which includes the students' intellectual, social, career, emotional, spiritual, and physical development (Astin, 1982). The value measure has some

> serious limitations, particularly if the ultimate goal in measuring quality is to be able to improve undergraduate institutions. Because the value-added approach requires the collection of complex and potentially controversial student data over time, it is an extremely time-consuming, expensive, and possibly diverse method of assessing quality. Even if the assessment is limited to the cognitive realm, there is still the need to use measures that make sense to policy makers and the general public and that at the same time satisfy faculty members that their particular cognitive objectives are

> adequately reflected. Even if these hurdles are surmounted, there is then the practical problem of collecting and analyzing the data properly. (Astin, 1982, p. 12)

Finally, a more recent measure of quality is student involvement. Astin (1985) defined student involvement as "student learns by becoming involved" (p. 133). According to Astin, student involvement means:

> the amount of physical and psychological energy that the student devotes to the academic experience. A highly involved student is one who, for example, devotes considerable energy to studying, spends a lot of time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students. Conversely, an uninvolved student may neglect studies, spend little time on campus, abstain from extra-curricular activities, and have little contact with faculty members or other students. (p. 134)

Astin's involvement theory includes:

> the investment of physical and psychological energy in various activities, involvement occurs along a continuum, involvement includes both quantitative and qualitative aspects, amount of student learning is directly proportional to the quantity and quality of student involvement, and finally, effectiveness of an educational policy is directly related to the capacity of that policy to increase student involvement. (pp. 135-136)

The implication of the student involvement theory is that motivation for learning comes from the student. Student involvement is a physical behavior that can be measured and is an important factor in the process of learning. "The focus is less on content and on teaching techniques and more on what students are actually doing; how motivated they are and how much time and energy they devote to the learning process" (Astin, 1985, p. 151). Student involvement can be measured by the amount of physical and psychological energy that the student devotes to an academic or co-curricular activity (Astin, 1985).

In summary, the different measures of quality provide different perspectives on quality, but not a clear definition of what a quality institution or program should contain. Each of these measures isolate factors that are essential in identifying quality. Yet, the lack of clarity on how to measure quality leaves higher education grasping for means to adapt to its external environment while maintaining a quality program or institution.

Role of Small, Catholic, Liberal Arts Colleges in Higher Education

The small, church-related, liberal arts college, which is part of the foundation of American higher education, previously has adapted to environmental factors and, as a result of its adaptation, has influenced higher education (Jonsen, 1978). Specifically, the small, Catholic, liberal arts college has influenced higher education through general education, its smallness, interest in the development of the individual student, and values.

General education traditionally has been concerned with providing all students with certain basic knowledge through selected core courses. Today, this concern for general education is still discussed and debated, even at large institutions. The smallness of an institution allows it to give added attention to its students and to personalize its approach to better meet the needs of its students. While the concern for values is difficult to isolate, they do express themselves in a number of ways by creating a warm, friendly, Christian community atmosphere. Values are related to the

Christian character of those small, Catholic, liberal arts colleges because they have a specific denominational affiliation and, for the most part, a commitment to promulgating certain essential learning and values (Jonsen, 1978).

The Carnegie Council (1973) and Astin (1972) studied small liberal arts colleges and developed distinctions regarding the various types based on size and selectivity. These institutions are small in size, which provides an atmosphere that is friendly and caring. Usually, these institutions are less selective and tend to promote a community environment as a result of their smallness. Tuition at such colleges also is less than at the more selective liberal arts colleges, and they have smaller endowments. While these colleges are church related, they receive little to no financial assistance from the denomination with which they are affiliated (Jonsen, 1978).

The small, Catholic, liberal arts colleges receive little to no financial assistance from the state and federal governments. Thus, the demand for private donations makes these colleges even more competitive in order to be selected as recipients of what monies are available. Inasmuch as small, Catholic, liberal arts colleges do not receive state and federal monies and are in keen competition for private donations, they are heavily dependent on tuition and fees as their primary source of revenue (Astin & Lee, 1972).

In summary, the small, Catholic, liberal arts colleges are different because of their size, selectivity, and religious affiliation. Because these institutions are small, they are less

selective than other small liberal arts colleges. Although these institutions are church related, they receive little to no financial assistance from the affiliated denomination. These institutions also receive little to no revenue from the state and federal governments because of their church-related character. As a result, these institutions must be competitive with other colleges and universities for what private gifts are available.

Change in Academic Programs as a Result of Retrenchment in Small, Catholic, Liberal Arts Colleges

In general, American higher education faces an enrollment shrinkage in the traditional college-age population so that by the year 1995 higher education will be about three-fourths its present size. The small, Catholic, liberal arts college faces an even more severe situation because of its dependence on tuition and its limited endowment (Howe, 1979). Other factors that affect these small, Catholic, liberal arts colleges include conflict between the institution's mission and its value orientation and the institution's insufficient revenue to provide programs necessary for it to fulfill its mission (Jonsen, 1984).

If they are to retain as well as strengthen their visibility, these small, Catholic, liberal arts colleges must be quality institutions and must be more than cost effective in their operations. These colleges must respond to their changing external environment and become efficient as well as effective.

> Efficiency is concerned mainly with internal processes and concentrates on reducing waste, on doing the same things with fewer resources. Thus, the concern is with better use of resources and resource allocation rather than resource generation. Doing things right is the aim of efficiency. Effectiveness, on the other hand, is not easily measured--particularly in higher education. It is a construct concerned more with doing the right things than with doing things right. Effectiveness involves relations between the organizations and the environment as well as internal processes. It is more concerned with resource acquisition than with resource allocation. Effectiveness has more to do with goals and purposes than with unit costs and conservation of resources, more to do with quality and diversity than with quantity. (Lawrence, 1984, p. 22)

If the cost of education continues to rise, it presents problems for students who seek a college education but cannot afford it. Some institutions have lowered admission standards in order to admit more students and keep their enrollments high (Carnegie Foundation, 1975). As a result, the student-faculty ratio may increase, which leaves the average class size larger and defeats the essence of the small college: smallness, individual attention, and so on (Martimer & Tierney, 1979). Thus, the small, Catholic, liberal arts college cannot allow quality to be lost because of finances.

The mission of these colleges cannot be relinquished in the face of retrenchment (Cyert, 1978). The mission statement outlines the ideals and purposes of an institution, and all functions of the college flow from it. All decisions should be made to reflect the mission statement, especially in light of the college's adaptation to its external environment (Chaffee, 1984; Martin, 1985, cited in Green & Levine). Some writers have indicated that institutions

change their mission statements as part of their adaptation to the external environment.

> Perhaps the first and most important prescription is that what institutions do should be clearly consistent with their traditions and their strengths. If an institution has historically served middle-ability level students, a sudden shift in emphasis either to high-ability level students or low-ability level students will likely fail and, at the same time, jeopardize its ability to deal with traditional clients. A major entry into off-campus graduate programs by a residential undergraduate college may produce increased revenue for a time but may very well erode the heart of the institution--the undergraduate program. Collegiate institutions do, over time, evolve a saga, a character, or a distinct identity that communicates to the world what they are. To violate such as change a mission of an institution should not be undertaken lightly. (Mayhew, 1979, pp. 295-296)

Administrators, however, must exercise caution in changing the mission of an institution, for ultimately this could result in closing the institution.

> If the crucial issue for the institution is fiscal survival, it is certain to give highest priority to the revenue and cost effects. It may even be willing to undergo a change in its basic mission and philosophy if the price of not doing so is bankruptcy. A conservatory may have to consider eliminating its expensive musical-performance program in order to continue offering its inexpensive liberal-arts degree. This is an example of a "crisis of mission." (Balderston, 1983, p. 151)

Decisions made in response to the external environment must reflect the institution's mission and maintain or improve the quality of the institution and its program. Chaffee (1984) explained:

> Changing academic programs in response to decline may be unnecessary and even harmful. . . . A college may change its academic programs to improve its recruitment efforts and do this very well but still find that these actions do not produce an enduring solution. (Chaffee, 1984, pp. 232-233)

Most program reviews are not conducted to evaluate quality, but are instituted for economic reasons. Usually, these reviews tend to result in a decision of which programs to fund or not fund. Presently, decision makers are more concerned with the economic situation of the institution than its quality. Program evaluations are received with mixed reactions from faculty, staff, and administrators because evaluations have connotations of possible cutbacks rather than assessing quality. "Quality assessment is taken as a sign rather than a symbol of strength" (Conrad & Pratt, 1985, p. 610). Finally, many faculty, staff, and administrators believe that quality cannot be assessed (Conrad & Pratt, 1985).

Assessing quality is extremely important for higher education during times of retrenchment and could determine the college's continuance or discontinuance (Conrad & Pratt, 1985). Part of the reason for assessing quality is so that the various publics continue to believe in and support these institutions. In addition, determining quality is important for recruiting new students and seeking revenue from various sources outside the institution. Thus, quality is important for "image" and "substance" of higher education (Conrad & Pratt, 1985, p. 611).

In summary, the small, Catholic, liberal arts colleges are more vulnerable than large public universities during times of shrinking enrollment, declining finances, and retrenchment. In adapting to their external environment and making decisions to cut back personnel and programs, these institutions must base their decisions on the explicit mission of the institution. The assessment of

institutions' academic programs should be based on quality rather than mere economic factors.

CHAPTER III

RESEARCH METHODOLOGY AND THE DESIGN OF THE STUDY

The purpose of this study was to determine the perceptions of executive-level administrators about change in academic programs as a result of retrenchment. This purpose was accomplished by surveying presidents of four-year, small, Catholic, liberal arts colleges in the United States.

The research questions were developed following a review of the pertinent literature on change in academic programs as a result of retrenchment at small private colleges. The following questions were researched for investigation.

1. Is the institutional size a significant variable in a retrenched institution?

2. Is the composition of the student body a significant variable in a retrenched institution?

3. Will retrenchment require an institution to reduce the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses?

4. Will retrenchment require an institution to reduce the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic programs?

5. Will retrenchment require an institution to decrease the percentage of full-time undergraduate teaching faculty while

increasing the percentage of part-time undergraduate teaching faculty?

6. Will retrenchment require an institution to increase the undergraduate student-faculty ratio?

7. Will retrenchment require an institution to add undergraduate academic courses for nontraditional college-age students in order to generate more revenue?

8. Will retrenchment require an institution to add undergraduate academic programs for nontraditional college-age students in order to generate more revenue?

9. Will retrenchment require an institution to add nontraditional graduate academic programs in order to generate more revenue?

10. What external environmental characteristics contribute to an institution being retrenched?

The null hypotheses were based on the pertinent literature on change in academic programs as a result of retrenchment and the research questions listed above. The population studied is described and justified in this chapter. The survey instrument is included in Appendix A. Finally, the methodology for collection and analysis of the data is described.

Null Hypotheses

Based on the questions for investigation, null hypotheses were developed for testing. The following hypotheses were tested through analysis of the responses to the survey questions.

The ten research questions presented above served as the basis of the formulation of the ten hypotheses presented below.

Hypothesis 1: There is no relationship between the college president's perception of his/her institution being retrenched and institutional size.

Hypothesis 2: There is no relationship between the college president's perception of his/her institution being retrenched and the composition of the student body at an institution.

Hypothesis 3: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses.

Hypothesis 4: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget which, in turn, will result in the elimination of some undergraduate academic programs.

Hypothesis 5: There is no relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty.

Hypothesis 6: There is no relationship between the college president's perception of his/her institution being retrenched and an increase in the undergraduate student-faculty ratio.

Hypothesis 7: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students in order to generate more revenue.

Hypothesis 8: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic programs for nontraditional college-age students in order to generate more revenue.

Hypothesis 9: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs in order to generate more revenue.

Hypothesis 10: There is no relationship between the college president's perception of his/her institution being retrenched and the external environmental characteristics.

Selection of the Population

The general purpose of this study was to determine the change in academic programs as a result of retrenchment in small, Catholic, liberal arts colleges. The population of institutions included 59 small, four-year, bachelor's-degree-granting, Catholic, liberal arts colleges in the United States with a head count between 1,000 and 2,500 students. The population was based on a classification determined by the Carnegie Commission on Higher Education (Astin, 1972). The population was confined to small, Catholic, liberal arts colleges because these institutions primarily depend on tuition, private gifts, and small endowments, with limited or no assistance from state and federal governments for their financial resources. The institutions were selected from The HEP '87 Higher Education Directory. Because of the small and manageable number of institutions, the entire population was included in the population excepting for the two institutions used in pretesting the instrument. The two institutions used in pilot testing were excluded to avoid contamination of the findings. Fifty-nine institutions comprised the population, with 59 potential respondents.

The primary criterion used in defining the respondents were those administrators who were typically expected to possess an institution-wide perspective and responsibility for decision making. These individuals held positions at the executive level of the college administration. The executive-level college administrators were individuals who held the position of president/chief executive officer. If the titles differed at an institution (e.g., acting president, chancellor, and so on), the individual who held this position was identified and included. These individuals were included because writers on college administration have stated that although the power and authority rest with the governing body, daily decision making rests with the president/chief executive officer (Wolotkiewicz, 1980). Tables 3.1 and 3.2 contain a description of the population.

Other executive-level administrative positions such as provost/vice-president for academics, vice-president for administration, vice-president for development/vice-president for institutional advancement, and vice-president for student affairs/dean of student affairs were excluded from this study because: (a) the investigator wanted the perceptions of the president and/or chief executive officer, (b) the investigator wanted the information from the top decision-making authority of an institution, and (c) these institutions were small and most college presidents would be knowledgeable of or have direct access to the information needed to respond to the questionnaire, or would be

expected to send the questionnaire to the appropriate person(s) for completion.

Table 3.1.--Composition of the population (percentage of responses).

Variable	No. in Population	No. of Responses	% of Responses
Respondents from small, Catholic, liberal arts colleges with head count between 1,000 and 2,500 students	59	42	71.1
Actual respondent:			
President	59	26	44.1
Acting president		1	1.6
President designee			
Assistant to the president		5	8.0
Vice-president/dean of academic affairs		1	1.6
Vice-president for planning/ dean of admissions		1	1.6
Vice-president of bus. affairs		1	1.6
Director of admin. services		1	1.6
Director of institutional research/planning		4	6.8
Director of finance and planning		1	1.6
Director of enrollment management/college planning		1	1.6

Table 3.2.--Composition of the population (completed and usable responses).

Variable	No. in Population	No. of Completed and Usable Instruments	% of Completed and Usable Instruments
Respondents from small, Catholic, liberal arts colleges with head count between 1,000 and 2,500 students	59	32	54.0
Respondents from:			
President	59	16	27.0
Acting president		1	1.6
President designee			
Assistant to the president		5	8.5
Vice-president/dean of academic affairs		1	1.6
Vice-president for planning/ dean of admissions		1	1.6
Vice-president of bus. affairs		1	1.6
Director of admin. services		1	1.6
Director of institutional research/planning		4	6.8
Director of finance and planning		1	1.6
Director of enrollment management/college planning		1	1.6

Development of the Instrument

After a thorough review of the pertinent literature, the instrument was designed to determine the change in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges (see Appendix A for a copy of the instrument).

It was expected that the responses would supply information sufficient to answer the following questions: Is the institutional size a significant variable in a retrenched institution? Is the

composition of the student body a significant variable in a retrenched institution? Will retrenchment require an institution to reduce the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses? Will retrenchment require an institution to reduce the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic programs? Will retrenchment require an institution to decrease the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty? Will retrenchment require an institution to increase the undergraduate student-faculty ratio? Will retrenchment require an institution to add undergraduate academic courses for nontraditional college-age students in order to generate more revenue? Will retrenchment require an institution to add undergraduate academic programs for nontraditional college-age students in order to generate more revenue? Will retrenchment require an institution to add nontraditional graduate academic programs in order to generate more revenue? What external environmental characteristics contribute to an institution being retrenched?

The instrument comprised 102 forced-answer and opinion questions. The questions concerned institutional size, composition of the student body, budget allocations for undergraduate academic programs, the percentage of full-time and part-time undergraduate teaching faculty, undergraduate student-faculty ratio, addition of

undergraduate academic courses and/or programs for nontraditional college-age students in order to generate more revenue, addition of nontraditional graduate academic programs in order to generate more revenue, state and federal student financial aid, private donations, and full-time equivalent (FTE) enrollment figures, in relationship to the concept of retrenchment.

Information was requested for the academic years 1979-1986, inclusive, concerning the following issues: budget allocations for undergraduate academic programs, full-time and part-time undergraduate teaching faculty, undergraduate student-faculty ratio, state and federal student financial aid, private donations, and FTE enrollment figures. These particular academic years were selected because the pertinent literature indicated that the institutions included in this study probably experienced financial difficulty during that period. The intention of limiting the study to that time period was to: (a) contain the study to the 1980s and (b) examine a specific span of time so that comparisons could be made to determine whether institutions were influenced by their external environment at different points within the established time span.

Information was also requested about the percentage of change in the total undergraduate academic program budget, state and federal student financial aid, and private gifts. These figures were adjusted to reflect the inflation rate of the corresponding fiscal year. The inflation rates employed are as follows: 1979--13.3%, 1980--12.4%, 1981--8.9%, 1982--3.9%, 1983--3.8%, 1984--4.0%, 1985--3.8%, and 1986--1.1% (Reagan, 1987, p. 311).

Respondents were requested to indicate what characteristics contribute to a need for retrenchment at an institution, whether their institution had experienced any of the characteristics that contributed to retrenchment from 1980 to the present time, and whether they would classify their institution as retrenched.

The instrument items were tested for clarity, vagueness, or confusion, and to determine the degree to which the questionnaire fit the purpose of this study by administrators at Marygrove College and Siena Heights College in Michigan. These institutions were chosen because they fit the same criteria as those institutions that were included in the study. In addition, a qualified Michigan State University research consultant reviewed the questionnaire to assure that the instrument obtained the information sought by this study. Based on information received from the pilot group and research consultant, changes in the instrument were made before the instrument was distributed to the selected college officials. So as not to contaminate the findings of this study, Marygrove College and Siena Heights College in Michigan were not included in the study population.

Data Collection

Information was gathered by the direct mailing of the survey to each of the designated officers of the selected institutions. The survey, consent form (see Appendix C), a personally addressed cover letter (see Appendix B) containing basic information about the purpose of the study, and a self-addressed stamped envelope were

mailed to each individual on September 1, 1987. Individuals were guaranteed that their responses would be kept confidential. Instruments were not coded for individual identification; however, identity by position and institution were requested in the information section of the questionnaire. The institutional data were placed on a separate sheet of paper. Once the instrument was received by the investigator and the institutional data noted, this page was destroyed before recording the data from the instrument to insure institutional confidentiality. An inducement for responding to the instrument was a promise by the investigator to provide each respondent with an abstract of the completed study.

A personalized follow-up letter (see Appendix D), instrument, consent form, and self-addressed stamped envelope were mailed to all nonrespondents on September 28, 1987. Of 59 instruments mailed, 42 responses were received for a response rate of 71.1%. Some of the respondents did not complete the instrument because of their small administrative staff, time demands, and the fact that they receive many requests to complete questionnaires. Some of these same institutions have an institutional policy not to be involved in completing questionnaires for the above reasons. Of the 59 instruments mailed, 32 respondents or 54.0% of the population returned completed and usable instruments. A return rate of 54.0% resulted because the respondent from an institution might not have had all the necessary information readily available for responding to the instrument. Furthermore, the respondent may have had to

circulate the instrument to other (appropriate) individual(s) for completion. This process, therefore, could have resulted in the instrument not being completed and returned to the investigator.

Data Analysis

Data were analyzed using programs from the SPSS-X Advanced Statistics Guide (Norusis, 1985). All programs were entered and run for analysis on the IBM 3090VF mainframe computer at Michigan State University.

The data collected were nominal, ordinal, and interval. The nominal and ordinal data were analyzed using the tabulation of frequencies. The interval data were analyzed using means and standard deviation. This type of descriptive information was tabulated using the SPSS-X subprogram Frequencies. The results supplied data in all of the following categories: frequencies, median, and--where applicable--means and standard deviation.

The hypotheses were tested using a logical deduction process.

> Logical deduction is concerned with the relationship between conclusion and the evidence given to support it. Inference is reasoning from one set of beliefs to a second set. If the inference is made verbally, then it becomes an "argument" (as the word is used in the technical terminology of logic). If an inference is not made explicit--if it is not transformed into an "argument"--then it cannot be subjected to logical analysis. It then remains a conclusion that is without evidence, and we cannot say it is a logical inference. Logic, then, concerns the strength of the evidence linking the premises and conclusions of arguments. Logic is not concerned with the truth or falsity of individual premises. A logically correct argument may contain false premises. But in a logically correct argument, if the premises are true, then there are good grounds for accepting the conclusions as true.
>
> Deductive validity deals with the relationship of premises to conclusion: if and only if the premises are true, the conclusions must be true. The truth of the premises guarantees

> the truth of the conclusion, when deductive validity is the consideration. In a deductive argument, it is impossible for the conclusion to be false while the premises are true. This is because all of the factual information in the conclusion is already contained (at least implicitly) in the premises.
>
> Deductive validity is a logical criterion applied in science to relationships between theoretical statements and in linking theories to hypotheses, whose observable truth or falsity provides an estimate of the theory's truth or falsity. (Selltiz, Wrightsman, & Cook, 1976, pp. 18-20)

Ten hypotheses were tested. The hypotheses were tested by logical deduction from the results of the descriptive information, using subprogram Crosstabulation, chi-square, or t-test. The logical deduction process included two factors. For Hypotheses 1, 2, 7, 8, and 9, the following logical deduction process was applied because the data yielded ordinal and nominal measures. First, if the frequency of the data related to the hypothesis tested of those respondents who classified their institution as retrenched and the dependent variable was greater than the median, then the hypothesis was not retained. The investigator wanted to determine if the median was significant by applying a second test. Second, the chi-square test was applied to determine whether the distribution of frequencies in a crosstabulation of two variables differed significantly from that expected by chance. The chi-square test was applied when the research data were in the form of frequency counts rather than interval scores (Glass & Hopkins, 1984).

For Hypotheses 3, 4, 5, 6, and the central hypothesis, the following logical deduction process was applied because the data yielded interval measures. First, if the frequency of the data related to the hypothesis tested of those respondents who classified

their institution as retrenched and the dependent variable was greater than the median, then the hypothesis was not retained. The investigator wanted to determine if the median was significant by applying a second test. Second, if the frequency of the data related to the hypothesis was greater than two standard deviations from the mean, then the hypothesis was not retained by a significant variability in the data. A t-test was applied to determine if there was a significant difference between retrenched institutions and those institutions that experienced retrenchment but were not classified as retrenched by the respondents. These latter institutions will be referred to as nonretrenched institutions. Pooled standard deviation combines the two standard deviations into one for comparison. Two standard deviations from the mean in a t-distribution is equivalent to the same z-value of two standard deviations (Glass & Hopkins, 1984). Thus, the investigator developed deviations from the mean by using linear interpolation. The formulation used was: $C = t \times 2.0/1.96$. All p-values for the chi-square and t-tests were reported to give more information of the reasonableness for decision making.

In determining whether to retain or not to retain the hypothesis, the level of significance for each test was set at the standard .05 level. The investigator thought the use of a small alpha level, such as .01, would impose too strict a test for research design to assess trends and perceptions. On the other hand, using a more liberal alpha level, such as .10 would increase the risk of making a Type I error because the hypothesis was not

retained when it was true because the amount of the observed difference in the mean was less than the specified alpha (Glass & Hopkins, 1984). Thus, the .05 alpha level was selected as the criterion to retain or not to retain the hypothesis.

Summary

This chapter contained a description of the design, methodology, and the procedures that were followed in conducting this study. As indicated earlier, the purpose of this study was to determine the perceptions of college presidents concerning the change in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges. In assessing that change, the investigator examined perceptions about retrenchment. Factual data were collected on the institutional size, composition of the student population, budget allocations for undergraduate academic programs, full-time and part-time undergraduate teaching faculty, undergraduate student-faculty ratio, undergraduate academic courses and/or programs for the purpose of reaching the nontraditional college-age student, nontraditional graduate academic programs, state and federal student financial aid, donation of private gifts, and FTE figures in relationship to the concept of retrenchment. The purpose of this study was stated in this chapter to provide the context in which the research questions and hypotheses were developed and used. The population was selected according to the statement of purpose. Chapter IV, Presentation and Analysis of the Findings, contains the findings of this study.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE FINDINGS

Introduction

The investigator designed the study to determine perceptions of presidents of small, Catholic, liberal arts colleges in the United States with a head count between 1,000 and 2,500 students about change in academic programs as a result of retrenchment. The instrument was designed to elicit information about the respondents' perceptions of the change in academic programs as a result of retrenchment through: (a) reductions in undergraduate academic program budgets, (b) an increase in part-time undergraduate teaching faculty and a corresponding decrease in full-time undergraduate teaching faculty, (c) an increase in undergraduate student-faculty ratio, (d) addition of undergraduate academic courses and/or programs for nontraditional college-age students in order to generate more revenue, and (e) addition of nontraditional graduate academic programs in order to generate more revenue.

Analysis of data was performed to consider the differences in responses from college presidents representing different institutions. Data were further analyzed to determine differences in responses from retrenched and nonretrenched institutions. The findings are presented in this chapter.

Results of Hypotheses Testing

The first null hypothesis tested was that there was a relationship between retrenchment and institutional size. The data from Questions 29 and 1 were used to test the first hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. In Question 1, the respondents indicated the current FTE enrollment for their institution (see Appendix A for the questionnaire).

> Hypothesis 1: There is no relationship between the college president's perception of his/her institution being retrenched and institutional size.

Table 4.1 contains the findings on the respondents' classifications of whether their institution was retrenched.

Table 4.1.--Respondents' classification of their institutions.

Classification	No. of Respondents	% of Respondents
Retrenched institution	2	6.3
Experienced characteristics associated with retrenchment (nonretrenched institutions)	21	65.6
No experience of characteristics associated with retrenchment	9	28.1
Total	32	100.0

Table 4.2 contains the findings about the current FTE enrollment at the institutions included in this study.

Table 4.2.--Current FTE enrollment.

FTE Enrollment (Size)	No. of Respondents	% of Respondents
1,000-1,500	18	56.3
1,501-2,000	13	40.6
2,001-2,500	1	3.1

Each of the hypotheses was tested using a two-part logical deduction process. Table 4.3 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and institutional size.

Table 4.3.--Relationship between retrenchment and institutional size.

FTE Enrollment (Size)	Retrenched Institutions		Nonretrenched Institutions	
	Number	Percent	Number	Percent
1,000-1,500	2	6.3	12	37.5
1,501-2,000	0	0.0	8	25.0
2,001-2,500	0	0.0	1	3.1

Significant at the 0.4946 level
Chi-square = 1.40816 with 2 df
Critical value at alpha .05 = 5.99

The frequency of the data related to retrenchment (2 respondents or 6.3%) and institutional size was less than the median. The chi-square was not significant at the .05 level. Therefore, there was no statistically significant relationship

between the college president's perception of his/her institution being retrenched and institutional size with a FTE enrollment between 1,000 and 2,500 students. The hypothesis was retained. Since the institutions that had experienced retrenchment were not in the other two categories for FTE enrollment, between 1,501-2,000 and 2,001-2,500 students, the findings were inconclusive in these categories. The hypothesis was retained.

Hypothesis 2: There is no relationship between the college president's perception of his/her institution being retrenched and the composition of the student body at an institution.

Questions 29 and 2 were used to supply the data to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. In Question 2, the respondents indicated the composition of the student population at their institution.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.4 contains the findings on the composition of student population at the institutions included in this study.

Table 4.4.--Composition of the student population.

Composition of Student Population	No. of Respondents	% of Respondents
All female	6	18.8
All male	1	3.1
Coeducational	25	78.1

This hypothesis was tested using the two-part logical deducation process for ordinal and nominal data. Table 4.5 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the composition of the student body at an institution.

Table 4.5.--Relationship between retrenchment and the composition of the student body at an institution.

Composition of Student Body	Retrenched Institutions		Nonretrenched Institutions	
	Number	Percent	Number	Percent
All female	0	0.0	4	12.5
All male	0	0.0	1	3.1
Coeducational	2	6.3	16	50.0

Significant at the 0.7377 level
Chi-square = 0.60847 with 2 df
Critical value at alpha .05 = 5.99

First, the frequency of the data related to the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and the composition of the student body at an institution was less than the median. Second, the chi-square was not significant at the .05 level. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and being a coeducational institution. The hypothesis was retained. Since the institutions that experienced retrenchment were not in the other two categories for the composition of the student body at an

institution--either all female or all male--the findings were inconclusive in these categories. The hypothesis was retained.

> Hypothesis 3: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses.

The data from Questions 29, 5, 6, and 7 were used to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. In Question 5, the respondents indicated the percentage of change that their institution experienced in the total undergraduate academic program budget allocations (excluding salaries) for the academic years 1979-1986, inclusive. The respondents indicated in Question 6 whether their institution deleted undergraduate academic courses as a result of a shift in or reduction of financial resources. If a respondent answered Question 6 with a "yes" response, he/she was asked to complete Question 7, which asked for a list of those undergraduate academic courses deleted as a result of a shift in or reduction of financial resources.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.6 contains the percentage of change in the total undergraduate academic program budget allocations (excluding salaries) for the academic years 1979-1986, inclusive.

Table 4.6.--Percentage of change in the total undergraduate academic program budget allocations (excluding salaries).

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	19	-3.39	10.82
1980-1981	20	-1.28	20.28
1981-1982	21	5.16	19.61
1982-1983	21	1.91	16.53
1983-1984	21	4.34	17.90
1984-1985	21	1.32	14.79
1985-1986	22	5.16	14.98
1986-1987	21	5.59	8.76

Table 4.7 contains the findings of whether an institution deleted undergraduate academic courses as a result of a shift in or reduction of financial resources.

Table 4.7.--Undergraduate academic courses deleted as a result of a shift in or reduction of financial resources.

Response	No. of Respondents	% of Respondents
Yes	4	12.5
No	28	87.5

The hypothesis was tested using a two-part logical deduction process. Table 4.8 contains the findings about the relationship between the college president's perceptions of his/her institution

Table 4.8.--Relationship between retrenchment and percentage of change in total undergraduate academic program budget allocations (excluding salaries).

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	2	0.00	0.00	13	1.26	±2.20	0.231	R
	13	-4.19	12.01					
1980-1981	2	0.00	0.00	13	0.19	±2.20	0.856	R
	13	-1.23	23.80					
1981-1982	2	0.00	0.00	14	-0.51	±2.19	0.617	R
	14	2.88	21.05					
1982-1983	2	0.00	0.00	14	-0.02	±2.19	0.987	R
	14	0.08	18.52					
1983-1984	2	0.00	0.00	14	-0.66	±2.19	0.523	R
	14	3.39	19.33					
1984-1985	2	0.00	0.00	14	2.05	±2.19	0.060	R
	14	-3.05	5.58					
1985-1986	2	0.00	0.00	15	-1.45	±2.17	0.168	R
	15	4.53	12.13					
1986-1987	2	0.00	0.00	14	-3.16	±2.19	0.007	R
	14	7.07	8.39					

NOTE: C = Critical value.
R = The hypothesis was retained.

being retrenched and a reduction in the total undergraduate academic program budget (excluding salaries).

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and a reduction in the total undergraduate academic program budget was less than the median. The second part of the logical deduction process, which was to test whether the frequency was greater than two standard deviations of the mean with the use of the t-test, could not be performed. The respondents who indicated that their institution had experienced retrenchment did not complete the question on the percentage of change the institution experienced in the total undergraduate academic program budget allocations (excluding salaries) for the years listed compared to the previous academic year. The academic years were 1979-1986, inclusive. There was insufficient evidence indicating whether these institutions eliminated undergraduate academic courses as a result of a shift in or reduction of financial resources. The hypothesis was retained. However, two respondents (6.3%) who indicated that their institution experienced the characteristics associated with retrenchment but did not classify their institution as retrenched indicated that their institution eliminated undergraduate academic courses as a result of a shift in or reduction of financial resources. The undergraduate academic courses deleted as a result of a shift in or reduction of financial resources included: Music (2), Art (1), Health Care (1), and 15 courses in Textiles.

The investigator wanted to determine whether there was a relationship between retrenched institutions and the percentage of change the institution experienced in the total undergraduate academic program budget allocations (including salaries) for the academic years 1979-1986, inclusive, compared with the previous academic year. The data from Questions 29, 3, 4, 6, and 7 were used to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. In Question 3, the respondents indicated the percentage of change that their institution experienced in the total undergraduate academic program budget allocations (including salaries) for the academic years 1979-1986, inclusive. The respondents indicated in Question 4 what employee salaries were included in the total budget allocations for the undergraduate academic programs. The respondents indicated in Question 6 whether their institution deleted undergraduate academic courses as a result of a shift in or reduction of financial resources. If respondents answered Question 6 with a "yes" response, they were asked to complete Question 7, which asked them to list those undergraduate academic courses deleted as a result of a shift in or reduction of financial resources.

Table 4.1 contains the findings on the respondents' classifications of whether their institution was retrenched. Table 4.9 contains the findings on the percentage of change in the total undergraduate academic program budget allocations (including salaries) for the academic years 1979-1986, inclusive.

Table 4.9.--Percentage of change in the total undergraduate academic program budget allocations (including salaries).

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	23	-4.48	7.28
1980-1981	31	-3.80	9.27
1981-1982	32	-0.72	9.34
1982-1983	32	3.07	7.73
1983-1984	32	2.47	7.43
1984-1985	32	1.71	6.31
1985-1986	32	1.06	6.24
1986-1987	31	4.41	6.19

The respondents indicated that the salaries included in the undergraduate academic program budget were for the positions of faculty (28 respondents or 87.5%), administrators (17 respondents or 53.1%), secretaries (25 respondents or 78.1%), students (4 respondents or 12.5%), plant and cafeteria workers (3 respondents or 9.37%), academic support personnel (1 respondent or 3.1%), and contributed services for clergy (1 respondent or 3.1%).

Table 4.7 contains the findings regarding whether an institution deleted undergraduate academic courses as a result of a shift in or reduction of financial resources.

Table 4.10 contains the findings about the relationship between the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and a reduction in the total undergraduate academic program budget (including salaries). First, the frequency of the data related to the college president's

Table 4.10.--Relationship between retrenchment and percentage of change in total undergraduate academic program budget allocations (including salaries).

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	1	3.70	0.00	14	1.08	±2.19	0.299	R
	15	-4.77	7.61					
1980-1981	2	5.10	23.34	20	1.34	±2.13	0.194	R
	20	-5.02	8.94					
1981-1982	2	9.70	24.60	21	1.95	±2.12	0.064	R
	21	-2.91	7.05					
1982-1983	2	9.70	17.54	21	1.47	±2.12	0.157	R
	21	1.13	7.08					
1983-1984	2	5.30	11.17	21	0.60	±2.12	0.556	R
	21	1.96	7.32					
1984-1985	2	5.00	12.73	21	0.82	±2.12	0.422	R
	21	0.95	6.22					
1985-1986	2	4.25	9.83	21	0.85	±2.12	0.403	R
	21	0.21	6.17					
1986-1987	2	6.40	10.61	20	0.40	±2.13	0.690	R
	20	4.33	6.64					

NOTE: C = Critical value.
R = The hypothesis was retained.

perception of his/her institution being retrenched (2 respondents or 6.3%) and a reduction in the total undergraduate academic program budget (including salaries) was less than the median. The second part of the logical deduction process was to test if the frequency was greater than two standard deviations of the mean with the use of the t-test. None of the t-test values were statistically significant at the .05 level for the relationship between retrenchment and a reduction in the total undergraduate academic program budget. There was no statistically significant evidence indicating these institutions eliminated undergraduate academic courses as a result of a shift in or reduction of financial resources. The hypothesis was retained.

> Hypothesis 4: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic programs.

The data from Questions 29, 5, 8, and 9 were used to test this hypothesis. The respondents indicated in Question 29 whether they classified their institution as retrenched. In Question 5, the respondents indicated the percentage of change that their institution experienced in the total undergraduate academic program budget allocations (excluding salaries) for the academic years 1979-1986, inclusive. The respondents indicated in question 8 whether their institution deleted undergraduate academic programs as a result of a shift in or reduction of financial resources. If respondents answered Question 8 with a "yes" response, they were asked to complete Question 9, which asked them to list those

undergraduate academic programs deleted as a result of a shift in or reduction of financial resources.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.6 contains the findings on the percentage of change in the total undergraduate academic program budget (excluding salaries) for the academic years 1979-1986, inclusive. Table 4.11 contains the findings regarding whether an institution deleted undergraduate academic programs as a result of a shift in or reduction of financial resources.

Table 4.11.--Undergraduate academic programs deleted as a result of a shift in or reduction of financial resources.

Response	No. of Respondents	% of Respondents
Yes	8	25.0
No	24	75.0

This hypothesis was tested using a two-part logical deduction process. Table 4.8 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget (excluding salaries).

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and a reduction in the total undergraduate academic program

budget was less than the median. The second part of the logical deduction process, which was to test whether the frequency was greater than two standard deviations of the mean with the use of the t-test, could not be performed. The respondents who indicated that their institution had experienced retrenchment did not complete the question on the percentage of change the institution experienced in the total undergraduate academic program budget allocations (excluding salaries) for the academic years 1979-1986, inclusive, compared with the previous academic year. Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that the institution eliminated undergraduate academic programs as a result of a shift in or reduction of financial resources. The hypothesis was retained.

In addition, five respondents (15.6%) who indicated that their institution experienced the characteristics associated with retrenchment but did not classify their institution as retrenched indicated that their institution eliminated undergraduate academic programs as a result of a shift in or reduction of financial resources. The undergraduate academic programs deleted as a result of a shift in or reduction of financial resources included: Graphics Design (B.A.) (1), Music-Business (certificate) (1), Music (B.A.) (1), Fine Arts major (1), Allied Health Administration (1), Social Work (1), Administrative Services (1), Gerontology (1), Health Care Administration (1), Environmental Studies (1), Radiology Technology (1), Nuclear Medicine Technology (1), and Fashion Merchandising (1).

Hypothesis 5: There is no relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty.

The data from Questions 29, 10, and 11 were used to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. In Question 10, the respondents indicated what percentage of their total undergraduate teaching faculty were full time and employed at their institution for the academic years 1979-1986, inclusive. The respondents indicated in Question 11 what percentage of their total undergraduate teaching faculty were part time and employed at their institution for the academic years 1979-1986, inclusive.

Table 4.1 contains the findings of the respondents' classification of whether their institution was retrenched. Table 4.12 contains the findings on the percentage of full-time undergraduate teaching faculty employed at an institution for the academic years 1979-1986, inclusive.

Table 4.13 contains the findings on the percentage of part-time undergraduate teaching faculty employed at an institution for the academic years 1979-1986, inclusive.

A two-step logical deduction process was applied to the hypothesis listed above. Tables 4.14 and 4.15 contain the findings about the relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty (Table 4.14)

and an increase in the percentage of part-time undergraduate teaching faculty (Table 4.15).

Table 4.12.--Percentage of full-time undergraduate teaching faculty.

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	31	68.83	14.08
1980-1981	32	69.80	13.58
1981-1982	32	67.78	14.55
1982-1983	32	67.82	16.25
1983-1984	32	67.93	14.89
1984-1985	32	67.03	14.96
1985-1986	32	66.98	14.10
1986-1987	32	67.75	14.88

Table 4.13.--Percentage of part-time undergraduate teaching faculty.

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	31	31.19	14.03
1980-1981	32	29.86	13.61
1981-1982	32	32.22	14.55
1982-1983	32	32.49	14.09
1983-1984	32	31.97	14.85
1984-1985	32	32.96	14.96
1985-1986	32	33.02	14.10
1986-1987	32	32.25	14.88

Table 4.14.--Relationship between retrenchment and a decrease in the percentage of full-time undergraduate teaching faculty.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	2	53.50	13.44	21	-1.40	±2.12	0.175	R
	21	68.13	14.12					
1980-1981	2	47.50	7.78	21	-2.52	±2.12	0.020	NR
	21	69.07	11.72					
1981-1982	2	47.50	4.95	21	-1.96	±2.12	0.064	R
	21	67.41	14.04					
1982-1983	2	46.00	7.07	21	-1.80	±2.12	0.086	R
	21	66.73	15.85					
1983-1984	2	52.50	4.95	21	-1.33	±2.12	0.197	R
	21	66.95	14.99					
1984-1985	2	53.00	4.24	21	-1.13	±2.12	0.217	R
	21	65.54	12.33					
1985-1986	2	55.00	1.41	21	-1.02	±2.12	0.321	R
	21	65.87	14.79					
1986-1987	2	53.00	7.07	21	-1.24	±2.12	0.228	R
	21	67.01	15.55					

NOTE: C = Critical value.
R = The hypothesis was retained. NR = The hypothesis was not retained.

Table 4.15.--Relationship between retrenchment and an increase in the percentage of part-time undergraduate teaching faculty.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	2 21	46.50 31.94	13.44 14.04	21	1.40	±2.12	0.175	R
1980-1981	2 21	52.50 30.41	7.78 11.81	21	2.56	±2.12	0.018	NR
1981-1982	2 21	52.50 32.59	4.95 14.04	21	1.96	±2.12	0.064	R
1982-1983	2 21	54.00 33.75	7.07 15.54	21	1.79	±2.12	0.087	R
1983-1984	2 21	47.50 32.91	4.95 14.94	21	1.35	±2.12	0.192	R
1984-1985	2 21	47.00 34.46	4.24 15.32	21	1.13	±2.12	0.320	R
1985-1986	2 21	45.00 34.13	1.41 14.79	21	1.02	±2.12	0.320	R
1986-1987	2 21	47.00 32.99	7.07 15.55	21	1.24	±2.12	0.228	R

NOTE: C = Critical value.
R = The hypothesis was retained. NR = The hypothesis was not retained.

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and a decrease in the percentage of full-time undergraduate teaching faculty was less than the median. The second part of the logical deduction process tested whether the frequency was greater than two standard deviations of the mean with the use of the t-test. The t-test was applied to each academic year. Statistically significant t-test values were produced for the 1980-1981 academic year for full-time undergraduate teaching faculty (Table 4.14) at the .05 level; ($t = -2.52$, $df = 21$, $p \leq .020$) and the part-time undergraduate teaching faculty (Table 4.15) ($t = 2.56$, $df = 21$, $p \leq .018$). There was a statistically significant relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty for the 1980-1981 academic year. The hypothesis was retained for the academic year 1980-1981. There were no statistically significant relationships for the remaining 14 t-tests for the academic years 1979-1986, inclusive, for full-time and part-time undergraduate teaching faculty. The hypothesis was retained for the remaining academic years with the exception being 1980-1981.

> Hypothesis 6: There is no relationship between the college president's perception of his/her institution being retrenched and an increase in the undergraduate student-faculty ratio.

The data from Questions 29 and 12 were used to test this hypothesis. The respondents indicated in Question 29 whether they

would classify their institution as retrenched. In Question 12 the respondents indicated the undergraduate student-faculty ratio for the academic years 1979-1986, inclusive.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.16 contains the findings on the undergraduate student-faculty ratio for the academic years 1979-1986, inclusive.

Table 4.16.--Undergraduate student-faculty ratio.

Academic Year	No. of Respondents	Mu (Ratio)	SD (Ratio)
1979-1980	31	14.65	2.99
1980-1981	32	14.53	2.84
1981-1982	32	14.34	2.82
1982-1983	32	14.28	2.54
1983-1984	32	14.38	2.55
1984-1985	32	14.59	3.04
1985-1986	32	14.56	2.65
1986-1987	32	14.66	2.35

This hypothesis was tested using a two-part logical deduction process. Table 4.17 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and an increase in the undergraduate student-faculty ratio.

Table 4.17.--Relationship between retrenchment and undergraduate student-faculty ratio.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Ratio)	SD (Ratio)	df	t-Value	C	p-Value	Decision
1979-1980	2	12.50	3.54	21	-0.97	±2.12	0.343	R
	21	14.81	3.20					
1980-1981	2	12.50	3.54	21	-0.90	±2.12	0.379	R
	21	14.62	3.17					
1981-1982	2	13.00	4.24	21	-0.59	±2.12	0.564	R
	21	14.38	3.12					
1982-1983	2	13.00	4.24	21	-0.63	±2.12	0.534	R
	21	14.29	2.65					
1983-1984	2	13.50	4.95	21	-0.39	±2.12	0.860	R
	21	14.29	2.57					
1984-1985	2	14.00	4.24	21	-0.17	±2.12	0.865	R
	21	14.43	3.31					
1985-1986	2	14.00	4.24	21	-0.13	±2.12	0.897	R
	21	14.29	2.87					
1986-1987	2	14.00	4.24	21	-0.22	±2.12	0.824	R
	21	14.43	2.46					

NOTE: C = Critical value.
R = The hypothesis was retained.

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and an increase in the undergraduate student-faculty ratio was less than the median. The second part of the logical deduction process tested whether the frequency was greater than two standard deviations of the mean with the use of the t-test. None of the t-test values were statistically significant at the .05 level for the relationship between retrenchment and undergraduate student-faculty ratio for the academic years 1979-1986, inclusive. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and an increase in the undergraduate student-faculty ratio. The hypothesis was retained.

> Hypothesis 7: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students in order to generate more revenue.

The data from Questions 29, 13, 14, and 15 were used to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. The respondents indicated in Question 13 whether their institution offered any undergraduate academic courses on a flexible schedule for nontraditional college students. If respondents answered Question 13 with a "yes" response, they were asked to complete Question 14, which asked them to list the undergraduate academic courses offered on a flexible schedule for nontraditional college-age students. In Question 15, the respondents were asked to list

the reasons why their institution offered undergraduate academic courses on a flexible schedule for nontraditional college-age students.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.18 contains the findings on whether an institution offered undergraduate academic courses on a flexible schedule for nontraditional college-age students.

Table 4.18.--Undergraduate academic courses offered on a flexible schedule for nontraditional college-age students.

Response	No. of Respondents	% of Respondents
Yes	15	46.9
No	17	53.1

The hypothesis was tested using a two-part logical deduction process. Table 4.19 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students.

Table 4.19.--Relationship between retrenchment and undergraduate academic courses for nontraditional college-age students.

Undergrad. Acad. Courses for Non-traditional College-Age Students	Retrenched Institutions		Nonretrenched Institutions	
	Number	Percent	Number	Percent
Yes	2	6.3	9	28.1
No	0	0.0	12	37.5

Significant at the 0.4207 level
Chi-square = 0.64822 with 1 df
Critical value at alpha .05 = 3.84

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and the addition of undergraduate academic courses for nontraditional college-age students was less than the median. Second, the chi-square test was applied to this hypothesis. The chi-square test was not statistically significant at the .05 level. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students. Of the respondents who classified their institution as retrenched, 3.1% (1 respondent) indicated that undergraduate academic courses for nontraditional college-age students had been added in order to generate more revenue. The hypothesis was retained.

In addition, nine respondents (28.1%) whose institutions experienced characteristics associated with retrenchment but did not classify their institutions as retrenched indicated they added undergraduate academic courses for nontraditional college-age students. The reasons these institutions offered such academic courses included: "student needs" (6), "a schedule nontraditional students can follow" (3), "to increase nontraditional enrollment" (1), "to develop a sense of community among adult learners" (1), "to develop an understanding of and an appreciation for liberal arts education" (1), "to meet the special professional needs of area religious and health care institutions" (1), "to meet the needs of registered nurses returning for course work" (1), and "to accommodate the working adults" (1).

Those respondents who indicated that they offered undergraduate academic courses on a flexible schedule for nontraditional college-age students listed the following academic courses: Management, Computer, all undergraduate courses (5); Business Courses (2); most undergraduate courses (except Natural Science, Teacher Education, and laboratories) (1); Humanities, Science, and Human Condition (1); Humanities through the Arts (1); Health Science Management (1); Religious Studies (1); Human Ecology (1); Values in Pluralistic Society (1); Global Perspective (1); Sciences (1); Social Sciences (1); Humanities (1); and Nursing (1). One respondent noted, "One third of the courses in our catalog are offered in this way on a rotation basis, and 100 courses a year" (1).

Hypothesis 8: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic programs for nontraditional college-age students in order to generate more revenue.

The data from Questions 29, 16, 17, and 18 were used to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institution as retrenched. The respondents indicated in Question 16 whether their institution started any undergraduate academic programs for nontraditional college-age students. If respondents answered Question 16 with a "yes" response, they were asked to complete Question 17, which asked them to list the undergraduate academic programs started for nontraditional college-age students. In Question 18, the respondents were asked to list the reasons why their institution started undergraduate academic programs for nontraditional college-age students.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.20 contains the findings of whether an institution initiated undergraduate academic programs for nontraditional college-age students.

A two-step logical deduction process was applied to the hypothesis listed above. Table 4.21 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic programs offered for nontraditional college-age students.

Table 4.20.--Undergraduate academic programs initiated for non-traditional college-age students.

Response	No. of Respondents	% of Respondents
Yes	17	53.1
No	15	46.9

Table 4.21.--Relationship between retrenchment and undergraduate academic programs for nontraditional college-age students.

Undergrad. Acad. Programs for Non-traditional College-Age Students	Retrenched Institutions		Nonretrenched Institutions	
	Number	Percent	Number	Percent
Yes	2	6.3	11	34.4
No	0	0.0	10	31.3

Significant at the 0.5812 level
Chi-square = 0.30435 with 1 df
Critical value at alpha .05 = 3.84

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and the addition of undergraduate academic programs for nontraditional college-age students was less than the median. Second, the chi-square test was not statistically significant at the .05 level. Therefore, there was no statistically significant relationship between the college president's perception of his/her

institution being retrenched and the addition of undergraduate academic programs for nontraditional college-age students. Of the respondents who indicated that their institutions experienced retrenchment, 3.1% (1 respondent) indicated that undergraduate academic programs for nontraditional college-age students had been added in order to generate more revenue. The hypothesis was retained.

In addition, 11 (34.4%) of the respondents whose institutions experienced characteristics associated with retrenchment but did not classify their institution as retrenched indicated that they added undergraduate academic programs for nontraditional college-age students. The reasons these institutions offered these academic programs included: "to meet needs of area constituents in programs suited to their backgrounds, experience, and time schedule" (7); "to meet nontraditional students' interests and to increase nontraditional student enrollment" (6); "to meet goals of the institution" (2); "because such students represent a high proportion of our enrollment" (1); "request of nursing students at local hospitals" (1); "available pool of students" (1); "to retain and expand our market share of the nontraditional students in this urban area" (1); and "marketing and recruiting" (1).

Those respondents who indicated that they offered undergraduate academic programs for nontraditional college-age students listed the following academic programs: "Weekend College" (5), "B.S.N. completion for R.N. nurses" (3), "Para-legal Training" (3),

"Management" (2), "Human Resource Management" (2), "All undergraduate academic programs" (2), "Accounting" (2), "Business Administration" (2), "Interdisciplinary Social Studies: (1), "General Studies" (1), "Interdisciplinary Humanities" (1), "Broadcast Communication" (1), "Chemical Dependency Counseling" (1), "New College" (1), "Business" (1), "American Studies" (1), "Social Work" (1), "We don't segregate nontraditional from traditional students" (1), "Gerontological Studies" (1), "Management of Nursing Services" (1), "Liberal Arts" (1), "Science" (1), "Legal Administration" (1), "Marketing" (1), "Health Services" (1), "Public Administration" (1), and "certificate programs" (1).

Hypothesis 9: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs in order to generate more revenue.

The data from Questions 29, 19, 20, and 21 were used to test this hypothesis. The respondents indicated in Question 29 whether they would classify their institutions as retrenched. The respondents indicated in Question 19 whether their institution started any nontraditional graduate academic programs. If respondents answered Question 19 with a "yes" response, they were asked to complete Question 20, which asked them to list the nontraditional graduate academic programs started by their institution since 1980. In Question 21, the respondents were asked to list the reasons their institutions started nontraditional graduate academic programs.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.22 contains the findings of whether an institution initiated nontraditional graduate academic programs since 1980.

Table 4.22.--Nontraditional graduate academic programs initiated since 1980.

Response	No. of Respondents	% of Respondents
Yes	18	56.3
No	14	43.8

This hypothesis was tested using a two-part logical deduction process. Table 4.23 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs.

Table 4.23.--Relationship between retrenchment and nontraditional graduate academic programs.

Nongraditional Graduate Academic Programs	Retrenched Institutions		Nonretrenched Institutions	
	Number	Percent	Number	Percent
Yes	2	6.3	14	43.8
No	0	0.0	7	21.9

Significant at the 0.8612 level
Chi-square = 0.03056 with 1 df
Critical value at alpha .05 = 3.84

The frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and the addition of nontraditional graduate academic programs was less than the median. Second, the chi-square test was not statistically significant at the .05 level. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs. Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that nontraditional graduate academic programs had been added in order to generate more revenue. The hypothesis was retained.

In addition, 14 respondents (43.8%) whose institution experienced characteristics associated with retrenchment but did not classify their institution as retrenched indicated that they added nontraditional graduate academic programs. The reasons these institutions offered such graduate programs included: "to respond to the needs of local students" (11), "to strengthen the financial viability of the institution and to meet is goals and mission as an institution" (2), "market of potential students" (2), "to respond to the needs of the local church" (2), "requested by the Diocese" (2), "to increase the number of qualified Math and Science teachers" (1), "need in the geographic area" (1), "government funding," and "serves in-service teachers" (1).

Those respondents who indicated that their institution offered nontraditional graduate academic programs listed the following graduate academic programs: "M.B.A." (2), "M.T.S. (Masters of Theological Studies)" (2), "M.A. in Management" (2), "Masters in Human Services" (2), "M.S. in Education" (1), "M.A. in Education" (1), "M.A. in Education: Specialty in Nonpublic School Administration" (1), "M.A. in Human Resources" (1), "M.A. in Liberal Studies" (1), "Masters in Religious Education " (1), "Masters in Science Education" (1), "Masters in Math Education" (1), "M.A. in Psychology of Aging" (1), "M.A. in Nursing" (1), "M.S. in Nursing" (1), "M.A. in Child Welfare" (1), "M.S. in Human Development/Gerontology" (1), "M.S. in Psychiatric/Mental Health Nursing" (1), "Masters of Human and Health Science Administration" (1), "Masters of Science in Telecommunication" (1), "M.A. in Special Education" (1), and "M.S. in Applied Science" (1).

Hypothesis 10: There is no relationship between the college president's perception of his/her institution being retrenched and the external environmental characteristics.

The external environmental characteristics included the state and federal student financial aid, donation of private gifts, and FTE enrollment. These external environmental characteristics were individually tested to determine if there was a relationship between them and the college president's perception of whether his/her institution was retrenched.

The data from Questions 29, 22, and 23 were used to test whether there was a relationship between the college president's perception of his/her institution being retrenched and the

percentage of change in state student financial aid. The respondents indicated in Question 29 whether they would classify their institution as retrenched. The respondents indicated in Question 22 whether their institution received state student financial aid. If respondents answered Question 22 with a "yes" response, they were asked to complete Question 23 and to indicate the percentage of change their institution experienced in state student financial aid for the academic years 1979-1986, inclusive.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Thirty-one respondents (96.9%) indicated that their institution received state student financial aid. Only one respondent (3.1%) indicated that the institution did not receive state student financial aid. Table 4.24 contains the findings on the percentage of change in state student financial aid for the academic years 1979-1986, inclusive.

Table 4.24.--Percentage of change in state student financial aid.

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	17	-0.24	11.91
1980-1981	22	-4.17	13.97
1981-1982	24	-2.77	26.54
1982-1983	25	-0.82	9.72
1983-1984	27	4.99	26.88
1984-1985	26	9.98	17.83
1985-1986	27	0.52	13.81
1986-1987	26	7.52	15.34

A two-step logical deduction process was applied to the hypothesis. Table 4.25 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the percentage of change in state student financial aid.

First, the frequency of the data for the college president's perception of his/her institution being retrenched (2 respondents or 6.3%) and the external environmental characteristics was less than the median. The second part of the logical deduction process tested whether the frequency was greater than two standard deviations of the mean with the use of the t-test. None of the t-test values were statistically significant at the .05 level for the relationship between retrenchment and the percentage of change in state student financial aid for the academic years 1979-1986, inclusive. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and state student financial aid. The hypothesis was retained. The respondents who indicated that their institution had experienced retrenchment did not provide the data for the academic year 1984-1985. The hypothesis was retained.

The data from Questions 29 and 24 were used to test whether there was a relationship between the college president's perception of his/her institution being retrenched and the percentage of change in federal student financial aid. The respondents indicated in

Table 4.25.--Relationship between retrenchment and the percentage of change in state student financial aid.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	1 10	-8.50 -1.88	0.00 12.16	9	-0.52	±2.31	0.616	R
1980-1981	1 14	-8.60 -5.06	0.00 12.01	13	-0.28	±2.20	0.780	R
1981-1982	1 16	-5.80 6.69	0.00 26.58	15	-0.46	±2.17	0.655	R
1982-1983	1 16	-1.10 -1.45	0.00 7.91	15	-0.04	±2.17	0.967	R
1983-1984	1 18	-1.60 5.75	0.00 26.21	17	-0.27	±2.15	0.788	R
1984-1985	2 18	0.00 12.38	0.00 15.69	18	-3.35	±2.14	0.004	R
1985-1986	1 18	-2.30 -0.33	0.00 14.52	17	-0.13	±2.15	0.897	R
1986-1987	1 17	0.70 7.23	0.00 15.22	16	-0.42	±2.16	0.682	R

NOTE: C = Critical value.
R = The hypothesis was retained.

Question 29 whether they would classify their institution as retrenched. The respondents indicated in Question 24 the percentage of change in federal student financial aid their institution experienced for the academic years 1979-1986, inclusive.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.26 contains the findings on the percentage of change in federal state student financial aid for the academic years 1979-1986, inclusive.

Table 4.26.--Percentage of change in federal student financial aid.

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	16	17.63	32.28
1980-1981	30	-5.88	14.84
1981-1982	32	-6.83	21.14
1982-1983	32	-3.14	16.50
1983-1984	32	3.25	15.14
1984-1985	32	-1.09	12.12
1985-1986	32	-0.71	9.81
1986-1987	32	-4.80	8.54

Table 4.27 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the percentage of change in federal student financial aid. None of the t-test values were statistically significant at the .05 level for the relationship between retrenchment and percentage of change in federal student financial aid for the academic years 1979-1986, inclusive. Therefore, there was no

Table 4.27.--Relationship between retrenchment and the percentage of change in federal student financial aid.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	1	-7.30	0.00	10	-0.69	±2.27	0.504	R
	11	19.31	36.78					
1980-1981	2	-9.60	2.55	19	-0.07	±2.14	0.947	R
	19	-8.97	12.99					
1981-1982	2	-5.95	2.76	21	-0.01	±2.12	0.991	R
	21	-6.16	24.71					
1982-1983	2	-1.50	1.27	21	0.23	±2.12	0.818	R
	21	-4.21	16.31					
1983-1984	2	-2.53	3.44	21	-0.69	±2.12	0.498	R
	21	2.34	9.75					
1984-1985	2	-3.37	2.36	21	-0.06	±2.12	0.955	R
	21	-2.85	12.65					
1985-1986	2	-3.78	1.44	21	-0.35	±2.12	0.728	R
	21	-1.11	10.45					
1986-1987	2	-1.10	1.41	21	0.44	±2.12	0.663	R
	21	-4.15	9.56					

NOTE: C = Critical value.
R = The hypothesis was retained.

statistically significant relationship between the college president's perception of his/her institution being retrenched and federal student financial aid for those academic years. The hypothesis was retained.

The data from Questions 29 and 25 were used to test whether there was a relationship between the college president's perception of his/her institution being retrenched and the percentage of change in donation of private gifts. The respondents indicated in Question 29 whether they would classify their institution as retrenched. The respondents indicated in Question 25 the percentage of change their institution experienced in the donation of private gifts for the academic years 1979-1986, inclusive.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.28 contains the findings on the percentage of change in donation of private gifts for the academic years 1979-1986, inclusive.

Table 4.28.--Percentage of change in donation of private gifts.

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	19	-4.59	20.17
1980-1981	29	-3.13	18.32
1981-1982	31	-0.82	26.88
1982-1983	32	8.20	29.48
1983-1984	32	-2.53	23.55
1984-1985	32	-0.95	24.81
1985-1986	32	6.77	19.44
1986-1987	32	3.37	28.25

Table 4.29 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the percentage of change in donation of private gifts. None of the t-test values were statistically significant at the .05 level for the relationship between retrenchment and the percentage of change in donation of private gifts for the academic years 1979-1986, inclusive. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and the donation of private gifts. The hypothesis was retained.

The data from Questions 29 and 26 were used to test whether there was a relationship between the college president's perception of his/her institution being retrenched and the percentage of change the institution experienced in FTE enrollment. The respondents indicated in Question 29 whether they would classify their institution as retrenched. The respondents indicated in Question 26 the percentage of change their institution experienced in FTE enrollment for the academic years 1979-1986, inclusive.

Table 4.1 contains the findings on the respondents' classification of whether their institution was retrenched. Table 4.30 contains the findings on the percentage of change in FTE enrollment for the academic years 1979-1986, inclusive.

Table 4.29.--Relationship between retrenchment and the percentage of change in donation of private gifts.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	1	-7.40	0.00	14	-0.30	±2.19	0.770	R
	15	-1.13	20.34					
1980-1981	2	-9.80	2.26	20	-0.57	±2.13	0.574	R
	20	0.96	21.41					
1981-1982	2	-5.70	2.40	21	-0.34	±2.12	0.740	R
	21	0.99	27.56					
1982-1983	2	0.22	4.36	21	-0.63	±2.12	0.535	R
	21	12.46	26.88					
1983-1984	2	-1.75	4.74	21	0.10	±2.12	0.919	R
	21	-3.75	27.05					
1984-1985	2	-1.30	3.82	21	-0.10	±2.12	0.922	R
	21	0.55	25.97					
1985-1986	2	-0.70	2.26	21	-0.49	±2.12	0.626	R
	21	5.51	17.40					
1986-1987	2	1.55	3.18	21	-0.09	±2.12	0.932	R
	21	3.52	31.67					

NOTE: C = Critical value.
R = The hypothesis was retained.

Table 4.30.--Percentage of change in FTE enrollment.

Academic Year	No. of Respondents	Mu (Percent)	SD (Percent)
1979-1980	30	5.06	13.99
1980-1981	32	1.81	6.41
1981-1982	32	4.27	11.39
1982-1983	32	-0.06	6.58
1983-1984	32	3.14	5.31
1984-1985	32	1.15	4.24
1985-1986	31	0.84	7.07
1986-1987	31	0.63	4.00

Table 4.31 contains the findings about the relationship between the college president's perception of his/her institution being retrenched and the percentage of change in FTE enrollment. None of the t-test values were statistically significant at the .05 level for the relationship between retrenchment and the percentage of change in FTE enrollment for the academic years 1979-1986, inclusive. Therefore, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and FTE enrollment for those academic years. The hypothesis was retained.

The finding concerning Hypothesis 10 was that no statistically significant relationship was found between the college president's perception of his/her institution being retrenched and the external environmental characteristics. The hypothesis was retained.

Table 4.31.--Relationship between retrenchment and the percentage of change in FTE enrollment.

Academic Year	No. of Retrenched Versus Nonretrenched Institutions	Mu (Percent)	SD (Percent)	df	t-Value	C	p-Value	Decision
1979-1980	2	7.03	9.86	19	0.01	±2.14	0.989	R
	19	6.86	16.75					
1980-1981	2	6.50	10.61	21	1.30	±2.12	0.207	R
	21	0.33	6.13					
1981-1982	2	5.45	9.26	21	0.04	±2.12	0.969	R
	21	5.06	13.76					
1982-1983	2	0.45	2.19	21	0.40	±2.12	0.692	R
	21	-1.09	5.28					
1983-1984	2	-1.00	0.00	21	-1.19	±2.12	0.247	R
	21	2.78	4.40					
1984-1985	2	-1.00	2.83	21	-0.67	±2.12	0.508	R
	21	1.25	4.57					
1985-1986	2	-2.00	4.24	20	-0.45	±2.13	0.656	R
	20	0.68	8.13					
1986-1987	2	-1.50	3.54	20	-0.66	±2.13	0.514	R
	20	0.33	3.72					

NOTE: C = Critical value.
R = The hypothesis was retained.

Summary of Findings

Major Findings

This chapter contained an analysis of the data from the study. Thirty-two completed and usable responses (54.0% of the population) were included in the study. A return rate of 54.0% resulted because the respondent from an institution might not have had all the necessary information available for responding to the instrument. Furthermore, the respondent may have had to circulate the instrument to other (appropriate) individual(s) for completion. This process, therefore, could have resulted in the instrument's not being completed and returned to the investigator. The respondents were not evenly distributed between admittedly retrenched (2 respondents or 6.3%) and 21 respondents (65.6%) who indicated their institution experienced the characteristics associated with retrenchment but did not classify their institution as retrenched (nonretrenched institutions).

There was no statistically significant relationship between a college president's perception of his/her institution being retrenched and the institutional size with an FTE enrollment between 1,000 and 2,500 students. The hypothesis was retained. Since institutions that experienced retrenchment were not in the other two categories for FTE enrollment--between 1,501-2,000 and 2,001-2,500 students--the findings for this portion of the hypothesis were inconclusive. The hypothesis was retained.

There was no statistically significant relationship between the college presidents' perceptions of their institutions being retrenched and those institutions being coeducational. The hypothesis was retained. Because institutions that experienced retrenchment were not in the other two categories for the composition of the student body at an institution--either all female or all male--the findings in this portion of the hypothesis were inconclusive. The hypothesis was retained.

The respondents who indicated that their institution had experienced retrenchment did not complete the question on the percentage of change the institution experienced in the total undergraduate academic program (excluding salaries). Therefore, the findings for this hypothesis were inconclusive. There was no sufficient evidence indicating these institutions eliminated undergraduate academic programs as a result of a shift in or reduction of financial resources. The hypothesis was retained.

Respondents who indicated that their institution had experienced retrenchment did not complete the question on the percentage of change the institution experienced in the total undergraduate academic program budget (excluding salaries). Therefore, the findings of this hypothesis were inconclusive. Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that the institution eliminated undergraduate academic programs as a result of a shift in or reduction of financial resources. The hypothesis was retained.

The findings of the study revealed a statistically significant relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty for the academic year 1980-1981. The hypothesis was not retained for the 1980-1981 academic year. For the other academic years there was no statistically significant relationship between retrenchment and a decrease in the percentage of full-time undergraduate teaching faculty while the percentage of part-time undergraduate teaching faculty increased. The hypothesis was retained for the following academic years: 1979-1980 and 1981-1986, inclusive.

There was no statistically significant relationship between the college president's perception of his/her institution being retrenched and undergraduate student-faculty ratio for the academic years 1979-1986, inclusive. The hypothesis was retained.

There was no statistically significant relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students. Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that undergraduate academic courses for nontraditional college-age students were added in order to generate more revenue. The hypothesis was retained.

Again, there was no statistically significant relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic programs

for nontraditional college-age students. Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that undergraduate academic programs for nontraditional college-age students were added in order to generate more revenue. The hypothesis was retained.

No statistically significant relationship was found between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs. Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that nontraditional graduate academic programs were added in order to generate more revenue. The hypothesis was retained.

There was no statistically significant relationship between retrenchment and the external environmental characteristics. The external environmental characteristics tested included state and federal student financial aid, donation of private gifts, and FTE enrollment for the academic years 1979-1986, inclusive. The hypothesis was retained.

Additional Findings

The following additional findings are based on the 32 completed and usable responses (54.0% of the population) from presidents at small, Catholic, liberal arts colleges.

Based on the tabulation of percentages of responses, it appears that there were some general trends. The data indicated a clear tend (28 respondents or 87.5%) that these institutions did not

delete undergraduate academic courses and/or programs (24 respondents or 75.0%) as a result of a shift in or reduction of financial resources.

The data did not clearly indicate a trend in these institutions concerning the offering of undergraduate academic courses on a flexible schedule for nontraditional college-age students since 1980. Fifteen institutions (46.9%) offered undergraduate academic courses on a flexible schedule for nontraditional college-age students since 1980. The reasons why these institutions offered such academic courses varied from meeting the needs of nontraditional college-age students, to two of the respondents (6.3%) indicating that these academic courses were offered for financial reasons.

Even though there was not a clear trend concerning the initiation of undergraduate academic programs for nontraditional college-age students, 53.1% (17 respondents) of the institutions did offer academic programs for these students. Similar reasons were given by respondents why their institution initiated these new academic programs with the exception of a few respondents who indicated such programs were established to increase enrollment.

The data indicated that 56.3% (18) of the respondents said that their institution had initiated nontraditional graduate academic programs since 1980. These academic programs included master's degree programs in business, health fields, education, and theology. The institutions added these academic programs for a variety of

reasons. Many of the reasons given were to respond to the needs of the students, the local church, and the geographic area. Some of the respondents indicated that these academic programs were added to increase their market in order to recruit more students to the institution and for financial reasons.

The major characteristics identified by the respondents as contributing to a need for retrenchment at an institution included declining enrollment (30 respondents or 93.8%), decrease in federal student financial aid (23 respondents or 71.9%), decrease in state student financial aid (22 respondents or 68.8%), increase in student-faculty ratio (17 respondents or 53.1%), and a decrease in funding for academic programs (15 respondents or 46.9%).

The data clearly indicated (23 respondents or 65.6%) that these institutions had experienced some of the characteristics associated with retrenchment. Only nine respondents (28.1%) indicated that their institution had not experienced any of the characteristics they indicated were associated with retrenchment.

Of those respondents who indicated that their institution had experienced some of the characteristics associated with retrenchment, only 6.3% (2 respondents) indicated that they would classify their institution as retrenched. The other 21 respondents (65.6%) gave various reasons why they would not classify their institution as retrenched, such as: "Financial aid decline offset by increased revenues." "Not all of the characteristics listed under Question 27 necessarily 'contribute to a need of retrenchment.' An increase in the use of part-time faculty members,

for example, may have occurred as the result of an institution's effort to provide students with greater exposure to a larger variety of faculty members with different experiences rather than an action necessitated by retrenchment." "Reallocation of resources to meet current student population." "We have not experienced any significant enrollment decline nor financial difficulties--and no retrenchment." "A tighter control has been put on departmental budgets, but new adult programming looks positive and a large capital fund drive is currently successful (new buildings and complete renovations). In other words, some areas tightened, others expanded. General upbeat on campus." "We have been able to maintain funding, enrollment, and student-faculty ratio." "Respond to changing student needs." "Enrollment now higher than ever before; sound fiscal management, tremendously assisted by a 5 year, 2 million plus Title III grant." "Preventive." "Changes in student demand for certain courses and programs." "Better use of available institutional resources to meet needs of current student populations." "The institution developed various graduate programs to ensure financial viability. The characteristics listed under Question 27 had a short-term financial effect on the institution." "Minimally effected by external environment." "Anticipated and planned for reduction of student enrollment, requiring a judicious application of enrollment management techniques." "We planned effectively to meet the needs of our clientele." "In specific programs (e.g., Social Work) decreased enrollment caused faculty

decline (by attrition). Overall, the institution has not significantly retrenched." "The college has maintained its ability to continue offering its academic education because of: (1) commitment, and (2) astute financial and academic management." "There seems to be an assumption or premise that the response to declining demographics will/is/has been retrenchment. That assumption, if that is the case, is not necessarily valid--unless one assumes that Catholic colleges are static. Dynamic change, appropriately tailored to the mission, is possible and, in my mind, desirable. That change can be negative--i.e., 'retrenchment' but it certainly need not be." "Adjustment was made for individual factors in planning process." "Recognizing potential impact (retrenchment) of these changes, the college has implemented a proactive forecasting, planning, and budgeting cycle." "We would view it as an adjustment to a changing need. We would try marketing approaches and/or different programs to offset the problem." "The college is located in one of the fastest growing counties in the state." "The only retrenchment characteristic that applies to our college is a decrease in Federal Student Financial Aid." "The only characteristic listed that matched our college is an increase in student-faculty ratio--done by design."

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Higher education is in a period of declining resources due to reductions in enrollment, state and federal student financial aid, and private sources of funding. With fewer students attending colleges and universities, income generated from tuition also has been reduced. While lower enrollments were foreseen for public and private institutions of higher education, the projected enrollment decline was exacerbated for the small, Catholic, liberal arts college (Centra, 1980).

In addition to fewer tuition dollars being available because of the enrollment decline, a growing federal budget deficit and legislative attempts to curb the deficit through the Gramm-Rudman-Hollings law forced further cutbacks in the appropriations to higher education ("Details of House and Senate Measures," 1986). Even with budget constraints, federal spending on higher education increased slightly, but did not keep up with inflation. In addition, there was limited financial assistance from states to small, Catholic, liberal arts colleges.

Higher education has responded to these shrinking resources by reducing programs, personnel, and expenses through a process called retrenchment (Deutsch, 1983). Although the danger existed that

retrenchment could result in the loss of quality programs, it was essential in terms of institutional survival that quality be maintained for those programs retained by small, Catholic, liberal arts colleges (Conrad & Pratt, 1985).

The small, Catholic, liberal arts college has become more dependent than before on tuition and private funds (Howe, 1979). The major issue for small, Catholic, liberal arts colleges is to preserve what has made them unique, different, competitive, and selective. Institutions that do not maintain these qualities are more vulnerable to external environmental conditions and face the possibility of extinction (Hammond, 1984).

Summary of the Study

The investigator sought to determine the perceptions of college presidents concerning the extent of change in academic programs as a result of retrenchment at their small, Catholic, liberal arts colleges. In assessing that change, the investigator focused on perceptions about retrenchment. Factual data were collected on institutional size, composition of the student population, budget allocations for undergraduate academic programs, full-time and part-time undergraduate teaching faculty, undergraduate student-faculty ratio, undergraduate academic courses and/or programs developed for the purpose of reaching the nontraditional college-age students, nontraditional graduate academic programs, state and federal student financial aid, donation of private gifts, and FTE enrollment figures (Astin, 1982; Astin & Solomon, 1981).

An introduction to and overview of the study was provided in Chapter I. Included in the chapter were the definitions of the problem, statement of purpose, and supporting comments about the need for the study. The design of the study was outlined, limitations and assumptions of the study were defined, research questions were presented, and hypotheses were tested.

The second chapter contained a review of the literature relevant to the purpose of the study. Included was selected literature on the external environment affecting higher education; retrenchment; various measures of quality in higher education; small, Catholic, liberal arts colleges; and change in academic programs as a result of retrenchment at small, Catholic, liberal arts colleges. The literature pertinent to the external environment affecting higher education included enrollment decline and shrinking resources for higher education. The literature on resources included information on tuition, state and federal student financial aid, competition for private gifts, and endowments. The literature on retrenchment presented the options available to institutions in order to respond appropriately to their external environment.

Another section of the literature review contained a discussion of the various measures of quality in higher education. The dilemma presented was that quality in higher education is difficult to define and measure. An important part of the literature review dealt with the small, Catholic, liberal arts college--the role of these institutions and how their size and selectivity are both an asset and a deficit during adverse conditions present in the

external environment. The final section incorporated the essential literature about change in academic programs as a result of retrenchment in small, Catholic, liberal arts colleges. This section presented the concern that quality could be lost as a result of retrenchment.

A thorough description of the research methodology and the design of the study was presented in Chapter III. The research design included collection of data through the administration of a written questionnaire. The population of institutions included 59 small, four-year, bachelor's-degree-granting, Catholic, liberal arts colleges in the United States with a head count between 1,000 and 2,500 students. The respondents were those administrators who held positions at the executive level, namely the position of president/chief executive officer.

The instrument was developed, pilot tested, and mailed to the defined population. Approximately one month later, a follow-up letter was sent to nonrespondents. Of the 59 questionnaires mailed, 42 responses were received (71.1% of the population). Thirty-two completed and usable instruments were completed and returned (54.0% of the population).

Chapter IV included the tabulated data collected from the questionnaires and an analysis of the data for the purpose of hypothesis testing through the logical deduction process. Data were tabulated using the SPSS-X Advanced Statistics Guide (Norusis, 1985) subprogram Frequencies. The hypotheses were tested by logical

deduction from the results of descriptive information and using the subprogram Crosstabulation, chi-square, or t-test. To determine whether the distribution of frequencies in a crosstabulation of two variables differed significantly from that expected by chance, the chi-square test was performed on the nominal and ordinal data. A t-test was applied to interval data to determine whether there was a significant difference between retrenched and nonretrenched institutions.

Chapter V contains the findings, conclusions drawn from the findings, and implications and recommendations based on the research findings. This chapter also includes speculations on retrenchment and suggested areas for future research.

Findings

Major Findings

The findings of this study are discussed below under the specific hypothesis to which they pertain.

Hypothesis 1: There is no relationship between the college president's perception of his/her institution being retrenched and institutional size.

The survey instrument designed for this study included two items that requested the respondents to indicate (a) whether they would classify their institution as retrenched and (b) the institutional size. The findings indicated that the size of an institution, with a FTE enrollment between 1,000 and 1,500 students, did not make a difference whether the institution was retrenched (Table 4.3). The hypothesis was retained. Because institutions

that experienced retrenchment were not in the other two categories of FTE enrollment--between 1,501-2,000 and 2,001-2,500 students--the findings for this portion of the hypothesis were inconclusive. The hypothesis was retained.

> Hypothesis 2: There is no relationship between the college president's perception of his/her institution being retrenched and the composition of the student body at an institution.

The survey instrument included two items that requested the respondents to indicate (a) whether they would classify their institution as retrenched and (b) the composition of the student body at their institution. The findings indicated that the composition of the student body at a coeducational institution did not make a difference in whether the institution was retrenched (Table 4.5). The hypothesis was retained. Because institutions that experienced retrenchment were not in the other two categories for the composition of the student body at an institution--either all female or all male--the findings for this portion of the hypothesis were inconclusive. The hypothesis was retained.

> Hypothesis 3: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic courses.

A number of items included in the survey instrument were designed to elicit information to test this hypothesis. The respondents who indicated that their institution had experienced retrenchment did not complete the question on the percentage of change their institution experienced in the total undergraduate academic program budget (excluding salaries). Therefore, the

findings were inconclusive (Table 4.8). The hypothesis was retained. However, two respondents (6.3%) who indicated that their institution experienced characteristics associated with retrenchment indicated that their institution eliminated undergraduate academic courses as a result of a shift in or reduction of financial resources.

> Hypothesis 4: There is no relationship between the college president's perception of his/her institution being retrenched and a reduction in the total undergraduate academic program budget, which, in turn, will result in the elimination of some undergraduate academic programs.

A number of items included in the survey instrument were designed to elicit information to test this hypothesis. The respondents who indicated that their institution had experienced retrenchment did not complete the question on the percentage of change their institution experienced in the total undergraduate academic program budget (excluding salaries). Therefore, the findings were inconclusive (Table 4.8). Of the respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that the institution eliminated undergraduate academic programs as a result of a shift in or reduction of financial resources. The hypothesis was retained. In addition, 15.6% (5 respondents) who indicated that their institution experienced characteristics associated with retrenchment indicated that their institution eliminated undergraduate academic programs as a result of a shift in or reduction of financial resources.

Hypothesis 5: There is no relationship between the college president's perception of his/her institution being retrenched and a decrease in the percentage of full-time undergraduate teaching faculty while increasing the percentage of part-time undergraduate teaching faculty.

The survey instrument included three items in which respondents were asked to indicate (a) whether they would classify their institution as retrenched, (b) the percentage of their total undergraduate teaching faculty who were employed full-time, and (c) the percentage of their total undergraduate teaching faculty who were employed part time at their institution. The findings indicated that there was a statistically significant relationship between retrenchment and a decrease in the percentage of full-time undergraduate teaching faculty (Table 4.14) while the percentage of part-time undergraduate teaching faculty increased (Table 4.15) for the 1980-1981 academic year. The hypothesis was not retained. The findings for the other academic years indicated no statistically significant relationship between retrenchment and a decrease in the percentage of full-time undergraduate teaching faculty while the percentage of part-time undergraduate teaching faculty increased. The hypothesis was retained for these academic years.

Hypothesis 6: There is no relationship between the college president's perception of his/her institution being retrenched and an increase in the undergraduate student-faculty ratio.

The survey instrument included two items that requested the respondents to indicate (a) whether they would classify their institution as retrenched and (b) the undergraduate student-faculty ratio. The findings indicated that if there was an increase in the undergraduate student-faculty ratio, it did not necessarily infer

that it was because the institution experienced retrenchment (Table 4.17). The hypothesis was retained.

> Hypothesis 7: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic courses for nontraditional college-age students in order to generate more revenue.

A number of items included in the survey instrument were designed to elicit information to test this hypothesis. The findings indicated that an institution did not necessarily offer undergraduate academic courses for nontraditional college-age students because the institution was retrenched (Table 4.20). Furthermore, of those respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that undergraduate academic courses for nontraditional college-age students were added in order to generate more revenue. The hypothesis was retained.

> Hypothesis 8: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of undergraduate academic programs for nontraditional college-age students in order to generate more revenue.

A number of items included in the survey instrument were designed to elicit information to test this hypothesis. The findings indicated that an institution did not offer undergraduate academic programs for nontraditional college-age students because the institution was retrenched. Furthermore, of those respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that undergraduate academic programs for

nontraditional college-age students had been added in order to generate more revenue. The hypothesis was retained.

> Hypothesis 9: There is no relationship between the college president's perception of his/her institution being retrenched and the addition of nontraditional graduate academic programs in order to generate more revenue.

A number of items included in the survey instrument were designed to elicit information to test this hypothesis. The findings indicated that an institution did not add nontraditional graduate academic programs because the institution was retrenched (Table 4.23). Furthermore, of those respondents who indicated that their institution experienced retrenchment, 3.1% (1 respondent) indicated that nontraditional graduate academic programs were added in order to generate more revenue. The hypothesis was retained.

> Hypothesis 10: There is no relationship between the college president's perception of his/her institution being retrenched and the external environmental characteristics.

The external environmental characteristics included state and federal student financial aid, donation of private gifts, and FTE enrollment. These external environmental characteristics were tested individually to determine whether there was a relationship between the college president's perception of whether his/her institution was retrenched and the external environmental characteristics.

The survey instrument included two items in which respondents were asked to indicate (a) whether they would classify their institution as retrenched and (b) state student financial aid. The findings indicated that a decrease in state student financial aid

did not make a difference whether an institution was retrenched (Table 4.25). The hypothesis was retained.

The survey instrument included two items in which respondents were asked to indicate (a) whether they would classify their institution as retrenched and (b) federal student financial aid. The findings indicated that a decrease in federal student financial aid did not make a difference in whether an institution was retrenched (Table 4.27). The hypothesis was retained.

The survey instrument included two items in which respondents were requested to indicate (a) whether they would classify their institution as retrenched and (b) donation of private gifts. The findings indicated that a decrease in the donation of private gifts did not make a difference in whether the institution was retrenched (Table 4.29). The hypothesis was retained.

The survey instrument included two items in which respondents were asked to indicate (a) whether they would classify their institution as retrenched and (b) FTE enrollment. The findings indicated that a decrease in the FTE enrollment did not make a difference in whether the institution was retrenched (Table 4.31). The hypothesis was retained.

The findings concerning Hypothesis 10 indicated that none of the external environmental characteristics made a difference in whether the institution was retrenched. The hypothesis was retained.

Additional Findings

The additional findings are based on 32 completed and usable responses (54.0% of the population) from presidents at small, Catholic, liberal arts colleges.

Twenty-eight college presidents (87.5%) indicated that their institution did not delete undergraduate academic courses as a result of a shift in or reduction of financial resources. Twenty-four college presidents (75.0%) indicated that their institution did not delete undergraduate academic programs as a result of a shift in or reduction of financial resources.

Fifteen college presidents (46.9%) indicated that their institution had offered undergraduate academic courses on a flexible schedule for nontraditional college-age students since 1980. The reasons these institutions offered such undergraduate academic courses varied from meeting the needs of nontraditional college-age students, to two of the respondents (6.3%) who indicated that these undergraduate academic courses were offered for financial reasons.

Seventeen college presidents (53.1%) indicated that their institution offered undergraduate academic programs for nontraditional college-age students. Similar reasons to those listed above were given by respondents concerning why their institution initiated these new undergraduate academic programs, with the exception of a small number of respondents (6 respondents or 18.8%) who indicated that these programs were established to increase enrollment.

Of the 18 college presidents (56.3%) who indicated that their institution had initiated nontraditional graduate academic programs since 1980, only a small percentage (6.3% or 2 respondents) of these administrators indicated that their institutions added these nontraditional graduate academic programs in order to generate more revenue.

College presidents identified the following major characteristics that contributed to a need for retrenchment at an institution: declining enrollment (30 respondents or 93.8%), decrease in federal student financial aid (23 respondents or 71.9%), decrease in state student financial aid (22 respondents or 68.8%), increase in the student-faculty ratio (17 respondents or 53.1%), and a decrease in funding for academic programs (15 respondents or 46.9%).

Twenty-three college presidents (71.9%) indicated that their institution had experienced some of the characteristics associated with retrenchment. Of those, only 6.3% (2 respondents) indicated that they would classify their institution as retrenched.

Conclusions

In correspondence with the definition of a perceived retrenched institution, the following conclusions can be drawn from the findings of this study and applied to small, Catholic, liberal arts colleges with an enrollment between 1,000 and 2,500 students.

1. The findings of the study indicated that there was a statistical significance between retrenchment and a decrease in the

percentage of full-time undergraduate teaching faculty while there was a corresponding increase in the percentage of part-time undergraduate teaching faculty for the 1980-1981 academic year. Therefore, it can be concluded that there will be a change(s) in academic programs as a result of retrenchment through a decrease in full-time undergraduate teaching faculty and possibly a corresponding increase in part-time undergraduate teaching faculty.

2. The findings of this study concerning the external environmental characteristics indicated that if an institution experienced a decrease in state and federal student financial aid, donation of private gifts, and FTE enrollment, it did not necessarily mean that the institution was retrenched. Therefore, if an institution experiences these external environmental characteristics, it does not necessarily mean that the institution is retrenched.

3. An additional conclusion from the findings of this study is that most of the institutions in this study experienced some of the characteristics associated with retrenchment, but respondents from only 2 of 32 institutions responded that they actually experienced retrenchment since 1980. Therefore, it can be concluded that small, Catholic, liberal arts colleges with a head count enrollment between 1,000 and 2,500 students will experience some of the characteristics associated with retrenchment, but only a very small number of institutions actually will experience retrenchment as perceived by their chief executive officers.

Implications and Recommendations

Institutional responses to financial constraints follow a four-step progression. The third step of the institutional response to financial constraint occurs when faculty adjustments are made (Kacmarczyk, 1984). Considering Kacmarczyk's observation, this could explain why the findings of this study indicated that there was a relationship between retrenchment and a decrease in the percentage of full-time undergraduate teaching faculty while the percentage of part-time undergraduate teaching faculty increased for the 1980-1981 academic year. Therefore, it follows that the response of small, Catholic, liberal arts colleges to financial constraint will result in a decrease in full-time undergraduate teaching faculty while there will be a corresponding increase in part-time undergraduate teaching faculty.

If one accepts the argument that with a decline in births, the market of potential students--usually between 18 and 22 years of age--is decreasing and is expected to continue to decrease into the mid 1990s (Petrovich, 1984), then small, Catholic, liberal arts colleges, which are dependent on tuition, need to expand their market potential, not necessarily because of retrenchment, but in order to maintain their current FTE enrollment. This strategy for market expansion was evident among a number of institutions in this study, which added undergraduate academic courses and/or programs for nontraditional college-age students and nontraditional graduate academic programs.

It was asserted in the literature that state and federal student financial aid would decline and donations of private gifts would increase, but would not be able to compensate for the overall cutbacks in governmental support to higher education. Competition among institutions of higher education will intensify for the meager revenues that will be available from governmental and private sources (Kacmarczyk, 1984). In addition, the traditional college-aged population will continue to decline at least until the mid-1990s (Petrovich, 1984). If one accepts the above statements as reasonably accurate, an interpretation of these findings may be that some of the institutions in this study did experience one or more of the external characteristics associated with retrenchment. Respondents from these institutions, however, indicated that their colleges were able to counteract the effects of these characteristics on their institutions by effective planning and adapting to the market of potential students. Therefore, college presidents of small, Catholic, liberal arts colleges will need to develop an effective marketing strategy to attract potential students in order to counteract the effects of the external environmental characteristics on their institutions.

An institution's response to retrenchment depends on the severity of the situation.

> Institutional responses to financial constraints has a four-step progression. First, the organization seeks to relieve immediate stress by across-the-board reductions. Second, programmatic changes that have little impact on faculty are made. Third, as the financial crisis deepens, faculty adjustments are finally instituted. For example, as full-time faculty members retire an institution may replace these

> positions with part-time faculty members. And finally, only when the crisis assumes significant proportions are faculty adjustments (lay-offs, early retirements, etc.) actively made. (Kacmarczyk, 1984, p. 32)

If one accepts the preceding statement as reasonably accurate, then this may explain why the findings of this study indicated that most college presidents of small, Catholic, liberal arts colleges stated that their institution was not retrenched, even though the institution had experienced some of the characteristics associated with retrenchment. Therefore, an implication of this study for presidents of small, Catholic, liberal arts colleges is to determine the severity of the retrenchment on their institution and then decide how to respond effectively.

The substance of the recommendations of this study can be refined into the following two statements.

1. Some of the executive-level college administrators responding to the study questionnaire indicated that small, Catholic, liberal arts colleges are not static. These administrators stated that their institution had responded successfully to the changing needs of society, which has been a basic characteristic of the small, Catholic, liberal arts college. While more and more of these institutions have been improving their data base, the findings of this study indicated that many of these institutions had insufficient data to complete all the items on undergraduate academic program budget, state and federal student financial aid, and donation of private gifts. Thus, this investigator recommends that all of these institutions improve their data base for

undergraduate academic program budget, state and federal student financial aid, and donation of private gifts so these college administrators can make better informed decisions about the future direction of their institution.

2. Some of the college presidents in this study stated that their institution had responded to the decline in traditional college-age students by adding undergraduate academic courses and/or programs for nontraditional college-age students and nontraditional graduate academic programs in order to expand the market potential and meet the needs of these students. Therefore, presidents of small, Catholic, liberal arts colleges should diversify their undergraduate academic courses and/or programs for nontraditional college-age students and nontraditional graduate academic programs in order to expand the market of potential students.

Speculations

Although most of the respondents indicated that their institution had experienced some of the characteristics associated with retrenchment, the majority of these same respondents still did not classify their institutions as retrenched. Some of the reasons for this discrepancy may include the following: (a) few college presidents want to admit that their institution is retrenched, (b) the institution did not experience retrenchment as the respondent defined it, (c) the institution's experience of retrenchment was temporary, (d) the institution was able to counteract the effects of the external environmental characteristics, (e) the college

president's perception of his/her institution being retrenched, and (f) the institution developed an effective strategic-planning process.

The external environmental conditions that have the greatest effect on higher education include declining enrollment, shrinking state and federal student financial aid, and competition for private gifts. These external factors are causing an adverse effect on higher education--it is in a period of financial and enrollment decline and has had to institute cutbacks in order to maintain its existence. The results may be a loss of quality personnel and programs, which could result in an institution's demise (Centra, 1980; Hearn & Heydinger, 1985; Kacmarczyk, 1984; Mingle, 1981; Wilson, 1983). Therefore, few college presidents want to admit that the quality of their academic programs is tenuous and that their institution is retrenched.

A review of the pertinent literature regarding retrenchment revealed a substantial amount of material concerning causes and processes of institutional retrenchment, but there was no clear definition of a retrenched institution. In addition, there was a limited amount of literature on change in academic programs as a result of retrenchment. There also was little to no literature on the small, Catholic, liberal arts college and how these institutions have been affected by the change in academic programs as a result of retrenchment. Thus, presidents of small, Catholic, liberal arts colleges might not have classified their institution as retrenched

because of the discrepancy in the definitions of what constitutes a retrenched institution.

The pertinent literature on retrenchment indicated that an institution may respond to retrenchment in several ways and be contingent upon the severity of the situation.

> The first phase is hope that retrenchment is temporary. Usually, the institution will freeze costs in this phase. In the second phase, the institution decrease new obligations, postponing new programs or building plans. In the third phase, the institution reduces services not absolutely central to the academic programs, such as maintenance, student affairs services and programs, and central administrative functions. And the final phase, the institution cuts parts of the academic program. (Deutsch, 1983, p. 42)

If one accepts the above response to retrenchment and financial constraints as the processes and institution will follow in responding to retrenchment, then the following possible reasons may explain why only a small percentage of respondents actually indicated that their institution experienced retrenchment. These institutions responded to the degree of severity that they were experiencing at a certain point in time. In the instance of this study's period of time, possibly only a small percentage of institutions were in the final and most severe phase of retrenchment where it "must cut part of the academic program" (Deutsch, 1983, p. 42).

Since the undergraduate academic courses and/or programs that currently are offered at an institution are essential for the fulfillment of the institution's mission, that may explain why the undergraduate academic courses and/or programs were not eliminated from the curriculum when the institution experienced retrenchment.

The small church-related colleges have existed for more than two centuries and for many years have served as the foundation of the American higher education system. Their success and longevity have been attributed to the use of creative responses to society's needs through a liberal arts curriculum, vocationalism, and course electives. This has been especially true of small, Catholic, liberal arts colleges which have responded to the needs of society (Jonsen, 1978). The findings of this study indicated that a number of institutions developed a market strategy for expansion by adding undergraduate academic courses and/or programs for nontraditional college-age students and nontraditional graduate academic programs. Therefore, these institutions were able to counteract the effects of the external environmental characteristics and the effects of retrenchment.

Locke (1967) defined perception as follows:

> Perceiving--that differs from noticing in that it involves knowing something, or at least having some opinion, about what is perceived. . . . We might also notice that some perceptions --that goes beyond perception. It is this element of judging, realizing, perceiving--that which philosophers have referred to when they insisted that all perception involves judgment. It also explains how what we perceive can, in a sense, depend upon our training and experience. (pp. 32-33).

The college president's perception involved a judgment on the part of the administrator. This judgment was based on the president's training and experience about the positive and negative connotations about retrenchment.

The college president's perception of his/her institution being retrenched may be affected by the effects of public opinion of

retrenchment. Retrenchment has a negative connotation in American higher education. However, retrenchment can be a positive process whereby an institution may be able to plan, develop, and build a better college than what it was before experiencing retrenchment. Therefore, retrenchment may be perceived by the college president as something positive for the institution but chooses not to classify his/her institution as retrenched because of how the various publics will perceive it. This public opinion, if negative, could be counter-productive to what the president hopes to achieve for the institution, and that is why he/she chooses not to classify the institution as one that experienced retrenchment.

Kotler and Murphy (1981) explained strategic planning as:

> the process of developing and maintaining a strategic fit between the organization and its changing marketing opportunities. First, the institution must carry out a careful analysis of its environment both today's and tomorrow's probable one. Then it must review its major resources as providing a key to what it can accomplish. The environment and resource analysis allow the organization to formulate new and appropriate goals that it wishes to pursue for the planning horizon. Goal formulation is followed by strategy development in which the most cost effective strategy is chosen for reaching its goals. The strategy will undoubtedly indicate certain changes that the institution must make in the organization structure if it is to implement the strategy. Finally, attention is turned to improving the organization's systems of information, planning, and control to permit carrying out the strategy effectively. (pp. 471-472)

Strategic planning can be an effective process to counteract an external environmental threat. "An environmental threat is a challenge posed by an unfavorable trend or specific disturbance in the environment which would lead, in the absence of purposeful action, to the stagnation, decline or demise of an organization or

one of its programs" (Kotler & Murphy, 1981, p. 474). If a college president assessed the environmental threat successfully--"(1) its potential severity as measured by the amount of money or prestige the organization would lose if the threat materialized and (2) its probability of occurrence" (Kotler & Murphy, 1981, p. 474)--then the administrator could plan to counteract the effects of the environmental threat. Therefore, strategic planning may be an effective process for institutions to prepare for and respond to the effects of the external environmental characteristics.

Suggested Areas for Future Research

The findings and conclusions from this descriptive research may provide a catalyst for further study. The following recommendations for further research are presented as a natural extension of this study.

1. The generalizability of this study is limited due to the small number of completed and usable responses from the population. Therefore, a replication of this study with a larger population--particularly a broader representation of small church-related institutions--is recommended. It is premature to draw any conclusions about a change in academic programs as a result of retrenchment through: (a) reductions in undergraduate academic program budgets, (b) an increase in part-time undergraduate teaching faculty and a corresponding decrease in full-time undergraduate teaching faculty, (c) an increase in the undergraduate student-faculty ratio, (d) addition of undergraduate academic courses and/or

programs for nontraditional college-age students in order to generate more revenue, and (e) addition of nontraditional graduate academic programs in order to generate more revenue. Furthermore, replication of this study with a larger number of usable responses would permit the generalizability of the study findings to the population.

2. Findings from this study determined only whether there was a statistically significant relationship between retrenchment and a reduction in the total undergraduate academic program budget (including salaries). An important aspect of this study was to determine whether there was a statistically significant relationship between retrenchment and a reduction in the total undergraduate academic program budget (excluding salaries), but there were insufficient data to determine that relationship. Additional research could result in determining whether there was a statistically significant increase or decrease in the total undergraduate academic program budget that could be attributed to salaries and not indicate the increase or decrease in academic programs. Thus, additional information could determine that if there is an increase in the undergraduate academic program budget and if it is attributed to salaries, then the actual funds budgeted for academic programs had not increased and, with the inflation factor, may actually have decreased.

3. Findings from this study determined only whether there was a statistically significant relationship between any two variables

under investigation for the academic years 1979 through 1986, inclusive. The descriptive data provided a foundation from which to speculate whether a cause and/or effect relationship existed between these variables for the academic years tested. The pertinent literature on retrenchment indicated that these institutions will face more difficult times between the 1980s and the 1990s. Further research could examine the relationship between these variables under investigation for the academic years 1987 through 1995, inclusive. Additional research could determine if these institutions were affected by the decrease in the number of traditional college-age students, the projected decrease in state and federal student financial aid, and the increase in competition for private gifts. Such longitudinal data combined with the findings of this study could be helpful to presidents of small, Catholic, liberal arts colleges to make better informed decisions on how the change in academic programs, as a result of retrenchment, could affect the institution's mission.

4. An in-depth case study could be conducted on a few of the small, Catholic, liberal arts colleges that have experienced retrenchment to determine what change(s) have occurred in their undergraduate academic program budget, full-time and part-time undergraduate teaching faculty, and undergraduate student-faculty ratio. Because many quantitative problems arise during social science research, and because its research methodology often limits the scope of qualitative aspects, the case-study approach may provide meaningful information about what external environmental

characteristics had a significant effect on an institution being retrenched. In addition, the findings could provide information on the change(s) in the undergraduate academic programs as a result of retrenchment.

5. Further research could investigate the relationship of the philosophic mission of the institution and the addition of undergraduate academic programs for nontraditional college-age students to determine whether these new undergraduate academic programs fulfilled or changed the mission of the institution. The presidents of small, Catholic, liberal arts colleges who at which undergraduate academic programs are added for nontraditional college-age students will need to determine the effects of this decision on the mission of their institution.

6. Further research could investigate the relationship of the philosophic mission of the institution and the addition of nontraditional graduate academic programs to determine whether these new nontraditional graduate academic programs have fulfilled of changed the mission of the institution. These findings could assist presidents of small, Catholic, liberal arts colleges who add nontraditional graduate academic programs in determining the effects of their decision on the mission of the institution.

7. Further research could investigate the relationship between retrenchment and quality academic programs at small, Catholic, liberal arts colleges to determine whether any characteristics associated with quality were sacrificed as a result of retrenchment.

These findings could assist presidents of small, Catholic, liberal arts colleges who must make informed decisions to counteract the effects of retrenchment and to ensure that quality is not sacrificed at the expense of a decision based on economics.

APPENDICES

APPENDIX A

SURVEY INSTRUMENT

SURVEY INSTRUMENT

1. What is your institution's current full-time-equivalent (FTE) enrollment?

   _____ 1,000-1,500
   _____ 1,501-2,000
   _____ 2,001-2,500

2. What is the composition of your student population?

   _____ all female
   _____ all male
   _____ coeducational

3. What percentage of change has your institution experienced in the total undergraduate academic program budget allocations (including salaries) for the years listed below compared to the previous academic year? If the percentage of change is a decrease, then place the figure within parentheses. (NOTE: Undergraduate Academic Program refers to "curriculum or a combination of courses in a particular field of study leading to a bachelor's degree.").

   _____ 1979-1980 _____ 1980-1981 _____ 1981-1982
   _____ 1982-1983 _____ 1983-1984 _____ 1984-1985
   _____ 1985-1986 _____ 1986-1987

4. What employee salaries are included in the total budget allocations for undergraduate academic programs?

   _____ Faculty _____ Administrators _____ Secretaries

   Other:

   _____
   _____

5. What percentage of change has your institution experienced in the total undergraduate academic program budget allocations (excluding salaries) for the years listed below compared to the previous academic year? If the percentage of change is a decrease, then place the figure within parentheses.

   _____ 1979-1980 _____ 1980-1981 _____ 1981-1982
   _____ 1982-1983 _____ 1983-1984 _____ 1984-1985
   _____ 1985-1986 _____ 1986-1987

6. Were there any undergraduate academic courses (not academic programs) deleted as a result of a shift in or reduction of financial resources? (NOTE: Undergraduate academic courses refers to "a total study undertaken by a student in a year or leading to a bachelor's degree.").

_____ yes _____ no

(NOTE: If your response to question number 6 was "no" then proceed to question number 8.)

7. List the undergraduate academic courses (not academic programs) deleted as a result of a shift in or reduction of financial resources.

_____
_____
_____

8. Were there any undergraduate academic programs (not academic courses) deleted as a result of a shift in or reduction of financial resources?

_____ yes _____ no

(NOTE: If your response to question number 8 was "no" then proceed to question number 10.)

9. List the undergraduate academic programs (not academic courses) deleted as a result of a shift in or reduction of financial resources.

_____
_____
_____

10. What percentage of your total undergraduate teaching faculty were full-time and employed at your institution during the following years?

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

11. What percentage of your total undergraduate teaching faculty were part-time and employed at your institution during the following academic years?

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

12. What was your undergraduate student-faculty ratio during the following academic years?

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

13. Has your institution offered any undergraduate academic courses (not academic programs) on a flexible schedule for nontraditional college-age students since 1980? (NOTE: Nontraditional college-age students refers to students who choose not to attend college directly after high school and usually are not between the ages of 18 and 22.)

_____ yes _____ no

(NOTE: If your response to question number 13 was "no" then proceed to question number 16.)

14. List the undergraduate academic courses (not academic programs) offered on a flexible schedule for nontraditional college-age students.

_____

_____

15. List the reasons why your institution offered undergraduate academic courses (not academic programs) on a flexible schedule for nontraditional college-age students.

_____

_____

16. Has your institution started any undergraduate academic programs (not academic courses) for nontraditional college-age students since 1980?

_____ yes _____ no

(NOTE: If your response to question number 16 was "no" then proceed to question number 19.)

17. List the undergraduate academic programs (not academic courses) offered for nontraditional college-age students.

_____

_____

18. List the reasons why your institution added undergraduate academic programs (not academic courses) for nontraditional college-age students.

_____

_____

19. Has your institution started any nontraditional graduate academic programs (not academic courses) since 1980? (NOTE: Nontraditional graduate academic programs refers to a "curriculum or a combination of courses in a particular field of study leading to a certificate, masters' or doctoral degree." "It may include a provision for assessment of learning already acquired, which may be applied in partial fulfillment of the degree program. The student may learn through classroom instruction, independent reading and research." The place of delivery may be at a different location other than at the institution (e.g. another city, at a hospital). The institution may jointly sponsor these academic programs (e.g. hospital, corporation, or another college).

_____ yes _____ no

(NOTE: If your response to question number 19 was "no" then proceed to question number 22.)

20. List the nontraditional graduate academic programs (not academic courses) offered at your institution.

_____

_____

21. List the reasons why your institution added the nontraditional graduate academic programs (not academic courses).

_____

_____

22. Does your state offer student financial aid for your type of institution?

_____ yes _____ no

(NOTE: If your response to question number 22 was "no" then proceed to question number 24).

23. What percentage of change has your institution experienced in <u>state</u> student financial aid for the years listed below compared to the previous academic year? If the percentage of change is a <u>decrease</u>, then place the figure within parentheses.

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

24. What percentage of change has your institution experienced in <u>federal</u> student financial aid for the years listed below compared to the previous academic year? If the percentage of change is a <u>decrease</u>, then place the figure within parentheses.

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

25. What percentage of change has your institution experienced in donation of private gifts for the years listed below compared to the previous academic year? If the percentage of change is a <u>decrease</u>, then place the figure within parentheses.

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

26. What percentage of change has your institution experienced in FTE enrollment for the years listed below compared to the previous academic year? If the percentage of change is a <u>decrease</u>, then place the figure within parentheses.

_____ 1979-1980	_____ 1980-1981	_____ 1981-1982
_____ 1982-1983	_____ 1983-1984	_____ 1984-1985
_____ 1985-1986	_____ 1986-1987	

27. Select the characteristics which contribute to a need for retrenchment at an institution. Check all characteristics that apply.

_____ Decrease in funding for undergraduate academic programs
_____ Decrease in full-time undergraduate teaching faculty
_____ Increase in part-time undergraduate teaching faculty
_____ Decrease in student-faculty ratio
_____ Adding undergraduate academic courses (not academic programs) offered on a flexible schedule for nontraditional college-age students
_____ Adding undergraduate academic programs (not academic courses for nontraditional college-age students
_____ Adding nontraditional graduate academic programs (not academic courses)
_____ Decrease in State student financial aid
_____ Decrease in Federal student financial aid
_____ Declining enrollment

Other characteristics:

_____

_____

28. Has your institution ever experienced any of the characteristic listed under question number 27 from 1980 to the present time?

_____ yes _____ no

(NOTE: If your response to question number 28 was "no" then skip the remaining questions.)

29. If your institution experienced the characteristics listed under question number 27, would you classify your institution as a retrenched institution during the period of time that your institution experienced the characteristics listed above?

_____ yes _____ no

(NOTE: If your response to question number 29 was "yes" then skip the remaining question.)

30. If you would not classify your institution as a retrenched institution in your response to question number 29, then how would you interpret the characteristics listed under question number 27, and their effect on your institution?

_____

_____

Institutional Data

Name of the Institution: _____

Title of your position at your institution:

_____

_____

APPENDIX B

COVER LETTER

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION
ERICKSON HALL

EAST LANSING • MICHIGAN • 48824-1034

September 1, 1987

Dear

I am writing to request your assistance in a research project as part of my doctoral dissertation for the Department of Educational Administration at Michigan State University. The purpose of the study is to assess the perceptions of college Presidents at small, Catholic, liberal arts colleges with a head count enrollment between 1,000 and 2,500 students about the possible change in academic programs as a result of retrenchment. A review of the pertinent literature indicates that from 1980 to the mid-1990s these colleges must respond to their external environment and adapt effectively in order to survive.

Your institutionwide perspective, level of responsibility, and experience in higher education make your contribution to this study necessary and valuable. I realize you are extremely busy and may not have the time or ready access to the information needed to respond to this questionnaire. However, I would appreciate it if you would either take the time to complete this questionnaire or pass it along to the person(s) who could respond. Please complete the enclosed consent form and questionnaire and return them in the self-addressed stamped envelope by September 25, 1987. All responses will be held in strict confidence.

A copy of the abstract will be made available to you after the study is completed. Thank you, in advance, for your time and cooperation in helping me complete this study.

Sincerely,

Brother Frank Osage, F.S.C.
815 Sparrow Avenue
Lansing, MI 48910
(517) 482-1347

Louis C. Stamatakos, Ph.D.
Professor
Michigan State University
College of Education
Department of Educational Administration
(517) 353-5220

APPENDIX C

CONSENT FORM

Please read the following statement, sign it, and return it with the survey.

I understand the purpose of this study as described in the cover letter and I am participating voluntarily.

_____ _____

Date Signature

APPENDIX D

FOLLOW-UP LETTER

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION
ERICKSON HALL

EAST LANSING • MICHIGAN • 48824-1034

September 28, 1987

Dear

Several weeks ago, we requested your assistance by asking you to complete and return a questionnaire. The questionnaire was part of a study to assess the perceptions of college Presidents at small, Catholic, liberal arts colleges with a head count enrollment between 1,000 and 2,500 students about the possible change in academic programs as a result of retrenchment.

To the best of our knowledge, we have not received a response from you. For your convenience, we have enclosed an additional questionnaire. We realize you are extremely busy and may not have the time or ready access to the information needed to respond to this questionnaire. However, we would appreciate it if you would either take the time to complete the questionnaire or pass it along to the person(s) who could respond. Please complete the enclosed consent form and questionnaire and return them in the self-addressed stamped envelope by October 16, 1987. All responses will be held in strict confidence.

A copy of the abstract will be made available to you after the study is completed. Thank you, in advance, for your time and cooperation in helping us complete this study.

Sincerely,

Brother Frank Osage, F.S.C.
815 Sparrow Avenue
Lansing, MI 48910
(517) 482-1347

Louis C. Stamatakos, Ph.D.
Professor
Michigan State University
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