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UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

**EFFECTS OF A MARKETING STRATEGIES
PROMOTIONAL MIX ON STUDENTS ATTITUDES TOWARD
NORTHERN OKLAHOMA COLLEGE**

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

By

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Norman, Oklahoma
1999

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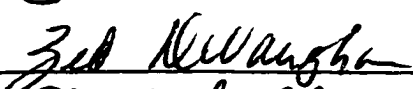
**EFFECTS OF A MARKETING STRATEGIES
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A Dissertation APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

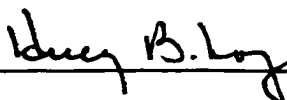
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ACKNOWLEDGMENTS

Appreciation is extended to my doctoral committee, Dr. Michael Buckley, Dr. Rosa Cintron, Dr. Zed DeVaugan, and Dr. Huey Long for their guidance and advice throughout the doctoral program. A special thanks is extended to Dr. Gary Green, committee chairperson, for his continued direction and advice throughout the entire program. His assistance is greatly appreciated.

Appreciation is also extended to my parents, Joe and Pam Kinzer, to whom I am indebted forever. Their support and encouragement throughout my life have given me the ability to realize that life's possibilities are endless and have given me the knowledge to understand how those possibilities can become realities.

A very special thanks is extended to my loving wife, Tammy, who has been an invaluable source of support, encouragement, and inspiration. Her willingness to sacrifice time and time again has not gone unnoticed and to her I am forever grateful. A very special thanks also to my children, Jake and Julia. They were a bigger inspiration than they can ever know.

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ABSTRACT

This study was conducted to determine whether there were differences among the factors of a college's promotional mix in terms of influencing prospective students to take interest in the college. It was the further intent of this study to determine whether there were differences among student demographics in terms of being influenced by the factors of the college's promotional mix. More specifically, the research questions were:

1. Are there differences among the factors making up the promotional mix in terms of influencing prospective students' attitudes toward Northern Oklahoma College (NOC)?
2. Are there differences among student demographics in terms of being influenced by the factors of the promotional mix?

Promotional activities utilized by NOC were identified and listed on a questionnaire. First-semester students at NOC were asked to complete the questionnaire.

The questionnaire asked the students to indicate the degree of influence each promotional activity had on their attitudes toward Northern Oklahoma College. Also asked were questions regarding students' demographics.

It was concluded that there existed differences among the factors of the promotional mix in terms of influencing prospective students' attitudes toward NOC. Promotional activities included in the personal selling factor of the promotional mix had the most positive influence on prospective students' attitudes toward NOC. Promotional activities included in the public relations factor of the promotional mix had the least positive influence on prospective students' attitudes toward NOC.

It was also concluded that there were differences among some demographic groups in terms of being influenced by the factors of the promotional mix. Differences between gender groups existed in terms of being influenced by the marketing publications factor, the personal selling factor, and the public relations factor of the promotional mix. There were no differences between gender groups regarding the advertising factor of the promotional mix. Additionally, it was concluded that there existed differences among racial/ethnic groups in terms of being influenced by the advertising factor of

the promotional mix. Regarding the marketing publications factor, the personal selling factor, and the public relations factor, there were no differences among racial/ethnic groups. There were no differences among age groups nor among marital status groups in terms of being influenced by the factors of the promotional mix.

**EFFECTS OF A MARKETING STRATEGIES
PROMOTIONAL MIX ON STUDENTS ATTITUDES TOWARD
NORTHERN OKLAHOMA COLLEGE**

CHAPTER I

INTRODUCTION

Background of the Study

Purpose of the Study

It is the intention of this research to contribute to the effectiveness of the current and future marketing strategies utilized by colleges within the Oklahoma State System of Higher Education. More specifically, this study is intended to provide college administrators information that will assist them in developing promotional activities within their marketing strategies that will provide a greater return in terms of influencing prospective students to take interest in their institutions.

According to Sherry Snider, Northern Oklahoma College Director of Marketing, the objective of the promotional activities of Northern Oklahoma College (NOC) is to influence prospective students to take further interest in and further investigate the services provided by NOC. After further investigating the services provided by NOC, it is hoped the prospective students will enroll in and become students of Northern Oklahoma College. Promotional activities are a subset of the overall marketing program, and each has its own objective. The objective of NOC's promotional activities is to influence prospective students to take further interest in the institution. The ultimate objective of the overall marketing program is to create an exchange between prospective students and the college. This exchange results in the students' enrollment in NOC.

This study focuses on promotional activities of Northern Oklahoma College and their effects on prospective students' attitudes toward the college. It is hoped this study will provide Northern Oklahoma College administrators information that will assist them in developing promotional activities that will achieve the objective of creating interest in the minds of

potential students to further investigate the college as their college of choice.

Marketing

Marketing, in its simplest definition, is a very broad concept. Berkowitz, Kerin, Hartley, and Rudelius (1994) suggested marketing is a process of satisfying needs and wants of consumers. Berkowitz et al. further defined the concept of marketing as "a process by which an organization strives to satisfy the needs of consumers while also trying to achieve the organization's goals" (p. 10). Boone and Kurtz (1989) provided a more specific definition of marketing as the "process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchange that will satisfy individual and organizational objectives" (p. 5).

The common element within these definitions is that marketing is based on the fact that people have needs and wants and marketing exists when people decide to satisfy those needs and wants through exchange. Berkowitz et al. defined exchange as "the trade of things of value between buyer and seller so that each is better off after the trade" (p. 10). The decision to commit to an exchange is

influenced by individual and organizational marketing activities. Pride and Ferrell (1989) stated that marketing activities are "individual and organizational activities that facilitate and expedite satisfying exchange relationships in a dynamic environment though the creation, distribution, promotion, and pricing of goods, services, and ideas" (p. 8).

In order for exchange to occur marketing managers must first identify their markets. Berkowitz et al. defined markets as "people with a desire and with the ability to buy a specific product, service, or idea" (p. 14). Since an organization cannot satisfy the needs of all consumers, it must concentrate its efforts on specific groups of potential consumers. Berry and Parasuraman (1991) defined these specific groups of potential consumers as target markets. Pride and Ferrell (1989) concluded that target markets can exist if the following requirements are met:

1. The people must need or desire a particular product.
2. The people in the group must have the ability to purchase the product.
3. The people in the aggregate must be willing to use their buying power.

4. Individuals in the group must have the authority to buy the specific product. (p. 85-86)

Once the target market has been identified, the organization must take steps to satisfy the needs of those within the target market. Organizations accomplish this by developing complete marketing programs. Managers develop marketing programs with the use of four controllable factors. Marketing theory suggests these factors are strategy elements and are controllable by the organization's decision makers. These factors are product, price, promotion, and place; and they make up what is known as the marketing mix. The factors of the marketing mix are defined as:

Product. Boone and Kurtz (1989) defined the product element as an "element of marketing decision making comprising activities involved in developing the right product or service for the firm's customers" (p. 23).

Price. The pricing strategy is defined as the "element of marketing decision making that deals with the methods of setting profitable and

justifiable exchange value for goods and services” (Boone & Kurtz, 1989, p. 24).

Promotion. The promotional element consists of tools, such as advertising and personal selling, that are “used to inform prospective buyers about the benefits of the product or service, persuade them to try it, and remind them later about the benefits they enjoyed by using the product or service” (Berkowitz et al., 1994, p. 496).

Place. The place element is the “element of marketing decision making comprising activities and marketing institutions involved in getting the right product or service to the firm’s customers” (Boone & Kurtz, 1989, p. 24).

The focal point of this study is on the promotion factor, a way for the seller to effectively communicate its products or services to the buyer through promotional activities.

Promotional Element of the Marketing Mix

Effective communication through promotion is vital to the success of a marketing program. Communication through promotional activities is often times the avenue

connecting the organization to its potential consumers. The marketing transaction of exchange will never occur unless the consumer knows the product or service exists and its location. Berkowitz et al. (1994) further emphasized the importance of promotion by indicating that one of the factors necessary for marketing to be successful is an effective way to communicate the benefits of a product or service to potential consumers.

Although the word "promotion" is often used interchangeably with the word "marketing," they are not synonymous terms. Promotion is one factor of the marketing mix. Marketing theory suggests the promotion element of the marketing mix is comprised of a mix of tools available to organizations which are used to communicate the benefits of its products and services to potential consumers. This mix of tools is called the promotional mix and consists of advertising, personal selling, publicity, and sales promotion. Berkowitz et al. (1994) defined the tools of the promotional mix as:

Advertising is any paid form of non-personal communication about an organization, good, service, or idea by an identified sponsor. The paid aspect

of the definition is important, because the space for the advertising message normally must be bought.

Personal selling is the two-way flow of communication between a buyer and seller, designed to influence a person's or group's purchase decision. Unlike advertising, personal selling is usually face-to-face communication between the sender and receiver.

Publicity is a non-personal, indirectly paid presentation of an organization, good, or service. It can take the form of a news story, editorial, or product announcement.

Sales Promotion is a short-term inducement of value offered to arouse interest in buying a good or service. (p. 496-501)

In putting together the promotional mix, organizations must develop an appropriate balance of elements within the mix. In order to develop an appropriate balance of elements, organizations must understand which promotional elements are most effective in communicating the benefits of their products or services to potential consumers.

Marketing in Higher Education

The use of marketing activities in institutions of higher education is not a new concept. For over a century educational administrators have utilized activities such as personal selling and recruitment to attract particular students to their institutions. Cutlip (1970) talked about colleges and universities that turned to advertising, publicity, lobbying, fund raising, and student recruitment activities in the middle of the last century. However, colleges and universities tended to carry on these marketing activities without much conscious reflection. The admissions office made efforts of contacting potential students, the recruitment office continued visiting high schools, and counselors continued counseling students. These activities were not thought of in terms of marketing strategy. Marketing was not accepted by college administrators as a formal strategy for promoting their institutions to prospective students. Students were not thought of as consumers who have specific needs and wants and colleges were not thought of as institutions that should strive to satisfy those needs and wants. "Many educational institutions assumed that the value of education was obvious, and that those who

valued education would make their way to the school doors to enroll" (Kotler & Fox, 1995, p. 11).

Fortunately, this view is fading and the use of marketing for colleges is becoming a more commonly accepted practice. During the late 1970s college and university administrators began focusing on marketing as a legitimate strategic tool. Edmondson (1987) described the changes higher education was forced to make:

As American higher education changes from a seller's to a buyer's market, colleges are changing from ivory-tower enclaves to consumer-driven businesses. Because of the baby bust, the number of high school graduates peaked at 3.2 million in 1977 and began a 15-year slide. . . . But some schools are turning the drought to their advantage as administrators learn how to size up the competition, look for new kinds of students, and market effectively. . . . (p. 27)

According to Kotler and Fox (1995), "The view that marketing is undesirable because it is unnecessary has faded away, in part because nonprofit managers and their supporters have learned the potential of marketing and in

part because they have been starkly confronted with need for it" (p.14).

The need for marketing in higher education is apparent. College administrators are becoming increasingly concerned with the needs and wants of students and are taking action to satisfy those needs and wants. They are beginning to realize that passive efforts used to attract students are not acceptable in today's competitive environment. As Kotler and Fox explained:

Educational institutions have recognized that they had marketing problems. Declines in prospective students, enrollment, donations, and other resources in the face of mounting costs reminded them of their dependence on the marketplace they served. Many faced changing student needs and societal expectation, increasing competition for scarce student and funding resources, and unabating financial pressures. Board members, legislators, and community groups began putting tough questions to educational administrators about their institutions' missions, opportunities, and strategies. One result was that educators were

often forced to take a hard look at marketing to see what this discipline might offer to keep their institutions viable and relevant. (Kotler & Fox, 1995, p. 5)

During the 1980s, the use of marketing in higher education was being accepted by many college and university administrators; however, there were those who resisted the concept. Engel (1984) concluded that marketing ideology was contrary to the liberal arts tradition of education. Pelletier and McNamara (1985) believed that the college campus should not be a marketplace. They explained:

The college campus is not or at any rate, should not be a marketplace. It is, or ought to be, a community of scholars, a place of teaching and learning, the setting for scholarly discourse, experimentation, and discovery. (Pelletier & McNamara, 1985, p. 54)

Despite those who resisted marketing as a strategic tool for educational institutions, according to the literature, the majority believed it could produce

favorable returns. "Marketing may have been considered questionable; however, the consensus today is that marketing, when done correctly, plays an important role in higher education" (Pate, 1993, p. 104). "The use of marketing in higher education has been supported by such groups as the College Board, the Johnson Foundation, and the National Association of College Admissions Officers" (Noble, 1986, p. 318). Colleges and universities are beginning to think of students as consumers and education as a product. New programs have been designed to appeal to the latest student interests, such as career-oriented programs in business.

According to Kotler and Fox, in order for colleges to successfully formulate and implement a marketing program, appropriate steps must be followed. The first step is to identify the college's target market. He defines the target market as the set of people who have an actual or potential interest in a service and the resources to acquire it. According to Kotler and Fox (1995) the benefits of identifying your target market are:

1. The institution can spot market opportunities better when it is aware of different segments and their needs.

2. The institution can make finer adjustments of its programs to match the desires of the market.

3. The institutions can make finer adjustments of its prices, distribution channels, and promotional mix. (p. 212)

Kotler and Fox (1995) suggested colleges select their target markets based on geography, age, sex, income, or other variables identified by the college. People differ in age, income, geographical location, ethnic group, sex, marital status, and other demographic characteristics. "Target marketing makes sense when we can identify common interests and preferences, and then respond in valued ways to identifiable groups of people" (p. 213). Using demographic distinctions to identify target markets and then monitoring the influence of the promotion on each segment of the market will allow the institutions to make positive adjustments to their promotional mix.

Another key step in developing a marketing program is the development of a marketing mix that supports the college's ability to compete in its target market. Kotler and Fox (1995) modified the traditional four-

factor marketing mix and made it more suitable for institutions of higher education. This marketing mix for higher education consists of seven controllable factors which administrators must consider when developing marketing programs. The elements of this marketing mix are programs, price, place, processes, physical facilities, people, and promotion. The focal point of this study is on the promotion factor of the seven-factor marketing mix Kotler and Fox developed specifically for use by colleges and universities.

Promotion of Colleges and Universities

Even though great strides have been made in adopting marketing techniques in institutions of higher education, administrators have done little to understand how consumers' attitudes are influenced by the promotional activities of the college. The promotional element is a key component of successful marketing strategies for institutions of higher education. The role of attracting consumers to a product or service was identified as the most important function of marketing by Absher and Crawford (1996). Trachtenberg (1985) concluded that an effective promotion mix is the key to the success of an

academic institution. Kotler and Fox (1995) also emphasized the importance of promotion:

Educational institutions need effective communications with their markets. . . developing good programs and services, pricing them attractively, and making them readily available to target consumers is not enough. The institution must also inform consumers and others about its goals, activities, and offerings and motivate them to take an interest in the institution. (p. 351)

Communication between seller/college and the buyer/student can occur in many forms. Effective communication involves an exchange between the institution and the audience. The institution must consider its purpose for preparing the communication and purposes for which the audience will be paying attention to it. Only then can the form, content, and delivery of the message influence individuals to take interest in the institution.

The process of communication is complex and not always successful. "Communication is the sharing of meaning and requires five elements: a source, a message,

a receiver, and the processes of encoding and decoding" (Berkowitz et al., 1994, p. 496). In the case of higher education, the source is the institution. The information the institution wishes to convey is the message, and prospective students are the receivers of the message. Berkowitz et al. described encoding as the process of having the sender/institution transform an abstract idea into a set of symbols. Decoding is the reverse, the process of having the receiver/student take a set of symbols, the message, and transform them back to the idea being sent.

Errors in communication can happen in many ways. Berkowitz et al. (1994) gave several reasons errors in communication occur: the source may not adequately transform the idea into an effective set of symbols, a properly encoded message may be sent through the wrong channel, or the receiver may not properly transform the set of symbols into the correct idea. "Although communication appears easy to perform, truly effective communication can be very difficult" (Berkowitz et al., 1994, p. 497).

Kotler and Fox (1995) suggested institutions will communicate more effectively by using the elements of a promotional mix they developed specifically for

institutions of higher education. The elements of this promotional mix are public relations, marketing publications, advertising, and personal selling.

Kotler and Fox (1995) concluded that these promotional elements are used by most colleges; however, most colleges do not monitor their effects on prospective students. Macleod (1994) concluded that only 37 percent of colleges and universities monitored the effectiveness of their promotion. In order to develop a promotional mix that is most likely to achieve the institution's objectives, administrators must develop the appropriate balance of elements within the mix. This requires organizations to monitor their promotions and understand which promotional elements are most effective in communicating the benefits of their products or services to the people within the market being targeted. Only then can they make important adjustments to their promotional mix that will enhance their ability to achieve their promotional objectives.

Statement of the Problem

It is the intention of this research to identify the current promotional activities utilized by Northern Oklahoma College and to categorize each of the

promotional activities as one of the factors making up the promotional mix. It is also the intention of this research to determine whether there are differences among the factors of the promotional mix in terms of influencing prospective students to take interest in Northern Oklahoma College as their possible college of choice. It is the further intention of this research to determine whether there are differences among student demographics in terms of being influenced by the factors of the promotional mix.

For the purposes of this study, promotional activities include all deliberate efforts made by the college to communicate its goals and offerings to prospective students in hopes of influencing them to take interest in Northern Oklahoma College as their possible college of choice. A factor analysis will be performed to assist in categorizing each promotional activity as one of the factors making up the promotional mix. The four factors making up the promotional mix identified by Kotler and Fox (1995) are: public relations, marketing publications, advertising, and personal selling.

Research Questions

1. Are there differences among the factors making up the promotional mix in terms of influencing prospective students' attitudes toward Northern Oklahoma College?
2. Are there differences among student demographics in terms of being influenced by the factors of the promotional mix?

Significance of the Study

The time has passed when college administrators could carry on without consciously reflecting on their institution's enrollment and their efforts toward attracting students to their institutions. The shrinking supply of first-year college students, scarce financial resources, and an increased number of options for students has resulted in greater competition among institutions. To remain viable, college administrators must consider enrollment trends and must take action toward influencing their institution's future enrollments.

Williford (1987) explained that marketing was introduced into higher education as an approach to promote colleges and universities among prospective

college freshmen. This orientation presumes that effective promotional activities that successfully recruit students every year will be the key factor in an institution's survival. Williford further suggested that institutional survival depends on how effectively it can recruit new students. Colleges that do not formulate and implement effective promotional activities do not communicate their ability to satisfy the needs and wants of their prospective students. This breakdown in communication drastically reduces the institution's ability to achieve its promotional objectives of influencing prospective students to take interest in the college.

In order to make informed decisions regarding the development and the implementation of an effective promotional mix, administrators must know which promotional activities will likely influence prospective students within their target market. It is the intention of this study to provide Northern Oklahoma College administrators information that will assist them in developing an effective promotional mix that will successfully achieve the objective of influencing prospective students to take further interest in NOC. It is also hoped this study will provide insight to college

and university administrators that will benefit them in developing future strategic plans that will enhance their ability to remain viable in the increasingly competitive market of higher education.

Limitations of the Study

Respondents in the current study are limited to 1998 first-year students at Northern Oklahoma College. It will be difficult to generalize beyond the accessible population at the case study institution.

In addition, when utilizing the causal-comparative design, as in the present study, it is difficult to establish causality on the basis of the collected data. Continued research by the case study institution will be needed to test alternative interpretations.

Regarding the statistical analysis, the large sample size could positively influence the results. Also, the number of analysis of variance tests performed could result in an outcome influenced by the family wise error rate.

Assumptions

1. The assumption is made that the sample is representative of the population of first-year students at Northern Oklahoma College.
2. The assumption is made that the students responded honestly and accurately and that their answers represent their true opinions.
3. The assumption is made that first-year students at Northern Oklahoma College were most recently exposed to the promotional activities. It is therefore assumed first-year students will most accurately recall the effects of promotional activities on their attitude toward Northern Oklahoma College.
4. The assumption is made that the administration of the questionnaire by a neutral party reduced the possibility of administrator bias influencing the students' responses.

CHAPTER II

RELATED LITERATURE

Business Principles in Higher Education

The use of business principles in the administration of colleges and universities is a topic of great debate. Only a few decades ago the idea of comparing colleges and universities to business would have been an unpopular concept.

Making a direct comparison between a university and a business would have been shocking a few decades ago. Educational institutions educated students, relying on money from tuition and gifts to pay teachers' salaries and the other expenses of operating their programs. Their aim was to impart knowledge and skill that would improve the lives and work opportunities of their graduates. Businesses, in contrast, aimed to make a profit, defined in narrowly financial terms. Education and business

were considered distinct "worlds," with little or nothing in common. (Kotler & Fox, 1995, p.5)

Many people, today, believe that administrators of higher education should not and can not use business practices in the operations of their institutions. Those supporting this view argue that universities have three main functions: teaching, conducting research, and providing public service. They suggest that universities are very complex institutions consisting of diverse faculties striving to achieve the objectives of teaching, conducting research, and providing public service. These objectives do not parallel the practices and profit centered goals of business. As Soles (1980) argued:

Faculties don't, or shouldn't see themselves as selling a product, nor yet as processing raw goods. Rather, we are trying to transmit some of the vast quantity of knowledge humanity has accumulated. . . In our different ways, we are trying to expose our students to some of the vast possibilities of the human mind and spirit and to instill and nurture skills necessary for developing their potential and acumen, including the capacities to innovate, create

and experiment. . . the vocabulary and practices of a product delivery system or of a manufacturing concern simply do not fit the university. A vocabulary of profits, efficiency, and debt-to-equity ratios provides no room for originality of thought, illumination for the individual, increased sensitivity to tomorrow's issues, or ingenious solution to them. (p. 6)

Seymour (1988) stated that "all true educators since the time of Socrates and Plato have agreed that the primary object of education is the attainment of inner harmony" (p. 38). He suggested that the implementation of business practices into universities will encourage educators to strive for objectives less than the attainment of inner harmony. The end result being nothing more than the transmission of mere facts. "Without such an integration learning is no more than a collection of scraps, and the accumulation of knowledge becomes a danger to mental health" (Seymour, 1988, p. 38).

The reverse side of the debate supports the use of business principles in the administration of higher education. Those supporting this view believe higher

education has benefited and can continue to benefit from utilizing business practices. This view is sometimes referred to as the corporate approach. Long (1987) defined the corporate approach as "the adoption of decision making procedures, establishment of priorities, a product oriented climate and general management strategies based on concepts and principles of business and industry rather than education" (p. 69).

It is argued that higher education has learned a great deal from private business and has benefited from using business principles in the administration of its institutions. "American educational institutions have learned much from business, including improved budgeting systems, endowment, investing, and other financial management procedures, as well as increased professionalization of human resource management functions" (Kotler & Fox, 1995, p. 5).

Not only has higher education learned much from business, it has also implemented what it has learned effectively.

Frankly, we in higher education have learned much about operating in a more businesslike manner. The stringencies of the last few years in particular

have helped us weed out unnecessary functions, use technology more effectively, plan more strategically, and use limited resources more efficiently. Most of us are better managers than we would have been if we had been less attentive to recent developments in the private sector. (Woodbury, 1993, p. 19)

Increased competition, a decline in the number of 18-year-old students, and scarce financial resources, have resulted in colleges' and universities' use of marketing principles. Students are increasingly being referred to as customers and education as the product that is being offered. Many colleges are becoming more sensitive to the needs of students and are making drastic changes in an effort to better serve those needs. According to O'Malley (1998) many colleges are "replacing long registration lines with telephone enrollment, staffing student services on evenings and weekends, and accepting monthly installments or credit card payments in lieu of prepaid tuition" (p.10). These changes, according to O'Malley, are a response to a new understanding that customers have a choice to go elsewhere for education.

Moving toward a mindset of being client centered is a matter of survival for community colleges. "Community colleges don't have a monopoly, so we have to add value to what we provide to the students. They have more than one place to get what they want. And when they don't get what they want from their local community college, they vote with their feet" (O'Malley, 1998, p. 10). The idea of being sensitive to the needs and wants of students has existed for several years in the education of adults. Long (1984) stated "For at least 50 years, leaders in the education of adults have promoted the idea that adult needs and wants provide the energy for educational programming for adults" (p. 70).

Winston (1997) made the observation that colleges and universities do sell goods and services, make them with purchased inputs and hired workers, use plant and equipment, and compete for customers and faculty input. If administrators accept this corporate view, then it follows that application of marketing principles can be made to institutions of higher education. Kotler and Murphy (1981) accepted this view and concluded: "If colleges and universities are to survive in the troubled years ahead, a strong emphasis on planning is essential.

The type of planning that appears to be most appropriate for the future is strategic market planning" (p. 23).

Competition in Higher Education

Over the last several years higher education has found itself engaged in an increasingly competitive market. One primary source of competition is the need for colleges and universities to attract and retain students. Colleges and universities are not only competing among themselves for students and resources, they also must compete with entities outside the realm of higher education. Long (1987) emphasized the existence of competition between higher education and industry. According to Long there are two primary types of competition between higher education and industry. "Competition between higher education and industry is primarily of two kinds: competition in instructional activity and research" (Long, 1987, p. 67). Corporations have developed "corporate colleges" that have enabled them to educate and train their own employees. "There are a number of corporate colleges, such as Northrop University, Rand Graduate Institute, and the Wang Institute of Graduate Studies which award degrees ranging from an Associate Degree of Business to a Ph.D. in Policy

Analysis" (Seymour, 1988, p. 2). Due to greater efforts on the part of industry to train and educate adults combined with a reduction in the number of 18-year olds, the "two areas of competition among higher education institutions and corporations that focuses on students will probably become sharper in the next decade" (Long, 1987, p. 67).

Colleges and universities are also facing increased competition among themselves. This increased competition has forced colleges and universities to take a new look at their prospective students. College and university leaders are realizing that their students have more choices and can go elsewhere for education and training. "Competition at the institutional level will intensify for potential students, a market which is now declining as far as the main age cohort is concerned. As financial and other pressures are applied to potential students, they will sharpen their expectations and scrutinize more carefully the offers of competing institutions" (Tonks & Farr, , 1995, p. 25). O'Malley (1998) suggested this competition is forcing institutions of higher education to become more sensitive to the needs of the consumers.

In an effort to attract and retain students with busy work schedules and weighty family responsibilities, many colleges nationwide are offering televised courses that can be delivered to workplace conference rooms and remote campuses, Internet-based courses that students can access from home or work, and even telephone classes in which instructors and students communicate via voice mail. (O'Malley, 1998, p. 10)

As evidenced by the closing of Phillips University in Enid, Oklahoma, it is critical for colleges and universities to successfully compete for and attain potential students and available financial resources. Best (1988) emphasized the importance of successfully competing for students and resources in today's marketplace. "Success in the competition for FTE's (Full Time Equivalency) must be attained to secure the institution's fiscal health directly or indirectly" (p. 179).

Marketing of Higher Education

Institutions of higher education have applied marketing practices to their recruiting efforts for many

years. Cutlip (1970) spoke of colleges applying such activities as personal selling, publicity, and advertising to their recruiting efforts over a century ago. Until the late 1970s, however, these activities were loosely applied. The admissions office contacted potential students and faculty and staff communicated with students.

During the late 1970s, colleges and universities experienced cuts in government funding and increased competition that resulted in the use of marketing strategies.

Scores of colleges have closed their doors since 1970 in the face of declining enrollments and dwindling financial support. . . It is not surprising, therefore, that so many colleges and universities now employ marketing experts who devise plans to market their services to students, alumni, government agencies, foundations, and other constituencies. (Dunn & Barban, 1986, p. 52)

During the early 1980s, college administrators began to incorporate formal marketing practices into their institutional planning. De los Santos (1984) explained

how colleges and universities began increasing their recruiting efforts and their recruiting budgets during the 1980s. By this time colleges and universities began to actively seek out students and allocate increased budgets for aggressively marketing their institutions.

Successfully marketing an institution of higher education involves much more than merely running a commercial on local television. Marketing is based on the idea that people have needs and wants. Marketing exists when people decide to satisfy those needs and wants through exchange. Kotler and Fox (1995) explained:

The concept of exchange is central to marketing. Through exchanges, social units -- individuals, small groups, institutions, whole nations -- attain the inputs they need. By offering something attractive, they acquire what they need in return. Since both parties agree to the exchange, both see themselves as better off after the exchange. (p.6)

According to Kotler and Fox, in order to successfully facilitate this exchange between buyer/student and seller/institution, educational administrators must know their markets, attract

sufficient resources, convert these resources into appropriate programs, services, and ideas, and effectively communicate them to various markets and publics. All of these activities together make up a successful marketing strategy.

Many colleges and universities today are placing greater emphasis on the development of marketing strategies. According to Macleod (1994), 90 percent of colleges have given marketing more priority. "Most colleges (84 percent) expect that the marketing function will be developed further, there will be more emphasis on researching the needs of client groups, and the marketing plan will be included within the overall college development plan" (p. 8). In 1998 Bush, Ferrell, and James conducted an exploratory investigation into the marketing activities of 80 colleges. They found that "the majority of respondents expressed that they had a strategic plan or were in the process of developing one" (Bush et al., 1998, p. 16).

Even though most colleges and universities are placing greater emphasis on marketing, few have devoted resources for a full-time marketing director. In the study conducted by Bush et al. (1998) only 10 of the 80 respondents indicated they had hired a full-time

marketing director. Research by Noble (1986) had similar results. Only 16.3 percent of 84 colleges and universities said they had a high-level administrator responsible for marketing programs. Yet, in the study conducted by Bush et al., respondents rated the hiring of a full-time marketing director as highest in effectiveness of an overall marketing plan.

The Marketing Mix for Higher Education

Kotler and Fox (1995) developed a marketing mix specifically for institutions of higher education. This marketing mix consists of seven controllable factors which administrators must consider when developing marketing strategy. The elements of the marketing mix for higher education are programs, price, place, processes, physical facilities, people, and promotion. They are defined as:

Programs. The program element of the mix is similar to the product element of the traditional mix. According to Kotler and Fox, this element is defined as the element of marketing decision making comprising activities involved in designing the right programs or services for the institutions' students. It consists of all the programs and services the institution makes available to

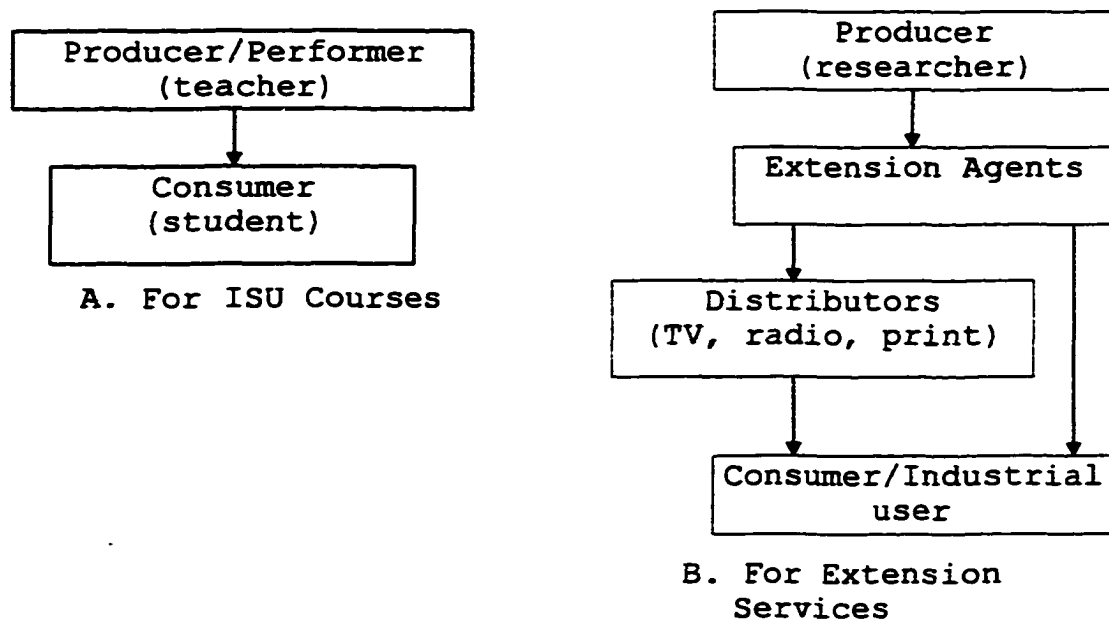
its consumers. The program element of the marketing mix consists of product lines. These product lines are groups of offerings that are closely related. "For example, many colleges offer educational programs, recreational programs, personal-growth programs and services, curative services, and future-planning programs and services. Each of these categories can be considered a product line" (Kotler & Fox, 1995, p.277).

Price. The price element of the marketing mix is the element that deals with the methods of setting exchange value for programs and services offered by the institution. "Setting prices for most educational programs should take into account cost-oriented, customer-demand-oriented, and competition-oriented factors. In the past, few institutions viewed tuition pricing from a marketing perspective, but this has changed rapidly" (Kotler & Fox, 1995, p. 309).

Place. Kotler and Fox (1995) described the place element as the element of marketing decision making regarding how institutions make their programs and services available and accessible to their target consumers. As illustrated in Figure 1, programs and services can be made available to consumers through various methods. Also included in the place element are

marketing decisions regarding location and scheduling of programs and services offered.

Figure 1. Delivery systems for Iowa State University Programs



From Strategic Marketing for Educational Institutions, by Philip Kotler and Karen Fox, 1995, p. 332. Copyright 1995 by Prentice-Hall, Inc.

Processes. The process element of the marketing mix includes marketing decision making regarding all institutional processes and how each will be carried out. For example, institutions have many processes they require students to follow in order to achieve certain

objectives. Students must follow certain processes to enroll, to apply for financial aid, to obtain books, and to pay for services rendered. Each of these processes must be considered when developing marketing strategy.

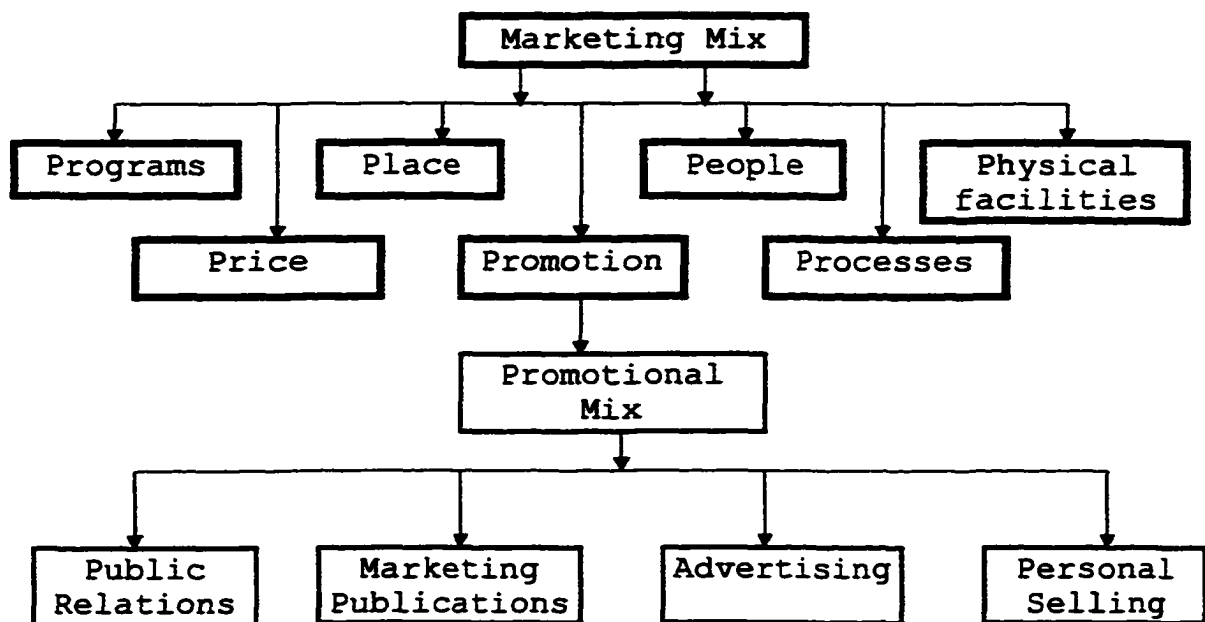
Physical Facilities. Kotler and Fox (1995) identified the physical facilities element of the marketing mix as the element of marketing decision making comprising decisions regarding how well the facilities will serve the planned educational activities to be carried out. "Educational institutions should also include the right combination of facilities to support their programs" (Kotler & Fox, 1995, p. 342).

People. The people element is identified by Kotler and Fox as one of the most important elements of the marketing mix. The people element includes those marketing decisions regarding all personnel representing the institution. Kotler and Fox explained how institutions of higher education are service providers, and the people who provide these services are critical to the institutions' success.

Promotion. The promotion element is comprised of a mix of tools available to the administrators that are used to communicate the institutions' goals, activities, and offerings to its consumers. This mix of tools is

called the promotional mix and consists of public relations, marketing publications, advertising, and personal selling. Although the word "promotion" is often used interchangeably with the word "marketing," they are not synonymous terms. Figure 2 illustrates how promotion and the promotional mix fit into the overall marketing mix.

Figure 2. The Association between the Marketing Mix and the Promotional Mix



From Strategic Marketing for Educational Institutions, by Philip Kotler and Karen Fox, 1995. Copyright 1995 by Prentice-Hall, Inc.

Williford (1987) identified several reasons marketing in higher education is often misunderstood as promotion. He concluded educational administrators neither implemented nor understood properly the distinction between marketing and promotion. Promotion is one factor of the marketing mix, and it contains its own set of tools making up the promotional mix.

The Promotional Mix for Higher Education

Kotler and Fox (1995) developed a promotional mix more suitable for colleges by altering two factors of the traditional promotional mix commonly used in marketing programs. They replaced the sales promotion factor with marketing publications. They also replaced the publicity factor of the traditional mix with public relations. These modifications resulted in the following mix of promotional tools that are commonly used by institutions of higher education:

Public Relations consists of those efforts made by the college to influence prospective students to take favorable interest in the college, typically through the college's own special promotions.

Marketing Publications consists of the college's published materials for which the college controls both the content and the context of the message and which are designed to inform students about its offerings in attempt to influence them to take further interest in the college.

Advertising consists of paid presentations and promotions of ideas, programs, or services, typically through mass media with the intent of influencing prospective students to gain awareness of and take further interest in the college.

Personal Selling includes direct communications from paid or non-paid representatives of the institution. These personal communications are intended to influence prospective students to take further interest in the college. (Kotler & Fox, 1995, p. 351-353)

In order for institutions to communicate the benefits of their services to potential students, they must use one or more elements of the promotional mix. In order to identify the appropriate blend of public relations, marketing publications, advertising, and

personal selling, administrators must consider a number of factors.

Berkowitz et al. (1994) proposed the appropriate mix can be identified through appropriately segmenting the market and identifying the target audience for the promotion. Schiffman and Kanuk (1983) defined market segmentation as the "process of dividing a potential market into distinct subsets of consumers and selecting one or more segments as a market target to be reached with a distinct promotional mix" (p. 20). There are many ways for educational institutions to segment their markets. Kotler and Fox (1995) suggested that educational markets be segmented by age, sex, income, geography, or lifestyle. Dalili (1982) also supported the use of market segmentation by institutions of higher education. He purported segmenting educational markets by adults, part-time students, non-traditional students, more females, and international students. The specific circumstances of an institution will assist in determining the appropriate methods of segmenting its markets. Goldgehn (1989) concluded that institutions should target market by "concentrating recruitment efforts toward those populations which provide the best opportunities" (p. 46).

Institutions must also identify the objectives of their promotional efforts. According to Waldrop (1994), it pays to advertise; but to do it efficiently requires defining your promotional objectives. Kotler and Fox (1995) concluded that the promotional objectives of an educational institution must be to motivate consumers/students to take an interest in the institution.

Promotional Activities in Higher Education

Woods (1976) concluded that it is necessary for colleges to apply a complete promotional mix consisting of a variety of promotional activities. She found the most effective promotional activity for the case study college in Oklahoma was influence from currently "enrolled students." The "college catalog" and "college brochures" were next in effectiveness in terms of influencing college choice. Influence from "graduates" and conversations with the college "recruiter" followed in effectiveness.

Bush, Ferrell, and Thomas (1998) conducted an exploratory investigation on promotional activities of 80 business colleges. They found the most common promotional activities were not specifically rated as the

most effective. In fact, the Internet home page was rated the lowest in perceived effectiveness along with public relations. "More than 50% of the respondents indicated that they had advertised and felt that it was relatively effective" (Bush et al., 1998, p. 8).

In terms of media use, 40 respondents reported that newspaper was their most common medium for advertising. Radio, spot television, magazine, and billboard advertising followed. Budgetary constraints could be a factor in the main choice of newspaper in addition to the perception that newspapers may be a more credible medium for academic institutions than radio or television. (Bush et al., 1998, p. 16)

Bush et al. (1998) suggested that colleges use existing resources to market their institutions. Most colleges have a marketing department within their business college. Bush et al. recommended administrators rely on their own marketing faculty members. They made note of marketing efforts of Mercy College in Dobbs Ferry, New York. The college introduced a new incentive program for its faculty members. If the college's

enrollment increased by a certain amount, the faculty members received a 7 percent salary increase. However, if enrollment failed to increase, the faculty members received a 7 percent cut. The faculty of the college approved this plan by four to one.

Berger and Wallingford (1996) contended in spite of the progress made in adopting marketing in higher education, little had been written about the need to tie the customer's state of mind or understanding of the service to the promotional strategy. They suggested promotional strategy should be based on the prospective student's current knowledge about the college.

The prospective student's relationship with a college can be viewed as a logical progression of six steps: (1) awareness of the college (2) interested in the college (3) familiar with the college (4) have a limited understanding of the offerings of the college (5) attend the college and (6) recommend the college to others. Recognizing these steps, all communication should serve to reach at least one of these goals: establish awareness of the existence of the college or create

inquisitiveness about the nature of the college. (p. 63)

Macleod (1994) examined promotional efforts of 45 colleges. Her results showed that the majority of respondents used a wide range of promotional materials to promote their services. The most popular being posters, course leaflets, and local press advertising. Her results highlighted the effectiveness of college promotional materials and activities on client groups and she recommended this should drive future planning. "Selection of promotional strategies should be based on past experience gained through monitoring the effectiveness of different activities" (Macleod, 1994, p. 6).

CHAPTER III

RESEARCH METHODOLOGY

Research Design

The research design employed in this study is a causal-comparative or ex post facto research design. This design is being used because the independent variables, the promotional activities, have already exerted their effects on the students' decisions to take interest in Northern Oklahoma College (NOC). As is often the case in educational research, to otherwise try and experimentally manipulate a student to take an interest in NOC prior to its occurrence would be virtually impossible. The best we can do is test those students who have made a conscious decision to take an interest in and enroll at NOC. This could be accomplished by asking them to recall what effect the promotional activities had on their decision. "The main reason for using a causal-comparative method is that many of the cause-and-effect

relationships in education that we wish to study are not amenable to experimental manipulation" (Gall, Borg, & Gall, 1996, p. 381).

This study attempts to investigate the effects of the independent variables, the promotional activities, on students' attitudes toward Northern Oklahoma College. First-year students were asked to recall the effects of the presumed causative variable, the promotional activities. The dependent variable, students' attitudes toward NOC, was measured by testing students after they had been exposed to the independent variable, the promotional activities. Students were asked to indicate the degree of influence the promotional activities had on their attitudes toward taking further interest in NOC as their possible college of choice.

Due to the importance of knowing one's market, additional exploratory analysis was conducted. Student demographics were compared to determine if differences existed among them in terms of being influenced by the factors of the promotional mix. This information will be particularly beneficial for future market segmentation as well as for the development of future promotional strategies.

Population and Sample

According to Schiffman and Kanuk (1983) no source of consumer information is more important than consumers themselves. This source requires original research directed at a sample of consumers. Most consumer analysis that deals with motivation and attitudes must be obtained directly from these consumers. In the present study, the student is considered the consumer. In order to measure the effects of the independent variables on students' attitudes, only those students who are enrolled at NOC for their first semester were surveyed. It was decided that information regarding the effects of current promotional activities was more accurately recalled by first-semester students who were most recently exposed to the promotional activities and who were most recently faced with the decision of college choice.

Participants in the study were first-semester students who were randomly selected from the accessible population of all first-semester students at NOC. Participants were asked to complete a survey questionnaire. All first semester students had an equal chance of being included in the study.

Questionnaire

Questionnaire Design

A sample questionnaire is included as Appendix B. The questionnaire consists of two parts. This first part is titled "student demographics" and the second part "college and career information." At the request of Northern Oklahoma College administrators, informational items were included in the questionnaire and will be used for purposes other than this study. Questions of interest for this study can be found in the "student demographics" section as well as on page three of the "college and career information" section.

Questionnaire Development

The development of the questionnaire was based on an instrument used by Bobby Woods (1976) in a dissertation research project developed to measure attitude development, as well as samples used in advertising textbooks. In addition, Northern Oklahoma College administrators requested that specific informational items be added to the questionnaire. These questions will assist the college in identifying geographic areas and advertising mediums most likely to

be cost effective for future promotional activities of the college.

Student demographics questions were included as the first section of the questionnaire. This data was used to test for differences among student demographics in terms of being influenced by the factors of the promotional mix.

In order to test for differences among the factors of the promotional mix, specific promotional activities were identified through several pilot interviews with Northern Oklahoma College administrators. Promotional activities, for the purposes of this study, included all deliberate efforts made by the college to communicate its offerings to prospective students. Twenty-one current promotional activities were identified. These promotional activities were listed in a Likert scale format, and respondents were asked to indicate the degree of influence each promotional activity had on their decision to take an interest in NOC: a very important influence, an important influence, a negative influence, a very negative influence, or whether there was no exposure to the promotional activity. "The allowance for a negative impression is important. . . Advertising may actually produce an unfavorable impression. . ." (Woods,

1976, p.54). In addition to the attitude scale used, respondents were asked several closed-ended questions designed to seek respondent information regarding financial aid, scholarships, college major, and student status.

Questionnaire Validity and Reliability

The validity of the instrument was verified by a panel of five experts. The panel of experts was chosen because of their expertise in the areas of higher education, marketing, promotion, and research. A list of the panel experts and their professional titles is included as Appendix C. Included as Appendix D is a copy of the letter used to request the experts' assistance in reviewing the questionnaire.

Reliability of the questionnaire was measured using the reliability coefficient alpha. The reliability of the questionnaire was found to be .9187 with 199 cases tested. "In general, tests that yield scores with a reliability of .80 or higher are sufficiently reliable for most research purposes" (Gall, Borg, & Gall, 1996, p. 254).

Questionnaire Administration

Questionnaires were administered during a required two-day event. Each first-semester student attending Northern Oklahoma College was required to attend this event; therefore, every first-semester student had an equal chance of being included in the study.

In an attempt to reduce interviewer bias, the questionnaire was administered and collected by a neutral moderator. The moderator explained that the survey was being conducted as part of a research study on marketing activities of Northern Oklahoma College. It was also explained that there were no risks associated with participation in the study. Finally, the moderator explained that data collected are used only for research purposes and are held in strict confidence.

Five third-party assistants were employed to distribute the questionnaire. Responding students were allowed 20 minutes to complete the questionnaire. After the allotted time expired, the questionnaires were collected by the assistants.

Data Analysis

Determination of Factors of the Promotional Mix

Kotler and Fox (1995) identified four primary types of promotion that colleges use to communicate their goals, activities, and offerings to prospective students in hopes of influencing the student's attitudes toward the college. They are: public relations, marketing publications, advertising, and personal selling. Based on their definitions, Kotler and Fox categorized each promotional activity under one of these promotional types.

In addition to the definitions provided by Kotler and Fox, empirical evidence supports the assignment of promotional activities to factors of the promotional mix. Factor analysis was performed on the 21 current promotional activities used by Northern Oklahoma College. Factor analysis is an effective tool used for reducing a large number of variables to a few factors. Gall et al. (1996) explained:

Factor analysis is one of the most frequently used techniques in multivariate research, because researchers often measure a large number of

variables in a single research project. Factor analysis provides an empirical basis for reducing all these variables to a few factors by combining variables that are moderately or highly correlated with each other. Each set of variables that is combined forms a factor, which is a mathematical expression of the common element in the variables that are combined. (Gall et al., 1996, p. 447-448)

Statistical Analysis

Data analysis was first performed by computing descriptive statistics for each of the 21 promotional activities and student demographics. The means, standard deviation, variances, and frequencies were computed. These statistics were used to describe the data and the results were used in further tests of statistical significance.

Each of the 21 promotional activities were rank ordered in an attempt to determine if there were differences among the factors of the promotional mix in terms of influencing prospective students to take an interest in NOC. Ranking each promotional activity expressed the position of its influence on students' attitudes relative to the influence by other promotional

activities. To identify differences among the factors making up the promotional mix, composite scores and means for each factor of the promotional mix were calculated. The group means were then placed in rank order.

This ranking method appeared to be the most appropriate way to analyze the differences among the four groups of promotional activities. According to Tabachnick and Fidell (1996) a one-way analysis of variance was designed to test the difference between two or more groups tested on the same variable. When analyzing four groups of variables tested by a single group rank order is most appropriate. A letter in support of this analysis is shown in Appendix E.

An analysis of variance was conducted on student demographics and the factors of the promotional mix in an attempt to determine if significant differences exist among them in terms of being influenced to take further interest in NOC. The student demographic groups analyzed were age, gender, racial/ethnic group, and marital status.

It was determined that analysis of variance was the appropriate statistical tool for this analysis because of the number of groups involved. Shavelson (1996) concludes when dealing with more than two groups, the

most appropriate test of statistical significance is the Analysis of Variance (ANOVA). Tabachnick and Fidell (1996) also suggest the use of ANOVA when dealing with two or more groups. "Analysis of variance is used to compare two or more means to see if there are any reliable differences among them" (Tabachnick & Fidell, 1996, p. 37).

Tabachnick and Fidell (1996) suggest doing post hoc comparisons when the independent variable has more than two levels. "If the overall test is significant, so usually are one or more of the subtests, but there is no way to tell which one. To find out which single degree of freedom subtests are significant, post hoc comparisons are performed" (p. 49). Because the current study consisted of groups with more than two levels, post hoc comparisons were conducted.

CHAPTER IV

RESULTS

Response Rate

The questionnaire distributed to 452 first-semester students yielded a 94.2 percent response rate. Of the 452 first-semester students at Northern Oklahoma College, 426 students responded. Of the 26 non respondents, 14 partially completed the questionnaire and were therefore excluded. The remaining 12 students failed to return the questionnaire.

Sample Demographics

Age

As expected, a large majority of students are 18 to 20 years old. Of the 426 respondents, 376 (88.26 percent) were 18 to 20 years of age. The next largest age group was 21 to 29 years of age; 35 students (8.22 percent) fell in this group. There were 8 students (1.88

percent) in the 30 to 39 age group and 7 students (1.64 percent) in the 40 to 49 age group.

Gender

There were 191 (44.84 percent) male respondents and 235 (55.16 percent) female respondents. This is representative of the total NOC student population which consists of 44 percent male and 56 percent female students.

Racial/Ethnic Groups

Of the 426 respondents, 331 (77.70 percent) students responded as "White". Fifty-two students (12.21 percent) responded as "American Indian or Alaskan Native." Twenty-one students (4.93 percent) responded as "Black." Eight students (1.88 percent) responded as "Hispanic." Four students (.94 percent) responded as "Asian or Pacific Islander." Five students (1.17 percent) responded as "other" and five students "preferred not to answer."

Marital Status

As expected, the most frequent response to marital status was single. Of the 426 responding students, 386

(90.61 percent) were single. Twenty-nine students (6.81 percent) were married, nine students (2.11 percent) were divorced, and two students (.47 percent) were widowed.

Financial Aid

Of the 426 responding students, 146 (34.27 percent) reported that they were receiving scholarships, and 110 students (25.82 percent) reported that they were receiving grants.

Factor Analysis of the Promotional Activities

The results of the factor analysis revealed findings consistent with the definitions of the factors of the promotional mix provided by Kotler and Fox (1995). The factor analysis suggested 4 factors existed among the 21 promotional variables. Included as Appendix F is the rotated factor matrix. This matrix shows the factor loading for each of the four factors identified. A cutoff correlation of .30 was used in analyzing the factors. Tabachnick and Fidell (1996) suggested using a correlation of .30 as the cutoff correlation in factor analysis. Each factor loading indicated a correlation higher than .30.

Table 1 lists the variables loading heaviest for each of the four factors. The items that loaded heavily on factor 1 appeared consistent with the definition of "personal communication" provided by Kotler and Fox (1995). Each variable appeared to include direct communication between college representatives and prospective students. Therefore, factor 1 was given the name "personal selling" and consists of the following: a direct mail advertisement from NOC, a conversation with a NOC recruiter, a conversation with a NOC faculty member, a conversation with a NOC counselor, a conversation with a high school counselor, a personal letter from a NOC faculty or staff member, the career fair, and a campus tour.

The variables loading heaviest for factor 2 consisted of those special activities developed and conducted by NOC in an attempt to influence prospective students to take favorable interest in the college. These variables appeared to be consistent with the definition of "public relations" provided by Kotler and Fox (1995). Therefore, factor 2 was named "public relations." Factor 2 consisted of a performance by the NOC Roustabouts, a booth at the Kay County Fair, the Redbud Jazz Festival, the quiz bowl, and music contests.

Table 1. Factor Loading Variables

Factor 1. Personal Communication

Direct mail advertisement from NOC
Conversation with an NOC recruiter
Conversation with an NOC faculty member
Conversation with an NOC counselor
Conversation with a high school counselor
A personal letter from NOC faculty or staff
Career fair
Campus tour

Factor 2. Public Relations

A performance by the NOC Roustabouts
Booth at the Kay County Fair
Redbud Jazz Festival
Quiz bowl
Music contests

Factor 3. Advertising

A newspaper advertisement for NOC
A radio commercial for NOC
The NOC Internet homepage
An athletic event

Factor 4. Marketing Publications

College catalog
Class schedule
Student handbook
Viewbook

The name given to factor 3 was "advertising." The variables loading heaviest for this factor consisted of the college's paid presentations and promotions of ideas, programs, or services. This is consistent with Kotler and Fox's definition of the element of the promotional mix named "advertising." Variables included in factor 3 are a newspaper advertisement for NOC, a radio commercial for NOC, the NOC Internet homepage, and an athletic event.

Factor 4 consisted of promotional publications published by the college. According to Kotler and Fox (1995), the element of the promotional mix called "marketing publications" consists of the college's published materials for which the college controls both the content and the context of the message. Therefore, factor 4 was named "marketing publications" and includes the college catalog, the class schedule, the student handbook, and the viewbook.

Findings for Research Question 1

Research question 1 was "Are there differences among the factors making up the promotional mix in terms of influencing prospective students' attitudes toward

Northern Oklahoma College?" The findings suggest there are differences.

Rank Order of the Twenty-one Promotional Activities

Table 2 shows the rank order of the twenty-one promotional activities. The promotional activities were ranked according to their degree of influence on prospective students' attitudes toward NOC. Raw scores for each promotional activity are shown in Appendix G.

For the total sample of 426 first semester students, a range of 14 to 321 was recorded. The highest score of 321 was recorded for "class schedule," indicating that the "class schedule" was the most influential promotional activity in terms of influencing students' attitudes toward NOC.

Five personal selling activities followed in effectiveness. A "conversation with a high school counselor" was recorded as the second highest activity in terms of influencing students' attitudes. It was followed by "campus tour," "direct mail advertisement from NOC," "conversation with a NOC faculty member," and "conversation with a NOC counselor," respectively.

Table 2. Rank Order of Promotional Activities

Promotional Activity	Sum	Mean	Rank
Class schedule	321	.75	1
Conversation with a high school counselor	288	.68	2
Campus tour	272	.64	3
Direct mail advertisement from NOC	269	.63	4
Conversation with NOC faculty member	268	.63	5
Conversation with NOC counselor	252	.59	6
College catalog	250	.59	7
Conversation with an NOC recruiter	237	.56	8
A personal letter from NOC faculty or staff	218	.51	9
Student handbook	210	.49	10
Viewbook	201	.47	11
An athletic event	192	.45	12
Career fair	156	.37	13
The NOC Internet homepage	108	.25	14
A newspaper advertisement for NOC	92	.22	15
A performance by the NOC Roustabouts	73	.17	16 tie
Music contests	73	.17	16 tie
A radio commercial for NOC	65	.15	18
Booth at the Kay County fair	41	.09	19
Redbud Jazz Festival	31	.07	20
Quiz bowl	14	.03	21

The marketing publication activity of "college catalog" ranked seventh in terms of influencing students' attitudes. Following the "college catalog" were two personal selling activities, "conversation with a NOC recruiter" and "a personal letter from NOC faculty or staff" respectively. Ranked tenth and eleventh were two marketing publication activities. They were: "student handbook" and "viewbook" respectively.

The highest ranked advertising promotional activity was "an athletic event" which was ranked 12th with a total score of 192 and a mean of .45. Ranked thirteenth was the lowest ranked personal selling activity of "career fair." Following "career fair" were two advertising activities. They were: "the NOC Internet homepage" with a total score of 108 and "a newspaper advertisement for NOC" with a total score of 92.

The highest ranked public relations promotional activity was "a performance by the NOC Roustabouts" which was ranked sixteenth. Ranked seventeenth was "music contests," the second highest ranked public relations activity. A "radio commercial for NOC" was ranked eighteenth. Three public relations promotional activities finished the rankings with the total scores of 41, 31, and 14. They were: "booth at the Kay County

Fair," "Redbud Jazz Festival," and the "quiz bowl" respectively.

Rank Order of the Promotional Mix Factors

In order to further identify differences among the factors making up the promotional mix, composite scores and means for each group of variables were calculated, and the means were placed in rank order. Table 3 shows the rank order of the factors of the promotional mix. Composite scores of each factor are shown in Appendix H.

Table 3. Ranked Factors of the Promotional Mix

Factor	Group Mean	Rank
Personal Selling	4.60	1
Marketing Publications	2.30	2
Advertising	1.07	3
Public Relations	.54	4

Responding students recorded personal selling as the factor of the promotional mix with the highest average influence on their attitudes toward taking further

interest in NOC. The personal selling factor had a group mean of 4.60. This is considerably higher than 2.30 which is the mean of marketing publications, the second highest ranked factor.

Ranked third was the advertising factor of the promotional mix. Advertising had a group mean of 1.07. The least influential factor of the promotional mix was public relations with a group mean of .54.

Findings for Research Question 2

Research question 2 was "Are there differences among student demographics in terms of being influenced by the factors of the promotional mix?" Findings indicated there were differences. Analysis of variance indicated there were statistically significant differences among gender and among racial/ethnic groups in terms of being influenced by the factors of the promotional mix. Using a 95 percent confidence interval, statistically significant differences were not found among age and marital status.

Age Groups

Analysis of Variance (ANOVA) on Age Groups Regarding Factors of the Promotional Mix

Using a 95 percent confidence interval, there were no statistically significant differences found among age groups in terms of being influenced by the factors of the promotional mix. However, using alpha .05, an F observed of 2.576 and significance of .053 was found among age groups on the personal selling factor of the promotional mix. As indicated in Table 4, this significance of .053 was the strongest among age groups. Due to the lack of significance on the main effect, further post hoc testing was not necessary.

Gender Groups

ANOVA on Gender Groups Regarding Factors of the Promotional Mix

A statistically significant difference was found between gender in terms of being influenced by the factors of the promotional mix. Using alpha .05 as the significance level, a difference was found between gender on three of the four factors of the promotional mix.

Table 4. Analysis of Variance on Age Groups with the Factors or the Promotional Mix as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
Advertising	Between Age Groups	3.157	3	1.052	.267	.849
	Within Age Groups	1665.587	422	3.947		
	Total	1668.744	425			
Marketing Publications	Between Age Groups	15.520	3	5.173	.944	.419
	Within Age Groups	2312.809	422	5.481		
	Total	2328.329	425			
Personal Selling	Between Age Groups	138.075	3	46.025	2.576	.053
	Within Age Groups	7540.084	422	17.867		
	Total	7678.160	425			
Public Relations	Between Age Groups	1.607	3	.536	.102	.959
	Within Age Groups	2222.046	422	5.266		
	Total	2223.653	425			

From SPSS statistical software output.

As indicated in Table 5, significant differences between gender existed in regards to marketing publications, personal selling, and public relations. There were no significant differences between gender regarding the advertising factor of the promotional mix.

An F critical value of 3.86 was compared to an F observed for each factor of the promotional mix. An F observed of 2.167 calculated for the advertising factor resulted in a significance level of .142; this indicated no significant difference. An F observed of 32.041 was computed for the marketing publications factor. This high F value indicated a significant difference between gender in terms of being influenced by the promotional activities within the marketing publications factor of the promotional mix.

A high F observed was also computed for the personal selling factor of the promotional mix regarding gender. This F observed was 25.893 indicating a significant difference between gender regarding influence from the promotional activities within the personal selling factor of the promotional mix. The public relations factor also indicated significance with an F observed of 6.181. This value indicated the existence of a difference between gender regarding public relations promotional activities.

Table 5. Analysis of Variance on Gender Groups with the Factors or the Promotional Mix as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
Advertising	Between Gender Groups	8.484	1	8.484	2.167	.142
	Within Gender Groups	1660.260	424	3.916		
	Total	1668.744	425			
Marketing Publications	Between Gender Groups	163.587	1	163.58	32.04	.000
	Within Gender Groups	2164.742	424	5.106		
	Total	2328.329	425			
Personal Selling	Between Gender Groups	441.904	1	441.90	25.89	.000
	Within Gender Groups	7236.255	424	17.067		
	Total	7678.160	425			
Public Relations	Between Gender Groups	31.948	1	31.948	6.181	.013
	Within Gender Groups	2191.704	424	5.169		
	Total	2223.653	425			

From SPSS statistical software output.

Because gender consists of only two groups, post hoc testing was not conducted. According to Shavelson (1996), post hoc comparisons are relevant with more than two groups.

The overall F test in the analysis of variance indicates whether or not there are significant differences between means. When the study includes more than two groups, the statistic does not indicate which groups differ statistically from the others. Post hoc comparisons are methods for discovering where the difference or differences lie. (Shavelson, 1996, p. 389-390)

Even though post hoc comparisons were not beneficial for gender groups, further analysis was conducted between gender groups and individual promotional activities within each factor of the promotional mix that indicated significance. This analysis indicated where the differences were among individual promotional activities.

ANOVA on Gender Groups Regarding the Marketing
Publications Activities

An analysis of variance was computed on gender regarding influence by marketing publications promotional activities. The results indicated that significant differences existed between gender in terms of being influenced by the college catalog, the class schedule, the student handbook, and the viewbook. Table 6 shows the significant results of gender groups on each marketing publications activity.

Further analysis of the descriptive statistics revealed that the means for females were higher than the means for males on each of these marketing publications variables. This indicated that females were influenced significantly more than males by the college catalog, the class schedule, the student handbook and the viewbook. Appendix I shows the descriptive statistics for gender regarding the individual promotional activities of the marketing publications factor of the promotional mix.

Table 6. Analysis of Variance on Gender Groups with the Marketing Publications Activities as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
College catalog	Between Gender Groups	12.361	1	12.361	22.50	.000
	Within Gender Groups	232.925	424	.549		
	Total	245.286	425			
Class schedule	Between Gender Groups	12.247	1	12.247	21.73	.000
	Within Gender Groups	238.872	424	.563		
	Total	251.120	425			
Student handbook	Between Gender Groups	7.523	1	7.523	15.56	.000
	Within Gender Groups	204.955	424	.483		
	Total	212.479	425			
Viewbook	Between Gender Groups	9.191	1	9.191	18.47	.000
	Within Gender Groups	210.971	424	.498		
	Total	220.162	425			

From SPSS statistical software output.

ANOVA on Gender Groups Regarding the Personal Selling Activities

An analysis of variance on gender with the personal selling activities as the independent variables revealed significant differences between gender regarding each personal selling promotional activity. These findings indicated there existed significant differences between gender groups in terms of being influenced by direct mail, a conversation with a NOC recruiter, a conversation with a NOC faculty member, a conversation with a NOC counselor, a conversation with a high school counselor, a personal letter from NOC faculty or staff, the career fair, and the campus tour. Table 7 shows the result of this ANOVA.

Further analysis of the descriptive statistics revealed that the means for females were higher than the means for males on each of the personal selling promotional activities. This indicated that females were influenced significantly more than males by direct mail, a conversation with a NOC recruiter, a conversation with a NOC faculty member, a conversation with a NOC counselor, a conversation with a high school counselor, a personal letter from a NOC faculty or staff, the career

Table 7. Analysis of Variance on Gender Groups with the Personal Selling Activities as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
Direct mail from NOC	Between Groups	7.234	1	7.234	11.53	.001
	Within Groups	265.905	424	.627		
Conversation with an NOC recruiter	Between Groups	7.580	1	7.580	11.41	.001
	Within Groups	281.568	424	.664		
Conversation with NOC faculty	Between Groups	2.795	1	2.795	4.44	.036
	Within Groups	266.604	424	.629		
Conversation with NOC counselor	Between Groups	10.962	1	10.962	16.96	.000
	Within Groups	273.967	424	.646		
Conversation with a high school counselor	Between Groups	3.472	1	3.472	5.261	.022
	Within Groups	279.824	424	.660		
A personal letter from NOC faculty or staff	Between Groups	3.334	1	3.334	5.413	.020
	Within Groups	261.108	424	.616		
Career fair	Between Groups	9.685	1	9.685	19.08	.000
	Within Groups	215.189	424	.508		
Campus tour	Between Groups	14.401	1	14.401	20.09	.000
	Within Groups	303.928	424	.717		

From SPSS statistical software output.

fair, and the campus tour. Appendix J shows the descriptive statistics for gender regarding the individual promotional activities of the personal selling factor of the promotional mix.

ANOVA on Gender Groups Regarding the Public Relations Activities

An analysis of variance computed on gender groups using public relations activities as the independent variables showed significant differences between gender on three of the five public relations activities. As shown in Table 8, significant differences between gender existed on a booth at the Kay County Fair, the quiz bowl, and music contests. There were no significant differences between gender groups regarding a performance by the NOC Roustabouts nor the Redbud Jazz Festival. Appendix K shows the descriptive statistics for gender groups regarding public relations activities.

Further analysis of the descriptive statistics revealed, once again, that the means for females were higher than the means for males on each of the three public relations activities that produced significant results. These findings indicated that females were influenced

Table 8. Analysis of Variance on Gender Groups with the Public Relations Activities as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
Performance by the NOC Roustabouts	Between Groups	.567	1	.567	1.191	.276
	Within Groups	201.923	424	.476		
	Total	202.491	425			
Booth at the Kay County Fair	Between Groups	1.700	1	1.700	5.487	.020
	Within Gender Groups	131.354	424	.310		
	Total	133.054	425			
Redbud Jazz Festival	Between Groups	.228	1	.228	.801	.371
	Within Groups	120.516	424	.284		
	Total	120.744	425			
Quiz bowl	Between Groups	1.935	1	1.935	7.095	.008
	Within Groups	115.605	424	.273		
	Total	117.540	425			
Music contest	Between Groups	2.984	1	2.984	6.470	.011
	Within Groups	195.507	424	.461		
	Total	198.491	425			

From SPSS statistical software output.

significantly more than males by a booth at the Kay County Fair, the quiz bowl, and music contests.

Racial/Ethnic Groups

ANOVA on Racial/Ethnic Groups Regarding Factors of the Promotional Mix

An analysis of racial/ethnic groups was computed by using an analysis of variance. The results of the analysis indicated a significant difference among racial/ethnic groups on the advertising factor of the promotional mix. Using alpha .05 and an F critical of 2.12, a significance level of .041 showed a significant difference existed among racial/ethnic groups in terms of being influenced by the advertising factor.

As shown in Table 9, the remaining three factors of the promotional mix produced significance levels greater than the required .05. The marketing publications factor produced an F observed of .71 and a significance level of .641. These results indicated no differences existed among racial/ethnic groups regarding marketing publications promotional activities.

The results of the ANOVA also showed no significant differences existed among racial/ethnic groups regarding

Table 9. Analysis of Variance on Racial/Ethnic Groups with the Factors or the Promotional Mix as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
Advertising	Between Racial/Ethnic Groups	51.312	6	8.552	2.215	.041
	Within Racial/Ethnic Groups	1617.432	419	3.860		
	Total	1668.744	425			
Marketing Publications	Between Racial/Ethnic Groups	23.469	6	3.912	.711	.641
	Within Racial/Ethnic Groups	2304.859	419	5.501		
	Total	2328.329	425			
Personal Selling	Between Racial/Ethnic Groups	46.237	6	7.706	.423	.864
	Within Racial/Ethnic Groups	7631.923	419	18.215		
	Total	7678.160	425			
Public Relations	Between Racial/Ethnic Groups	44.783	6	7.464	1.435	.200
	Within Racial/Ethnic Groups	2178.870	419	5.200		
	Total	2223.653	425			

From SPSS statistical software output.

personal selling promotional activities. The personal selling factor resulted in an F observed of .423 and a significance level of .864. Using F critical 2.12 and alpha .05, the results of racial/ethnic groups on the personal selling factor were not statistically significant.

The results of the ANOVA showed an F observed of 1.435 and a significant level of .20 for the public relations factor of the promotional mix. These results indicated there were no significant differences among racial/ethnic groups in terms of being influenced by the public relations promotional activities.

Post Hoc Comparisons Among Racial/Ethnic Groups Regarding Advertising Activities

Due to the significant differences found among racial/ethnic groups regarding advertising activities, further post hoc testing was conducted. Post hoc testing was conducted in an attempt to identify where the differences lie among racial/ethnic groups in terms of being influenced by advertising activities.

The results of the post hoc comparisons revealed that a significant difference existed between the "Black" racial/ethnic group and the "White" racial/ethnic group

in terms of being influenced by a radio commercial for NOC. An analysis of the post hoc comparisons as well as the descriptive statistics indicated that the "Black" racial/ethnic group was influenced significantly more than the "White" racial/ethnic group by a radio commercial for NOC.

The results of the post hoc comparisons also revealed a significant difference between the "Black" racial/ethnic group and the "American-Indian or Alaskan Native" racial/ethnic group in terms of being influenced by a radio commercial for NOC. The post hoc comparisons and the descriptive statistics indicated that the "Black" racial/ethnic group was influenced significantly more than the "American-Indian or Alaskan Native" racial/ethnic group by a radio commercial for NOC.

The post hoc comparisons also revealed a statistically significant difference between the "Black" racial/ethnic group and the "White" racial/ethnic group in terms of being influenced by an athletic event. The comparisons and the descriptive statistics indicated that the "Black" racial/ethnic group was influenced significantly more than the "White" racial/ethnic group by an athletic event.

Additionally, the comparisons indicated a significant difference existed between the "Black" racial/ethnic group and the "American-Indian or Alaskan Native" racial/ethnic group in terms of being influenced by an athletic event. Once more, the post hoc comparisons and the descriptive statistics indicated the "Black" racial/ethnic group was influenced significantly more than the "American-Indian or Alaskan Native" racial/ethnic group by an athletic event. Appendix L shows the post hoc comparisons and the descriptive statistics for racial/ethnic groups regarding advertising activities.

Marital Status Groups

ANOVA on Marital Status Groups Regarding Factors of the Promotional Mix

The results of the analysis of variance, as shown in Table 10, indicated no significant differences among marital status groups in terms of being influenced by the factors of the promotional mix. Using alpha .05, there were no statistically significant differences found among the groups.

Table 10. Analysis of Variance on Marital Status Groups with the Factors or the Promotional Mix as Independent Variables.

		Sum of Squares	df	Mean Square	F	Sig.
Advertising	Between Marital Status Groups	3.730	3	1.243	.315	.814
	Within Marital Status Groups	1665.014	422	3.946		
	Total	1668.744	425			
Marketing Publications	Between Marital Status Groups	21.493	3	7.164	1.311	.270
	Within Marital Status Groups	2306.836	422	5.466		
	Total	2328.329	425			
Personal Selling	Between Marital Status Groups	122.154	3	40.718	2.274	.079
	Within Marital Status Groups	7556.006	422	17.905		
	Total	7678.160	425			
Public Relations	Between Marital Status Groups	1.510	3	.503	.096	.962
	Within Marital Status Groups	2222.142	422	5.266		
	Total	2223.653	425			

From SPSS statistical software output.

The strongest level of significance among marital status groups was found to be on the personal selling factor of the promotional mix. This significance level of differences among marital status groups regarding the personal selling factor of the promotional mix was .079. As indicated in Table 10, the significance levels regarding the advertising factor, the marketing publications factor, and the public relations factor were .814, .270, and .962 respectively.

Since no significant differences were found among marital status groups and since post hoc comparisons are methods for discovering where significant differences lie, further post hoc testing would not reveal results beneficial for the analysis of marital status groups.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Conclusions

Research Questions Conclusions

Research Question 1. The first research question was "Are there differences among the factors making up the promotional mix in terms of influencing prospective students' attitudes toward Northern Oklahoma College?" Based on the findings, the conclusion was that there were differences among the factors of the promotional mix in terms of influencing prospective students' attitudes toward NOC.

A rank order of the group means of composite scores for each factor of the promotional mix indicated that the 426 responding students recorded personal selling activities as having the most positive influence on their decisions to take further interest in NOC. The group mean of personal selling activities of 4.60 was

noticeably higher than the second most influential factor of marketing publications which had a group mean of 2.30. The factor of the promotional mix recorded as having the third most positive influence on prospective students' attitudes was advertising with a group mean of 1.07. Public relations activities were recorded as having the least positive influence on prospective students' attitudes toward taking further interest in NOC. The public relations factor had a group mean of .54.

Based on these results, the conclusion was that there were differences among personal selling activities, marketing publications activities, advertising activities, and public relations activities in terms of influencing prospective students toward taking further interest in Northern Oklahoma College.

Research Question 2. The second research question was "Are there differences among student demographics in terms of being influenced by the factors of the promotional mix?" Based on the findings, the conclusion was that there were, at least in some student demographic groups, differences in terms of being influenced.

Based on the results of the analysis of variance, there were no significant differences among age groups in

terms of being influenced by advertising activities, marketing publications activities, personal selling activities, or public relations activities.

It was concluded that there existed differences between gender groups in terms of being influenced by the marketing publications factor of the promotional mix. There also existed differences between gender groups in terms of being influenced by the personal selling factor of the promotional mix. Between gender groups, there also existed differences in terms of being influenced by the public relations factor of the promotional mix. There were no differences, however, between gender groups in terms of being influenced by the advertising factor of the promotional mix.

Further analysis regarding gender and marketing publications promotional activities led to the conclusion that females were influenced significantly more than males by the college catalog, the class schedule, the student handbook, and the viewbook. It was also concluded, based on analysis of variance on gender groups regarding personal selling activities, that females were influenced significantly more than males by direct mail advertisements from NOC, by a conversation with a NOC recruiter, by a conversation with a NOC faculty member,

by a conversation with a NOC counselor, by a conversation with a high school counselor, by a personal letter from a NOC faculty or staff member, by the career fair, and by the campus tour. Based on additional analysis regarding gender groups and public relations activities, it was concluded that females are influenced significantly more than males by a booth at the Kay County Fair, by the quiz bowl, and by music contests.

Regarding differences among racial/ethnic groups, it was concluded that the "Black" racial/ethnic group was influenced significantly more than the "White" and the American-Indian or Alaskan Native" racial/ethnic groups by a radio commercial for NOC. Based on the analysis of variance, it was also concluded that the "Black" racial ethnic group was influenced significantly more than the "White" and the "American-Indian or Alaskan Native" racial/ethnic groups by an athletic event.

Based on the analysis of marital status groups, it was concluded that there were no significant differences among marital status groups in terms of being influenced by advertising activities, marketing publications activities, personal selling activities, or public relations activities.

Additional Conclusions

Even though the personal selling factor was ranked as the most influential factor of the promotional mix, it was concluded that a marketing publications activity was ranked as the most influential among the twenty-one promotional activities. The marketing publications promotional activity ranked as the most influential was the class schedule. The college catalog and the student handbook were also ranked among the top 50 percent in terms of influencing prospective students toward taking further interest in NOC. This mixture of high ranked promotional activities indicates the importance of developing a well balanced promotional mix, as suggested by Berkowitz (1994).

The following additional conclusions were also drawn from the findings:

1. It was concluded that the personal selling factor was the most effective factor of the promotional mix in terms of influencing prospective students to take further interest in NOC. Seven of the eight personal selling activities were ranked among the top nine of twenty-one promotional activities in terms of influence.

2. It was concluded that the marketing publications factor of the promotional mix was the second most influential factor of the promotional mix in terms of influencing prospective students toward taking further interest in NOC. The marketing publications activities of the class schedule, the college catalog, and the student handbook were ranked among the top ten promotional activities in terms of influence.
3. It was concluded that the marketing publications activity of the class schedule was ranked as the most influential promotional activity among the 21 current promotional activities.
4. It was concluded that the advertising activities of a newspaper advertisement, a radio commercial, the NOC Internet homepage, and an athletic event do not greatly influence prospective students toward taking further interest in NOC. All of the advertising activities ranked in the bottom 50 percent among the 21 promotional activities. The highest ranked advertising activity was an athletic event that was ranked 12th among the 21 activities.

5. It was concluded that the public relations factor of the promotional mix was the least effective factor of the promotional mix in terms of influencing prospective students. Of the five public relations activities, the highest ranked was a performance by the NOC Roustabouts which was ranked 16th among the 21 activities. The quiz bowl was ranked 21st, the least influential promotional activity.
6. It was concluded there were no differences among marital status groups in terms of being influenced by the factors of the promotional mix.

Implications for Practice

This research identified the most influential promotional activities in terms of influencing prospective students toward taking further interest in NOC. This information can be utilized when developing future promotional strategies for NOC. As suggested by Berkowitz (1994), in order for institutions to effectively communicate their offerings to potential students they must identify the appropriate blend of promotional factors to include in their promotional mix. Based on the findings of this research, Northern Oklahoma

College's future promotional mix should primarily consist of personal selling and marketing publications activities. Priority should be given to each of the personal selling promotional activities. Marketing publications activities of the class schedule, the college catalog, the student handbook, and the viewbook should also be emphasized in the development of future promotional strategies.

Even though advertising and public relations activities ranked less favorably, the results showed their influence on prospective students was positive rather than negative. Therefore, the inclusion of advertising and public relations activities, when budgetary restrictions allow, should be beneficial in the future promotional mix.

As recommended by Kotler and Fox (1995), institutions should select their target markets based on demographic variables or some other variables identified by the college. This research indicated that selecting NOC's target market on student demographic variables would be beneficial for the development of future promotional strategies. Because significant differences existed among gender and racial/ethnic groups these variables should be used when identifying NOC's target

markets. By using these variables to identify future target markets, the selection of the promotional activities to include in the promotional mix can be based on the finding that differences existed among these groups in terms of being influenced by promotional activities.

Based on the finding that females were influenced significantly more than males by personal selling activities, coupled with the finding that the personal selling factor is the most influential factor of the promotional mix, NOC should target females by using a promotional mix that greatly emphasizes personal selling activities. The promotional mix used for targeting females should also consist of marketing publications activities. The inclusion of marketing publications activities is based on the finding that females were influenced significantly more than males by marketing publications activities. Also indicating the use of marketing publications activities is the finding that the class schedule, the college catalog, and the student handbook, were ranked among the top 50 percent of activities in terms of influencing students' attitudes toward NOC.

The research also indicated that racial/ethnic groups should be used for identifying target markets. The research indicated that the "Black" racial/ethnic group was influenced significantly more than the "White" and the "American-Indian or Alaskan Native" racial/ethnic groups by a radio commercial for NOC and by an athletic event. Based on these findings, a radio commercial and an athletic event should be included in the promotional mix developed to target the "Black" racial/ethnic group.

Age groups should also be used for identifying NOC's target markets. Even though there existed no significant differences among age groups in terms of being influenced, a large majority (88.26 percent) of students responded as being in the 18 to 20-year age group. Targeting promotional activities toward this age group should capture a large percentage of prospective students. Personal selling activities, as well as marketing publications activities, should be emphasized in the promotional mix developed for targeting this age group. Their inclusion is based on the findings that personal selling activities were ranked as the most influential in terms of influencing prospective students toward taking further interest in NOC. Also indicating the inclusion of marketing publications activities is the

finding that a marketing publications activity, the class schedule, was ranked as the most influential promotional activity.

Recommendations for Further Research

Based on this research, the following recommendations for further study are made:

1. Due to the potential of technology, such as the Internet and the use of CD rom, in the promotion of institutions, it is recommended that further research be conducted to determine possible uses and effects of this technology.
2. Since the study was limited to the case study institution, it is recommended that further research be conducted for other colleges and universities regarding the effects of promotional activities.
3. It is recommended the case study institution continue studying and monitoring the effects of future promotional activities.
4. Since this study was limited to first-semester students who had already committed themselves to NOC, it is recommended that further research be

conducted on prospective students who have not committed to an institution.

5. Since this study was limited to the promotional element of the marketing mix, it is recommended further research be conducted on the uses and effects of the remaining elements of the marketing mix.
6. Since this study was limited to the effects of promotional activities on prospective students' attitudes, it is recommended further research be conducted to determine the effects of marketing on student retention.
7. In light of the findings of this study regarding the differences among gender groups, it is recommended further research be conducted to determine whether promotional activities contribute to the rising female enrollment rate.

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APPENDIX A
Case Study Institution

CASE STUDY INSTITUTION

The case study institution was Northern Oklahoma College (NOC). NOC is located in Tonkawa, Oklahoma, a city of approximately 3,100 people about 90 miles north of Oklahoma City. NOC was founded as a University Preparatory School in 1901. The college department was established in 1921, and the institution became a fully accredited junior college. In 1965, with the passage of the Higher Education Code, the college's three man Board of Regents was expanded to five and the college was given added authority. That same year the institution's official name was changed to Northern Oklahoma College.

In 1997 NOC enrolled approximately 2,200 students. Of the 2,200 students, 1,165 were full-time students and 1,033 were part-time students. NOC offers 39 areas for associate degrees and community service programs. NOC offers an associate of applied science, associate of arts, and associate of science degrees.

Northern Oklahoma College has had an evolving philosophy reflecting the history and traditions of the institution. Within the last two decades, NOC has moved from the traditional concept of the junior college which

offers the first two years of academic work to the role of the comprehensive, service-oriented institution with multiple purposes. The mission of Northern Oklahoma College, a public, comprehensive two-year college, is to provide persons in its service area an "open-door" higher educational opportunity to seek cultural enrichment, economic achievement, and/or an associate degree.

Northern Oklahoma College is accredited by North Central Association of Colleges and Schools. The Nursing program at NOC is accredited by the National League for Nursing Accrediting Commission. NOC was the first two-year institution in Oklahoma to receive accreditation by the Association of Collegiate Business Schools and Programs.

APPENDIX B
Sample Questionnaire

Marketing Survey

This survey is being conducted as part of a research study on marketing activities of Northern Oklahoma College (NOC). Your responses will be used for research purposes only and will be kept confidential. **Please do not write your name on this form.** Please complete the survey as accurately and honestly as possible. Thank you for your participation.

DIRECTIONS: Please complete the survey by placing a check in the space to the left of the most appropriate answer. Your participation will enable Northern Oklahoma College to better serve future students. You must be 18 years or older to participate.



1. Age

- ☐ Under 18
- ☐ 18-20
- ☐ 21-29
- ☐ 30-39
- ☐ 40-49
- ☐ Over 50

3. Racial/Ethnic Group

- ☐ Black
- ☐ White
- ☐ American-Indian or Alaskan Native
- ☐ Asian-or Pacific Islander
- ☐ Hispanic
- ☐ Other
- ☐ Prefer not to answer

2. Gender

- ☐ Male
- ☐ Female

4. Marital status

- ☐ Single
- ☐ Married
- ☐ Divorced
- ☐ Widowed

5. How far do you have to travel to attend classes each class day?
(Answer only if you do not live in Northern residence housing)

- | | |
|---|----------------------------------|
| ☐ Less than 1 mile | ☐ 21-40 |
| ☐ 1-5 | ☐ Over 40 |
| ☐ 6-20 | |

6. Financial aid received or to be received this semester. (Please check all that apply)

- | | |
|--|--|
| ☐ Scholarship | ☐ Short term loan |
| ☐ Grant | ☐ Long term loan |
| ☐ Work study | ☐ Rehabilitation |
| ☐ Veteran | ☐ Other |
| ☐ Veteran dependent | ☐ None |

7. What is your *major* reason for attending *any* college?

- ☐ To eventually obtain a four-year college degree
- ☐ To gain skills necessary to obtain a job or new position
- ☐ To satisfy personal interests
- ☐ To improve upon English, writing, or math skills

8. How did you *first* become interested in attending Northern?

- ☐ Friends
- ☐ Family
- ☐ Newspaper advertisements
- ☐ High school recruiters
- ☐ Roustabout performances
- ☐ Knowledge of program not offered elsewhere
- ☐ Other
- ☐ If other, please specify _____

9. What is your *major* reason for attending Northern?

- ☐ Location
- ☐ Cost
- ☐ Advice of counselor, teacher
- ☐ Good academic reputation
- ☐ Size of college
- ☐ Availability of financial aid
- ☐ To be with friends
- ☐ Advice of parents or guardians
- ☐ Availability of a particular program of study
- ☐ Sports opportunities

10. What is your chosen major or program of study?

- ☐ Business—transfer or immediate employment
- ☐ Science
- ☐ Mathematics
- ☐ Technical—transfer or immediate employment
- ☐ Pre-medical occupations (physical therapy, pre-med, pre-chiro., etc.)
- ☐ Fine Arts (music or art)
- ☐ Social Science (history, political science, psychology, sociology, pre-law, etc.)
- ☐ Language Arts (English, journalism, foreign language, etc.)
- ☐ Education
- ☐ Undecided
- ☐ If other, please specify _____

11. Why did you select this major?

- ☐ Career opportunities
- ☐ Help society
- ☐ Lifestyle
- ☐ Salary potential
- ☐ Other

12. Do you feel you will need special help in any of the following areas? (Please check all that apply)

- | | |
|---|--|
| ☐ Expressing ideas in writing | ☐ Identifying a major area of study |
| ☐ Increasing reading speed | ☐ Developing better study skills and habits |
| ☐ Improving test-taking skills | ☐ Improving reading comprehension |
| ☐ Improving public-speaking skills | ☐ Improving mathematics skills |

13. Please rate the following promotional activities on the degree to which they influenced you to take further interest in Northern Oklahoma College as your college of choice. Do so by placing a check mark in the column that most accurately describes the item's influence on your decision to take interest in Northern Oklahoma College. If you were never exposed to the promotional activity, check the middle column, *I was not exposed to this activity*.

PROMOTIONAL ACTIVITY	DEGREE OF INFLUENCE THE PROMOTIONAL ACTIVITY HAD ON YOUR DECISION TO TAKE INTEREST IN N.O.C.				
	Very Important Influence	Important Influence	I was not Exposed to this Activity	Negative Influence	Very Negative Influence
A newspaper advertisement for NOC					
A radio commercial for NOC					
Direct mail advertisement from NOC					
The NOC internet homepage					
Conversation with an NOC recruiter					
Conversation with an NOC faculty member					
Conversation with an NOC counselor					
Conversation with a high school counselor					
A personal letter from NOC faculty or staff					
A performance by the NOC Roustabouts					
College catalog					
Class schedule					
Student handbook					
Viewbook					
An athletic event					
Career fair					
Booth at the Kay County Fair					
Redbud Jazz Festival					
Quiz bowl					
Music contests					
Campus tour					

14. Which of the following is true for you? (please check one)

☐ Just finished high school ☐ have been attending a ☐ have been working
☐ have been in the military different college/university ☐ other

15. Do you plan to enroll at NOC next year? (please check one)

☐ yes ☐ no

16. How large was your graduating class? _____

17. Please enter your home ZIP code. _____

18. What radio station(s) do you listen to? _____

19. What are your favorite television channels? _____

20. What newspaper(s) do you read? _____

21. Do you own a personal computer? _____

If yes, do you have Internet access? _____

Who is your service provider? _____

22. Please make any comments or suggestions that you feel will help us in our marketing efforts to attract prospective students.

Thank you for your participation!!!

APPENDIX C
Panel of Experts

PANEL OF EXPERTS

Dr. Joe Kinzer

President

Northern Oklahoma College

Mr. Don Matthews

Professor of Marketing

Rose State College

Mr. Bill Roberts

Director of Marketing

Rose State College

Ms. Sherry Snider

Director of Marketing

Northern Oklahoma College

Mr. Art Zenner

Interim Dean of the School of Business

Professor of Marketing

Rose State College

APPENDIX D

Questionnaire Review Letter

6420 S. E. 15th Street
Midwest City, OK 73110
November 9, 1998

(Name and address of expert)

Dear :

I am writing this letter as a request for your assistance in reviewing a research questionnaire. You have been selected because of your knowledge and expertise in the areas of marketing and promotional research.

I am in the dissertation phase of my doctoral program at the University of Oklahoma. I am conducting a dissertation research study with the intention of determining whether there are differences among the factors of a college's promotional mix in terms of influencing prospective students to take interest in the college as their college of choice. It is also the intention of the study to determine whether there are relationships among the factors of the promotional mix and student demographics.

Data will be gathered using the attached questionnaire. The development of the questionnaire was based on an instrument used in a previous dissertation as well as current literature on the topic.

It would be greatly appreciated if you would review the questionnaire at your earliest possible convenience. Of special interest is the validity of the instrument. Feel free to make any comments directly on the questionnaire. Once you have completed the review please return the questionnaire to me or call me at (405) 736-0353 and I will make arrangement to pick up the questionnaire.

If you have questions or need additional information please call me at (405) 736-0353. Your assistance in this matter is greatly appreciated.

Sincerely,

Jay M. Kinzer

APPENDIX E
Statistical Analysis Letter

?

Jay M. Kinzer
508 W. 8th Street
Edmond, OK 73003

Dr. Bill Graves
University of Oklahoma
College of Education
Office of Educational Research
820 Van Vleet Oval
Norman, OK 73019

Dear Dr. Graves:

Thank you for meeting with me regarding the statistical analysis of my research data. I appreciate you reviewing my dissertation questionnaire and informing me of the most appropriate methods for statistically analyzing the data collected.

In an effort to be statistically correct, I plan to rank order the twenty-one promotional activities listed on item 13 of my questionnaire. As you suggested, rank ordering these variables is the most appropriate method of comparison, not analysis of variance. Analysis of variance is designed to test two different sets of scores on the same variable rather than four sets of variables with one set of scores.

Also, I plan to check for differences among student demographics, in terms of influence by promotion, using analysis of variance. As you suggested, ANOVA is the most appropriate method of analysis for these variables. Correlation analysis is inappropriate due to the lack of linearity in the variables.

Again, thank you for informing me on this matter.

Sincerely,

Jay M. Kinzer

c: Dr. Gary Green

APPENDIX F

Factor Analysis of Promotional Activities

Factor Analysis

Factor Matrix^a

a. 4 factors extracted. 10 iterations required.

Rotated Factor Matrix^a

	Factor			
	1	2	3	4
Newspaper advertisement for NOC.	.194	.290	.594	.221
Radio commercial for NOC.	.203	.279	.668	.240
Direct mail advertisement from NOC.	.486	.296	.281	.157
NOC internet homepage	.319	.186	.466	.203
Conversation with an NOC Recruiter.	.670	8.604E-02	.224	.192
Conversation with NOC faculty member.	.601	.150	7.886E-02	.220
Conversation with NOC counselor.	.453	.130	9.639E-02	.380
Conversation with a high school counselor.	.326	.133	.131	.144
A personal letter from NOC faculty or staff.	.613	.169	.295	.122
A performance by the NOC Roustabouts.	.132	.453	7.256E-02	6.927E-02
College catalog.	.228	.219	.163	.515
Class schedule.	.194	7.046E-02	.105	.739
Student handbook.	.266	8.763E-02	.283	.692
Viewbook.	.388	.189	.310	.482
An athletic event.	.408	5.060E-02	.420	.123
Career fair.	.424	.277	.343	.199
Booth at the Kay County Fair.	.225	.636	.422	.116
Redbud Jazz Festival.	.132	.749	.221	.108
Quiz bowl.	.187	.573	.334	.140
Music contests.	.172	.784	3.099E-02	.114
Campus tour.	.432	.223	5.955E-02	.174

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

APPENDIX G

Scores for the Twenty-one Promotional Activities

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean
Class schedule.	426	-2	2	321	.75
Conversation with a high school counselor.	426	-2	2	288	.68
Campus tour.	426	-2	2	272	.64
Direct mail advertisement from NOC.	426	-2	2	269	.63
Conversation with NOC faculty member.	426	-2	2	268	.63
Conversation with NOC counselor.	426	-2	2	252	.59
College catalog.	426	-2	2	250	.59
Conversation with an NOC Recruiter.	426	-2	2	237	.56
A personal letter from NOC faculty or staff.	426	-2	2	218	.51
Student handbook.	426	-2	2	210	.49
Viewbook.	426	-2	2	201	.47
An athletic event.	426	-2	2	192	.45
Career fair.	426	-2	2	156	.37
NOC internet homepage	426	-2	2	108	.25
Newspaper advertisement for NOC.	426	-2	2	92	.22
A performance by the NOC Roustabouts.	426	-2	2	73	.17
Music contests.	426	-2	2	73	.17
Radio commercial for NOC.	426	-2	2	65	.15
Booth at the Kay County Fair.	426	-2	2	41	9.62E-02
Redbud Jazz Festival.	426	-2	2	31	7.28E-02
Quiz bowl.	426	-2	2	14	3.29E-02
Valid N (listwise)	426				

APPENDIX H
Factor Scores

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PERSELL	426	-16.00	16.00	4.6009	4.2504
MARKPUB	426	-8.00	8.00	2.3052	2.3406
ADVER	426	-8.00	8.00	1.0728	1.9815
PUBREL	426	-10.00	10.00	.5446	2.2874
Valid N (listwise)	426				

APPENDIX I

Descriptive Statistics for Gender on Marketing Publications Activities

Descriptives

			N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
							Lower Bound	Upper Bound
College catalog.	Sex	male	191	.40	.75	5.40E-02	.29	.50
		female	235	.74	.74	4.81E-02	.65	.84
		Total	426	.59	.76	3.68E-02	.51	.66
Class schedule.	Sex	male	191	.57	.78	5.68E-02	.45	.68
		female	235	.91	.72	4.71E-02	.81	1.00
		Total	426	.75	.77	3.72E-02	.68	.83
Student handbook.	Sex	male	191	.35	.71	5.12E-02	.24	.45
		female	235	.61	.68	4.47E-02	.52	.70
		Total	426	.49	.71	3.43E-02	.43	.56
Viewbook.	Sex	male	191	.31	.70	5.08E-02	.21	.41
		female	235	.60	.71	4.64E-02	.51	.70
		Total	426	.47	.72	3.49E-02	.40	.54

APPENDIX J

Descriptive Statistics for Gender on Personal Selling

Activities

Descriptives

			N	Mean	Std. Deviation	Std. Error
Direct mail advertisement from NOC.	Sex	male	191	.49	.81	5.84E-02
		female	235	.75	.78	5.08E-02
		Total	426	.63	.80	3.88E-02
Conversation with an NOC Recruiter.	Sex	male	191	.41	.80	5.75E-02
		female	235	.68	.83	5.42E-02
		Total	426	.56	.82	4.00E-02
Conversation with NOC faculty member.	Sex	male	191	.54	.81	5.88E-02
		female	235	.70	.78	5.07E-02
		Total	426	.63	.80	3.86E-02
Conversation with NOC counselor.	Sex	male	191	.41	.78	5.66E-02
		female	235	.74	.82	5.35E-02
		Total	426	.59	.82	3.97E-02
Conversation with a high school counselor.	Sex	male	191	.58	.83	6.00E-02
		female	235	.76	.80	5.21E-02
		Total	426	.68	.82	3.96E-02
A personal letter from NOC faculty or staff.	Sex	male	191	.41	.80	5.76E-02
		female	235	.59	.78	5.06E-02
		Total	426	.51	.79	3.82E-02
Career fair.	Sex	male	191	.20	.69	4.99E-02
		female	235	.50	.73	4.76E-02
		Total	426	.37	.73	3.52E-02
Campus tour.	Sex	male	191	.43	.82	5.96E-02
		female	235	.80	.86	5.64E-02
		Total	426	.64	.87	4.19E-02

APPENDIX K

Descriptive Statistics for Gender on Public Relations
Activities

Descriptives

			N	Mean	Std. Deviation	Std. Error
A performance by the NOC Roustabouts.	Sex	male	191	.13	.75	5.40E-02
		female	235	.20	.64	4.18E-02
		Total	426	.17	.69	3.34E-02
Booth at the Kay County Fair.	Sex	male	191	2.62E-02	.62	4.48E-02
		female	235	.15	.50	3.26E-02
		Total	426	9.62E-02	.56	2.71E-02
Redbud Jazz Festival.	Sex	male	191	4.71E-02	.63	4.53E-02
		female	235	9.36E-02	.44	2.89E-02
		Total	426	7.28E-02	.53	2.58E-02
Quiz bowl.	Sex	male	191	-4.19E-02	.61	4.44E-02
		female	235	9.36E-02	.43	2.83E-02
		Total	426	3.29E-02	.53	2.55E-02
Music contests.	Sex	male	191	7.85E-02	.71	5.14E-02
		female	235	.25	.65	4.26E-02
		Total	426	.17	.68	3.31E-02

APPENDIX L

Post Hoc Comparisons for Racial/Ethnic Groups

Multiple Comparisons

LSD

Dependent Variable	(I) racial/ethnic group	(J) racial/ethnic group	Mean Difference (I-J)	Std. Error	Sig.
Newspaper advertisement for NOC.	afro-american/black	caucasian american/white	1.15E-02	.139	.934
		american indian	.12	.160	.443
		asian american			
		oriental or pacific islander	.24	.337	.481
		mexican american/hispanic	-.26	.257	.309
		other	-.16	.308	.599
		prefer not to answer	.24	.308	.440
	caucasian american/white	afro-american/black	-1.15E-02	.139	.934
		american indian	.11	.092	.229
		asian american			
		oriental or pacific islander	.23	.311	.467
		mexican american/hispanic	-.27	.221	.217
		other	-.17	.279	.534
		prefer not to answer	.23	.279	.417
	american indian	afro-american/black	-.12	.160	.443
		caucasian american/white	-.11	.092	.229
		asian american			
		oriental or pacific islander	.12	.321	.719
		mexican american/hispanic	-.38	.235	.102
		other	-.28	.290	.326
		prefer not to answer	.12	.290	.691
	asian american oriental or pacific islander	afro-american/black	-.24	.337	.481
		caucasian american/white	-.23	.311	.467
		american indian	-.12	.321	.719
		mexican american/hispanic	-.50	.379	.188
		other	-.40	.415	.336
		prefer not to answer	.00	.415	1.000
	mexican american/hispanic	afro-american/black	.26	.257	.309
		caucasian american/white	.27	.221	.217
		american indian	.38	.235	.102
		asian american			
		oriental or pacific islander	.50	.379	.188
		other	1.00E-01	.353	.777
		prefer not to answer	.50	.353	.157

Multiple Comparisons

LSD

Dependent Variable	(I) racial/ethnic group	(J) racial/ethnic group	Mean Difference (I-J)	Std. Error	Sig.
Newspaper advertisement for NOC.	other	afro-american/black	.16	.308	.599
		caucasian american/white	.17	.279	.534
		american indian	.28	.290	.326
		asian american			
		oriental or pacific islander	.40	.415	.336
		mexican american/hispanic	-1.00E-01	.353	.777
		prefer not to answer	.40	.391	.307
	prefer not to answer	afro-american/black	-.24	.308	.440
		caucasian american/white	-.23	.279	.417
		american indian	-.12	.290	.691
		asian american			
		oriental or pacific islander	.00	.415	1.000
		mexican american/hispanic	-.50	.353	.157
		other	-.40	.391	.307
Radio commercial for NOC.	afro-american/black	caucasian american/white	.33*	.126	.008
		american indian	.38*	.145	.009
		asian american			
		oriental or pacific islander	.48	.306	.121
		mexican american/hispanic	.35	.233	.133
		other	7.62E-02	.279	.785
		prefer not to answer	.48	.279	.089
	caucasian american/white	afro-american/black	-.33*	.126	.008
		american indian	4.58E-02	.084	.585
		asian american			
		oriental or pacific islander	.14	.283	.615
		mexican american/hispanic	1.70E-02	.201	.933
		other	-.26	.253	.309
		prefer not to answer	.14	.253	.575
	american indian	afro-american/black	-.38*	.145	.009
		caucasian american/white	-4.58E-02	.084	.585
		asian american			
		oriental or pacific islander	9.62E-02	.291	.742
		mexican american/hispanic	-2.88E-02	.213	.892
		other	-.30	.263	.249
		prefer not to answer	9.62E-02	.263	.715

Multiple Comparisons

LSD

Dependent Variable	(I) racial/ethnic group	(J) racial/ethnic group	Mean Difference (I-J)	Std. Error	Sig.
Radio commercial for NOC.	asian american oriental or pacific islander	afro-american/black	-.48	.306	.121
		caucasian	-.14	.283	.615
		american/white			
		american indian	-.9.62E-02	.291	.742
		mexican			
		american/hispanic	-.13	.344	.716
		other	-.40	.377	.289
		prefer not to answer	.00	.377	1.000
	mexican american/hispanic	afro-american/black	-.35	.233	.133
		caucasian			
		american/white	-1.70E-02	.201	.933
		american indian	2.88E-02	.213	.892
		asian american			
		oriental or pacific islander	.13	.344	.716
		other	-.28	.320	.391
		prefer not to answer	.13	.320	.696
	other	afro-american/black	-.7.62E-02	.279	.785
		caucasian			
		american/white	.26	.253	.309
		american indian	.30	.263	.249
		asian american			
		oriental or pacific islander	.40	.377	.289
		mexican			
	prefer not to answer	american/hispanic	.28	.320	.391
		prefer not to answer	.40	.355	.261
		afro-american/black	-.48	.279	.089
		caucasian			
		american/white	-.14	.253	.575
		american indian	-.9.62E-02	.263	.715
		asian american			
	NOC internet homepage	oriental or pacific islander	.00	.377	1.000
		mexican			
		american/hispanic	-.13	.320	.696
		other	-.40	.355	.261
		caucasian	.21	.142	.144
		american/white			
		american indian	.18	.163	.274
	prefer not to answer	asian american			
		oriental or pacific islander	-7.14E-02	.344	.836
		mexican			
		american/hispanic	.18	.262	.496
		other	-.97*	.314	.002
		prefer not to answer	2.86E-02	.314	.928

Multiple Comparisons

LSD

Dependent Variable	(I) racial/ethnic group	(J) racial/ethnic group	Mean Difference (I-J)	Std. Error	Sig.
NOC internet homepage	caucasian american/white	afro-american/black	-.21	.142	.144
		american indian	-2.95E-02	.094	.754
		asian american			
		oriental or pacific islander	-.28	.317	.379
		mexican american/hispanic	-2.95E-02	.226	.896
		other	-1.18*	.284	.000
		prefer not to answer	-.18	.284	.528
	american indian	afro-american/black	-.18	.163	.274
		caucasian american/white	2.95E-02	.094	.754
		asian american			
		oriental or pacific islander	-.25	.327	.445
		mexican american/hispanic	.00	.240	1.000
		other	-1.15*	.295	.000
		prefer not to answer	-.15	.295	.612
	asian american oriental or pacific islander	afro-american/black	7.14E-02	.344	.836
		caucasian american/white	.28	.317	.379
		american indian	.25	.327	.445
		mexican american/hispanic	.25	.386	.518
		other	-.90*	.423	.034
		prefer not to answer	1.00E-01	.423	.813
	mexican american/hispanic	afro-american/black	-.18	.262	.496
		caucasian american/white	2.95E-02	.226	.896
		american indian	.00	.240	1.000
		asian american			
		oriental or pacific islander	-.25	.386	.518
		other	-1.15*	.360	.001
		prefer not to answer	-.15	.360	.677
	other	afro-american/black	.97*	.314	.002
		caucasian american/white	1.18*	.284	.000
		american indian	1.15*	.295	.000
		asian american			
		oriental or pacific islander	.90*	.423	.034
		mexican american/hispanic	1.15*	.360	.001
		prefer not to answer	1.00*	.399	.013

Multiple Comparisons

LSD

Dependent Variable	(I) racial/ethnic group	(J) racial/ethnic group	Mean Difference (I-J)	Std. Error	Sig.
NOC internet homepage	prefer not to answer	afro-american/black	-2.86E-02	.314	.928
		caucasian	.18	.284	.528
		american/white	.15	.295	.612
		american indian	-1.00E-01	.423	.813
		asian american	.15	.360	.677
		oriental or pacific islander	-1.00*	.399	.013
		mexican			
		american/hispanic			
An athletic event.	afro-american/black	caucasian	.47*	.176	.008
		american/white	.58*	.203	.005
		american indian	.40	.428	.344
		asian american	.28	.326	.391
		oriental or pacific islander	-9.52E-02	.390	.807
		mexican	.90*	.390	.021
		american/hispanic			
		other			
	caucasian american/white	afro-american/black	-.47*	.176	.008
		american indian	.11	.117	.356
		asian american	-6.50E-02	.394	.869
		oriental or pacific islander			
		mexican	-.19	.280	.499
		american/hispanic	-.56	.353	.110
		other	.44	.353	.219
		prefer not to answer			
	american indian	afro-american/black	-.58*	.203	.005
		caucasian	-.11	.117	.356
		american/white	-.17	.407	.671
		asian american			
		oriental or pacific islander	-.30	.298	.317
		mexican	-.67	.367	.067
		american/hispanic	.33	.367	.374
		other			
	asian american oriental or pacific islander	afro-american/black	-.40	.428	.344
		caucasian	6.50E-02	.394	.869
		american/white	.17	.407	.671
		american indian	-.13	.480	.795
		asian american			
		oriental or pacific islander	-.50	.526	.342
		mexican	.50	.526	.342
		american/hispanic			

Multiple Comparisons

LSD

Dependent Variable	(I) racial/ethnic group	(J) racial/ethnic group	Mean Difference (I-J)	Std. Error	Sig.
An athletic event.	mexican american/hispanic	afro-american/black	-.28	.326	.391
		caucasian american/white	.19	.280	.499
		american indian	.30	.298	.317
		asian american			
		oriental or pacific islander	.13	.480	.795
		other	-.38	.447	.402
		prefer not to answer	.63	.447	.163
	other	afro-american/black	9.52E-02	.390	.807
		caucasian american/white	.56	.353	.110
		american indian	.67	.367	.067
		asian american			
		oriental or pacific islander	.50	.526	.342
		mexican american/hispanic	.38	.447	.402
		prefer not to answer	1.00*	.496	.044
	prefer not to answer	afro-american/black	-.90*	.390	.021
		caucasian american/white	-.44	.353	.219
		american indian	-.33	.367	.374
		asian american			
		oriental or pacific islander	-.50	.526	.342
		mexican american/hispanic	-.63	.447	.163
		other	-1.00*	.496	.044

APPENDIX M

Institutional Review Board Letter of Approval



The University of Oklahoma

OFFICE OF RESEARCH ADMINISTRATION

February 18, 1999

Mr. Jay M. Kinzer
508 West 8th Street
Edmond OK 73003

Dear Mr. Kinzer:

Your research proposal, "Effects of a Marketing Strategies Promotional Mix on Students Attitudes Toward Northern Oklahoma College," has been reviewed by Dr. E. Laurette Taylor, Chair of the Institutional Review Board, and found to be exempt from the requirements for full board review and approval under the regulations of the University of Oklahoma-Norman Campus Policies and Procedures for the Protection of Human Subjects in Research Activities.

Should you wish to deviate from the described protocol, you must notify me and obtain prior approval from the Board for the changes. If the research is to extend beyond 12 months, you must contact this office, in writing, noting any changes or revisions in the protocol and/or informed consent form, and request an extension of this ruling.

If you have any questions, please contact me.

Sincerely yours,

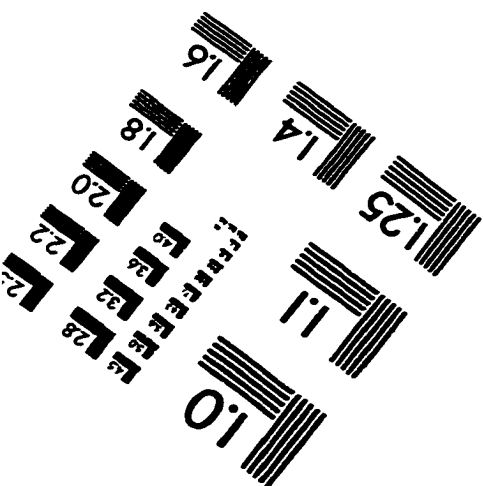
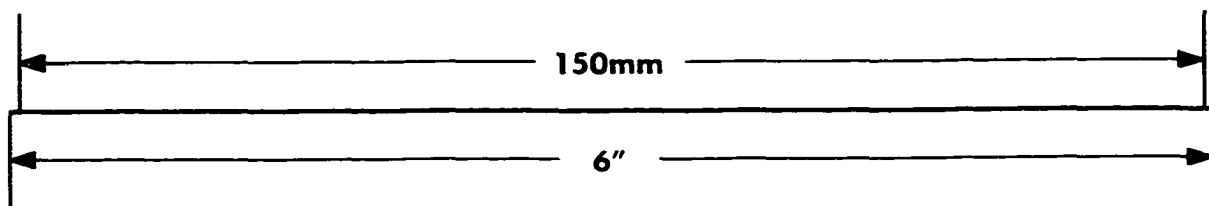
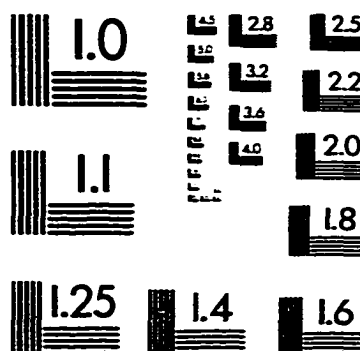
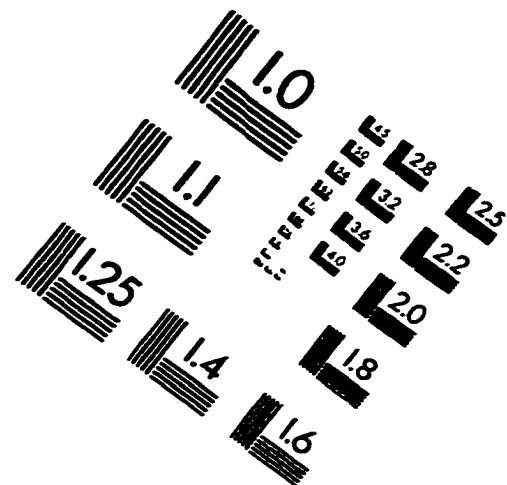
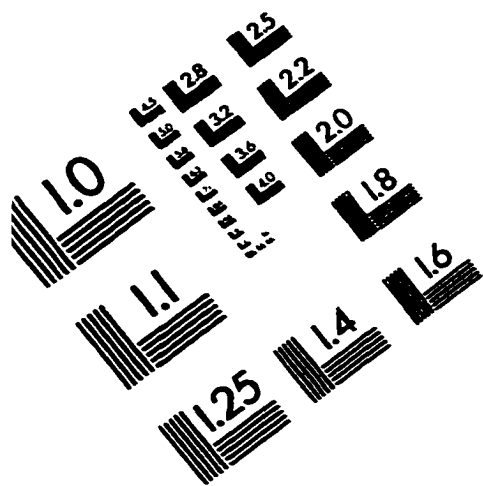
A handwritten signature in cursive script that reads "Susan Wyatt Sedwick".

Susan Wyatt Sedwick, Ph.D.
Administrative Officer
Institutional Review Board

SWS:pw
FY99-145

cc: Dr. E. Laurette Taylor, Chair, IRB
Dr. Gary Green, Educational Leadership & Policy Studies

IMAGE EVALUATION TEST TARGET (QA-3)



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