Enrolment Management and Consumer Behaviour in Higher Education

A case study of successfully positioning and marketing an educational institution with reference to college choice factors

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Abstract

The purpose of this study was to identify factors that influence students to attend Cyprus College. The college could utilise the outcome of the study for the development of its strategic student recruitment plan as well as for market positioning and promotion.

The competition in recruiting more students and retaining them has become fiercer than ever before. Facing a growing competitive environment, higher education institutions are mobilising all the resources for recruiting and updating their programs, services and campuses to become more attractive to students and their parents. Anticipating students' expectations could be one of the most effective tools that colleges hold in order to face the new highly competitive environment.

The survey instrument utilised to collect data on college choice factors was a self-administered questionnaire, developed by the researcher based on a review of the literature on college choice, the researcher's personal experience as an administrator in the field of college education and information received from a focus group. Descriptive and multivariate statistics, including frequencies, cross-tabulations, factor analysis and reliability tests have been used to present and analyse the data.

With a clear understanding of the factors influencing students to enrol at Cyprus College, it will be in a better position to target and promote those qualities/characteristics important for the effectiveness of recruitment and enrolment activities. In addition, the College can use the outcome of the study to strengthen areas that need improvement by adjusting the college characteristics (operational and strategic), so that they would be more consistent with those desired by students. Several recommendations have been put forward in this study, and they are expected to serve as a guideline not only for Cyprus College management but also to other higher education leaders who wish to improve the effectiveness of their marketing and recruiting efforts.

Chapter One - Introduction

1.1 Introduction and Background

In today's highly competitive recruitment environment, research involving college choice factors is of utmost importance for institutions of higher education. Through a better understanding of college choice factors, institutions are better able to leverage their limited recruitment and marketing budgets on those strategies, programs and services that influence students' enrolment behaviour. With this knowledge, professionals involved in admissions and enrolment management can target and tailor their marketing messages to specific target markets and can design and integrate proactive recruitment approaches. Knowing student expectations could be one of the most effective tools that colleges hold in order to face the new highly competitive environment.

1.1.1 Higher Education in Cyprus

The educational system in Cyprus has evolved significantly during the past decades due to the growing need for a more educated workforce but mainly due to the rapid socio-economic development (Shaelou, 2004). Sixty-five years ago, only a very small proportion of the population managed to complete primary school and continue studies. According to the Department of Statistics of Cyprus only 16% of Cypriots used to continue their studies in secondary

schools. Throughout the years, secondary education has become compulsory. Furthermore, the sustained and continued economic development in Cyprus has created a demanding employment market seeking specialised and well-educated employees.

Higher Education in Cyprus essentially started in the 1960s, with the first private colleges offering a limited number of programmes, mainly in the business field. However, the establishment of the Department of Higher Education within the ministry of education in 1984 supplied the momentum needed for the registration of a number of private colleges, the establishment of the University of Cyprus in 1992 and the establishment of the Council for Accreditation. More than 150 programmes of study have been successfully examined and accredited since its establishment.

In the past decade, there has been a huge improvement in all aspects of higher education, and the strategic goal as set by the government, is for Cyprus to become a regional centre for quality educational services. The government has promoted a series of measures which aim at the expansion of Higher Education, especially at University-level:

1. The establishment and operation of the University of Cyprus in 1992. This measure contributed to the upgrading of tertiary education and laid the foundations for the involvement of the University in the social and economic life of Cyprus.

2. The establishment of another two state universities

   a. The Open University of Cyprus

   b. Cyprus University of Technology (TEPAK)

3. The creation of suitable institutional framework for the operation of Private Institutions of Tertiary Education (PITE).

4. The establishment of the Council of Educational Evaluation-Accreditation, responsible for the educational evaluation-accreditation of programs. The first programs of studies were evaluated in January 2000, an event which proved to be a milestone for the development of private higher education. The result of this evaluation was the institutions' significant effort to improve their infrastructure, which contributed positively to the increase in the number of students both Cypriot and international attending these institutions.

5. Approval of the Law which regulates the establishment and operation of Private Universities in June 2005 by the House of Representatives for further upgrading private tertiary education.

A significant characteristic of the industry is its private sector, which enrols up to three times more students than the public sector. In 2005/2006 there were 24 private and 8 public institutions with a total enrolment of 20,078 students as compared to 6,000 students in 1992. 33% of them were enrolled in public and the remaining 67% in private institutions. School leavers from both public and private secondary schools account approximately 9,700 students. Nearly 75%

of the total secondary school leavers continue their studies beyond the secondary level. About 47% attend higher educational institutions abroad and the other 28% attend higher educational institutions in Cyprus (*Source: Department of Statistics and Research*).

The leading colleges in Cyprus are considered to be Cyprus College, Intercollege, Frederick Institute of Technology and Philips College, as they are the largest in campus size, in terms of number of students and in the number of accredited programmes. These private higher education institutions are mainly modelled on the British and North American type of education. Initially, Cypriot colleges based their curricula on overseas institutions, most of them very reputable ones, relying on their accreditation and degree validation bodies. This was a viable option for achieving recognition as well as an effective way to cover the lack of legislation and accreditation in Cyprus. The local accreditation system that was put to place, forced colleges to put increasing emphasis on their own programmes, thus enhancing their autonomy. This development helped them increase their market share and improve their reputation. However, the market competition continues to be very intense and is expected to become even fiercer because two new public higher educational institutions will begin operating during the academic year 2007-2008, namely the Technological University and the Open University.

This has, however, raised the fundamental issue of the role of the state in higher education, as regards the accreditation/evaluation process, or other

important issues such as university status, ownership status of institutions in higher education, the mission of such institutions and their recognition in Cyprus or abroad.

The approval of law 109 (I) 2005 by the House of Representatives and its enforcement on July 29, 2005 completed the legal framework for the establishment and operation of private universities in Cyprus. Private universities will offer programmes covering a wide range of fields, including Business, Education, Social Sciences, Economic Sciences, Engineering and Arts. Cyprus College was among the first colleges that applied to become private universities. The Higher Education system of Cyprus and its structure are presented in **Appendix A.**

1.1.2 Cyprus College

Cyprus College is the oldest institution of higher learning in the country. The college is officially registered with the Ministry of Education and Culture and it is authorised to offer educational programs leading to Diploma, Bachelor's and Master's degrees. Most of the programs offered gained accreditation from the Council for Educational Evaluation – Accreditation (SEKAP).

Cyprus College is undergoing a period of rapid change and development. This development can be seen in the introduction of new courses, enrolment growth and the expansion of college facilities. Cyprus College continues to monitor economic and business activity in Cyprus and neighbouring countries and its objective is to develop programs and services that will satisfy current and anticipated needs of business and industry.

The commencement of cooperation between Cyprus College and the international university organisation Laureate International Universities (LIU) in November 2005 signals a new era for Cyprus College. Cyprus College arrived at this agreement through its continuous goal of academic upgrading, expansion and evolution into an international university.

The college looks to the future with great confidence. In order to secure its long-term survival and stability, however, a number of initiatives and activities should be performed in order for the College to survive in the competitive arena

and to attain its mission. The College's reputation and long-term survival are co-dependent on enrolment trends. The quality of the institution can only be developed and maintained in a stable enrolment environment, and stable enrolments are possible only through sound planning, development and management of academic/administrative processes and programs.

1.1.3 The recruiting marketplace and future concerns

In recent years, higher education worldwide has faced various dynamic challenges that have never been encountered in the past. A decline in the number of high school graduates, the increased cost of attending a college, diminishing government funding, a growing number of new competitors and the advent of new technology, taken together, are heating up the competition among institutions and in turn, leading to an acute awareness of the need for understanding the student market (Howe & Strauss, 2003).

The competition for students has become more and more intense and the marketplace has become increasingly crowded with communication about the programs and services provided by colleges and universities. Today's prospective student is an intelligent consumer with considerable latitude in college choice. The success of the industry in general and to our own institution in particular is closely tied to our effectiveness in attracting and enrolling the kinds and numbers of students needed to make it possible for our institutions to survive. While most universities and colleges have strong

research agenda for many issues, they do very little research that allows them to understand their own business, the marketplace and the behaviour of their 'customer' (Black et al., 2004).

Private higher education in Cyprus is encountering many problems and obstacles. Private institutions do not receive any financial support from the government and furthermore there is no law that encourages endowments. In the face of severe competition from public universities (e.g. University of Cyprus plans to increase its number of students to 8,000 by 2012, with the Cyprus University of Technology (TEPAK) in operation as of September 2007) the private education sector is not on equal financial footing as public institutions do not charge any tuition. Cyprus society perceives private institutions as secondary options and of lower quality; most students and or parents have public institutions as their first choice. Private colleges mainly enrol candidates who have failed to enter into public institutions and there is a fierce competition among the private institutions in winning students' enrolment. Since private institutions do not have access to government funds, their major source of income is tuition. Therefore, students become the lifeblood for these institutions, and how to recruit enough students has turned out to be an extremely important issue. Arimoto (1997) noted that institutions of higher education might encounter a survival crisis in coming years; as a result, recruiting students and influencing student college selection behaviour has been a major task for many institutions.

Higher education in Cyprus is undergoing a transformational period. A few of the many unavoidable challenges that will change the arena of higher education include the: highly competitive recruitment environment; globalisation of education with technology advances; intentions of the government to develop new government-operated institutions; the new law that will allow the operation of private universities; competition from universities on the north side of Cyprus; intentions of international universities to enter the Cyprus market; on-line education and the high costs associated with higher education. Such changes necessitate solutions, practices and strategies that will enhance institutional reputation, student diversity, student quality, student recruitment and student retention.

In fact, recruitment has become increasingly complex and unpredictable. To address the particular trials posed by the emergent market conditions, there is a need for innovative recruiting and marketing practices. The outcome of this study will contribute towards this end.

1.2 Statement of the problem

Today more than ever before college administrators and enrolment management personnel are confronting difficulties in their efforts to identify, recruit and admit students. Change in demographic trends, increased competition for students, shifting student academic and career interests, and a shortage of college financial resources are serious concerns of college administrators. The increased competition for students has caused many colleges and universities to develop and elaborate enrolment management strategies designed to influence the size and characteristics of the student body. A look into the college choice behaviour of individual students indicates the ways in which environmental, institutional and student characteristics affect a student's choice about whether or not to attend college and which college to attend. It is the result of these studies, which provide the fundamental knowledge base for enhancing the effectiveness of enrolment planning activities as well as student marketing and recruitment activities (Hossler, 1984). The need for a thorough understanding of those college choice factors that contribute to a student's decision to choose one college from many possibilities is critical to successful recruitment efforts.

College choice studies enable enrolment managers to estimate the effects of institutional and student characteristics on the probability that a particular individual will choose a particular college. Understanding the enrolment effects

of such characteristics can help enrolment managers tailor and target their college's marketing mix (programs, prices, services and places) to those students possessing characteristics similar to those who most often matriculate at their college (Paulsen, 1990).

Discenza et al. (1985) concluded that post-secondary institutions should implement marketing techniques that respond effectively to a changing environment. They suggested that successful marketing involves: (a) developing market plans which assess the future as well as the means for merging these plans into current administrative decisions and (b) developing customer-oriented planning that is constant and organised. This process involves surveying prospective and current students to determine customer needs and wants. By utilising these strategies, colleges and universities can more accurately identify their enrolment goals and begin to market themselves more effectively.

In today's competitive recruitment environment, it is imperative for institutions to have a clear perception of customer needs, behaviours and motivations. Effective strategic enrolment management requires that the institution fully grasps the market environment in which it operates. Clear are the implications for Cyprus College as they derive both from market conditions and from the current literature. It is an absolute necessity to learn more about its customers (prospective students) by identifying the factors which are influencing the

choice of students. Using this knowledge, the college management can greatly enhance both the efficiency and effectiveness of its marketing and recruitment efforts.

1.3 Purpose and Rationale of the study

The purpose of the study is to identify factors that influence students to select Cyprus College. In addition, the research findings as well as the primary information that were collected for the purpose of the study will greatly assist and enhance the process of developing the strategic student enrolment, recruitment and marketing plan of the College. The results will assist enrolment management to better understand the effects of college choice variables as they relate to the college selection process of prospective students.

Educational researchers from different disciplines such as economics, sociology and marketing have conducted considerable research on the college choice process. Economists view college choice as a form of investment decision-making behaviour, whereas sociologists look at college choice from the perspective of the status attainment process. Marketing experts perceive college choice as a consumer decision about buying a product. Based on the literature, there appears to be an assortment of factors that influence students' decisions to attend a particular college. Although no single factor may influence a student's choice, investigating the variables that most influence

students can help in developing effective recruitment strategies and programs for attracting students (Hossler et al., 1999).

Through a more comprehensive and in-depth appreciation of the factors influencing college choice, enrolment managers will be in a better position not only to develop precise marketing strategies for the prospective target groups but also to establish the market position of the college more effectively. Furthermore, deeper insights into the dimensions of the influence of college choice factors on recruitment strategies of an institution will provide an opportunity for the college to add additional elements, thus widening its marketing strategy.

1.4 Significance of the Study

The findings and recommendations of this study will be of valuable importance to the immediate professional area of the researcher as well as to the enrolment policy-making procedures/strategies of Cyprus College. It has to be noted that beyond Cyprus College, these findings, analyses and recommendations will be of beneficial significance for other local institutions; they also supply a valuable source of comparative information and reference for practitioners and researchers in the area of student recruitment and marketing at the European and international level.

Clarifying the influences behind college choice is the basis for building a solid, comprehensive and consistent marketing and enrolment strategy. With a clear understanding of the factors motivating students to enrol in Cyprus College, it will be in a better position to target and promote those qualities/characteristics important for the effectiveness of the recruitment and enrolment activities of the college. Additionally, the college can use the outcome of the project to strengthen areas that need improvement by adjusting the college characteristics (operational and strategic) so that they would be more consistent with those desired by students. Ultimately, a set of specific recommendations will be provided that will be very beneficial for the future strategic direction of Cyprus College.

Besides, the findings of the study can provide prospective students with some guidelines regarding the factors to consider in their decision-making process, so that they can shape a more appropriate college choice.

Finally, the study will augment the current body of research in the area of student college selection. Of particular significance is that the study will add to the research literature in the college choice process in a small and 'less developed higher education' country where higher education is undergoing dramatic changes and reforms.

1.5 Research Questions

The following research questions were developed as a result of the major themes that emerged from the review of the literature on college choice.

1. When do students develop their plans for university/college education?

2. What college characteristic choice factors are considered to be important to students in their selection of a college?

3. What information sources are considered to be influential to students in their preference of a college?

4. Who influences students in their decision to select a college?

5. What recruitment strategies and programs are considered to be most influential to students in their selection of a college? Determine whether these are effective and examine the implications for Cyprus College.

6. What is the relationship of fixed college characteristics, sources of influence and recruitment programs/strategies to students' 'rating' of college choice factors?

1.6 Assumptions

1. Determining factors influencing the college choice can improve enrolment management efforts within an institution by enabling the college to act strategically as well as tactically.

2. Identification of critical tangible and intangible resources can enhance institutional self-knowledge of perceived strengths and weaknesses, thus allowing the college to aggressively communicate those areas of perceived strengths and improve on areas of perceived weaknesses.

3. The survey instrument utilised in the study accurately measures the constructs under investigation.

4. This study can serve as an effective benchmark for future studies involving the college selection process.

5. Students sampled were critical and objective in responding to factors influencing their college choice.

1.7 Limitations of the Study

1. The population selected for this study consisted of first-year native undergraduate students enrolled at Cyprus College, and generalisations from the data obtained may not be appropriate to other student populations.

2. Data was collected through the use of a survey instrument, which was distributed to participants by the researcher. Therefore, data employed in this study is limited to participants' self-reported answers, and an honest response from participants was assumed.

3. The participants were surveyed after having already made their college choice decision; therefore, data collected relied solely on their recall of that process.

4. The ideal study of student's college choice would be a longitudinal study because student college choice is a longitudinal and cumulative process that begins at an early age and ends with the decision to attend a particular college. However, the present study cannot meet that requirement.

5. Since students were surveyed after they had already enrolled at Cyprus College, a period of time had elapsed since they were involved with the college selection process. Thus, potential problems exist with potential faulty recall, halo effects, cognitive dissonance, selective perception and a potential reinforcing bias toward their choice.

1.8 Definitions of Terms

The terms and definitions below are those that are most commonly used in this paper.

College Image –' An organised set of beliefs that people associate with an academic institution' (Kotler & Keller, 2006)

College Characteristics –Includes academic quality of an institution, institutional image, academic programs, faculty members, campus environment, campus culture and activities, educational facilities, cost and financial aid and employment opportunities after graduation.

College Choice Process – 'A complex, multistage process during which an individual develops aspirations to continue formal education beyond high school, followed by a decision to attend a specific college, university or institution of advanced vocational training' (Hossler, Braxton & Coopersmith, 1989).

College Choice Set – 'A group of post-secondary institutions to which a student considers submitting an application for admissions' (Hossler & Gallagher, 1987).

Enrolment Management – This refers to both an organisational structure and a set of systematic processes institutions undertake in order to proactively recruit, retain, graduate and place students (Hossler, 1984).

Financial Considerations –'Factors that are associated with the issues of cost and availability of financial aid and scholarships'.

Marketing Research – 'Encompasses all formal or informal activities and attempts to enhance the knowledge of market and consumer behaviour in that market. It is the base and guide of marketing activities' (Schmidt & Hollensen, 2006).

Market Segmentation – 'The process of dividing the total market into several smaller groups, such that members of each group are similar with respect to demand and choice' (Etzel et al., 2007). The markets of an educational institution consist of diverse students who differ in age, income, preference, personality, belief and value, academic ability, family background, geographical location and other characteristics.

Marketing Strategy –Defined as 'the selection of a target market, the choice of a competitive position, and the development of an effective marketing mix to reach and serve the chosen market' (Kotler & Fox, 1995).

Positioning –Can be defined as how you differentiate your brand in the minds of your customers and prospects (Ries & Trout, 2001). Every educational institution holds a position in the minds of those who have contact with or know about the institution. Positioning differs from image in that it implies a frame of reference, and that reference is usually relative to the competition. In other words, 'positioning is defined as the act of designing the company's offering and image so that they occupy a meaningful and distinctive competitive position in the mind of the target market' (Kotler & Keller, 2006).

Predisposition – ' The decision to continue education after high school'(Hossler & Gallagher, 1987).

Recruitment Strategies and Programs –The institutional process of communicating to the prospective student information regarding services and programs, which will enable them to make informed choices about educational programs. Included in this study are the following: campus visit, college publications, visits by admissions staff to high schools, telemarketing, Websites, internet, media and advertising (radio, outdoor, newspaper, TV).

Search Stage – 'The time in the college choice process where students evaluate the features, benefits and outcomes associated with various colleges and universities and develop their choice set of higher learning institutes' (Hossler & Gallagher, 1987).

Selection (Choice) Stage – 'The final phase in the college choice process where students decide to which colleges they will apply and where they will ultimately enrol' (Hossler & Gallagher, 1987).

Sources of Influence – 'The important role significant others play in influencing students' college choice decisions' (Kellaris & Kellaris ,1988). It includes parents, friends, high school teachers and counsellors, current students, alumni and admissions representatives.

Target Marketing –'Refers to the tailored approach to satisfying a particular market segment. Once an institution differentiates among the different segments that make up the market, it may choose one or more of these segments to focus on, then develop market offers specifically to meet the needs of each selected target market '(Kotler & Fox, 1995).

1.9 Organisation of the Study

The study is organised into five chapters. Chapter One presents an introduction and background, the problem statement, research questions, the purpose of the study, its limitations and definitions of terms. Chapter Two contains a historical background of the college choice process, review of the literature and research related to it and higher educational marketing. Chapter Three describes the methods and procedures used in this study, including a description of the population, instrument development, collection of data and statistical methods used to analyse it. Chapter four presents a descriptive and multivariate statistical analysis of the data collected, and Chapter Five contains a summary of the study, a discussion of significant findings, recommendations/implications for practice and recommendations for future research.

Chapter Two - Literature Review

2.1 Introduction

The purpose of this chapter is to present an overview of the literature review.

The first section presents a historical background of the college choice process

and the factors important throughout the years.   Section two refers to the

market analysis and the importance of higher education marketing.   A

discussion of the latter is presented not only because the analysis of college

choice is useful feedback for marketing but also because the college choice

process can determine the effectiveness of the recruiting and marketing efforts.

Various elements of the marketing concept that are directly related to and/or

affected by the college choice process are also addressed in this section.   The

final section provides information about college choice behaviour, the various

college choice models and an analysis of the influential factors and variables in

the college choice process.   A summary concludes the chapter.

2.2   Historical Background

College choice process has been defined as a 'complex, multistage process

during which an individual develops aspirations to continue formal education

beyond high school, followed later by a decision to attend a specific college,

university or institution of advanced vocational training' (Hossler, Braxton &

Coopersmith, 1989).   The college choice process is not only a complex one, but

it affects many participants such as high school graduates, their families, institutions of higher education, and government policy makers.

The college choice process has changed significantly during the past 50 years for a variety of reasons, including changes in student demographics and in college admissions recruitment and marketing practices. Most of the literature reviews in the U.S. and the U.K. indicate that prior to the 1950s, only a small percentage of school graduates went on to college. There was limited guidance literature available to students, and their decisions were largely determined by personal perceptions of a college's reputation or its facilities.

The college choice process in the 1950s was relatively straightforward, with students making decisions from a defined and limited set of institutions. Students tended to make their college choices in their last high school year or later. Parents were the major source of support and influence, with high school counsellors having little involvement in the student's choice process. During this period, higher education was primarily a choice for those fortunate enough to afford it (Kinzie et al., 2004).

In the 1960s, many high school graduates started to attend higher learning institutions instead of entering the work market directly. The rise in enrolments was also attributed to the baby boomers. For instance, Jencks & Reisman, (1977) have called this period the 'Golden Age' of American Higher Education.

In the 1970s, with advanced education participation rates rising, an increasingly competitive environment emerged. Many colleges and universities enhanced their marketing efforts in an attempt to attract more students and achieve enrolment goals. In addition, increasing costs and pressure from ethnic groups influenced colleges and universities to keep pace with the new developments (Brubacher & Rudy, 1997). As a result, the enrolment management field emerged as an area of critical importance for higher schooling institutions and admissions officers began to play a larger role in marketing, recruitment and public relations activities. During this period, students and their parents started feeling the pressure to choose the best college possible. Four sets of factors appeared to affect a student's college preference at this time: factors internal to the institutions, such as academic reputation and prestige; factors external to the institution, such as its location and proximity to home; external human influences, such as encouragement from friends or counsellors; and individual student factors, such as personal and family finances(Swann & Henderson, 1998).

Through the 80s, the college choice process changed even further. It became more complex, began earlier in high school and was marked by an increase of information available to students and families. Furthermore, intensive competition prompted colleges and universities to use more sophisticated business and sales – oriented techniques to recruit, enrol and retain students. During this time, more colleges were using aggressive marketing strategies to

achieve their student goals. As the gap between the costs of private and public colleges continued to grow, competition for students intensified, and financial aid was used aggressively as a tool to attract prospective students (Duffy & Goldberg, 1998).

Also in the 1980s, colleges combined admissions, financial aid, orientation, retention and institutional research under one department in the hope of creating a more effective enrolment process (Hossler, 1984; Zemsky & Oedel, 1983). During this period, researchers developed two different types of models to help explain the many influences on student decision-making processes. The first type, econometric models, predicted that a student would select a particular post-secondary institution if the perceived benefits of attendance outweighed the perceived benefits of non-attendance (Hossler, Braxton & Coopersmith, 1989). The second type, sociological models, asserted that student desire to attend college, or 'college aspirations', were influenced by socioeconomic status, student academic ability, high school context, gender and the views of significant others. These factors help to explain some students' college choice behaviours (Litten, 1982). Econometric models (reflecting the influence of cost on student decision-making) and sociological models (demonstrating the influence of interrelated factors influencing college aspirations) were combined in later studies to reflect a more comprehensive view of student college choice.

The 1990s saw significant increases in tuition and fees and greater demand for financial aid. The search for the right college became more intense, requiring greater investments of time, money and energy. Students were considering more institutions earlier during high school, and they were actively involved in a search for the 'best deal' for a college education. Colleges and universities responded by using financial aid strategies, such as tuition discounting as well as early-admission and early-decision strategies to influence student enrolment decisions. Students and their families continued to obtain information from more sources – including electronic ones, college publications, specialised guidebooks and private college counsellors. More students and their parents felt tremendous pressure to come up with the correct decision and to do so as early as possible in order to get into 'the right college' (Avery et al., 2003). In the 1990s, post-secondary education options expanded significantly. Students could attend public or private four-year schools, two-year institutions, those for non-profit or profit, technical and vocational schools and distance learning universities. This array of options increased competition among seats of learning for the attention of prospective students (Hossler, 1998). To increase their chances of getting into higher education, students in the 1990s applied to more colleges and universities than in previous decades (McDonough, 1997).

It was during this time that enrolment-management programs became a mixture of marketing, admissions, public relations, financial management, statistics, institutional research and enrolment projections. The enrolment-

management model in place at most institutions of higher education united admissions marketing and financial aid. According to St. John (1998), in order for colleges and universities to maximise net tuition revenue, they must carefully coordinate their decisions on financial aid, marketing and admissions.

Today, the amount of information about post-secondary education available to students can be overwhelming. Many potential applicants receive direct mail; listen to the testimony of friends and families; learn about potential educational opportunities through Websites, college publications, videocassettes and DVDs; are exposed to thousands of messages through mass media and receive a plethora of information through advertising and promotion. Although there is more information about post-secondary educational options, there is also more pressure on students to make the right decision.

Factors such as changing demographics, public policy, institutional practices and marketing techniques all have had subtle but noteworthy effects on the college choice process. For instance population projections in the EU countries reveal the demographic impacts: data on birth rates, migration and mobility will combine and coincide with a shrinking youth population over the next 50 years. European universities, which traditionally educate students aged 18 to 25 years, will obviously be affected by the reduced numbers of their traditional target group in the long term. It is projected that some higher education systems in

Europe are under high risk of closure or setback while others are under medium risk due to the population decline (Mizikaci &Baumgartl 2007).

Demographic changes seemingly will have an impact on European higher education institutions, which will enrol fewer native and more foreign students in the future. The non-native population in higher education will come from two sources – migration and mobility programs. This will require changes in the present structures: more flexibility in teaching and learning; broader access for world students and academics; differentiation in terms of quality and excellence; managing communication and diversity; and coordination and organization at the European level. Only the higher education institutions that will provide the successful integration of immigrant and foreign students will be able to cope with the remarkable impacts of demographic changes in Europe.

In the future, it is expected that this scenario of competition will become even more intensified, in the sequence of the agreement foreseen in the Bologna Convention, for the harmonisation of academic degrees in the European Union. With the harmonisation of the different academic degrees, the mobility and employability of students will be greater, for which the less competitive universities may come to lose a good part of their student bodies. Within this context, the identification of the institutional factors that a potential student may consider in choosing one university over another are matters of

importance to university administrators who are concerned with the long-term effectiveness of their institutions enrolment practices.

And what about developing countries? Demographic change, income growth, urbanisation, and the growing economic importance of knowledge and skills have combined to ensure that, in most developing countries, higher education is no longer a small cultural enterprise for the elite. Rather, it has become vital to nearly every nation's plans for development. As a result, higher education is indisputably the new frontier of educational development in a growing number of countries. For most developing countries, higher education enrolments are growing faster than their populations, a trend that will continue for at least another decade (Peril & Promise 2000)

This continued expansion of higher education is clearly necessary to meet increased demand; however, with it has come some new problems. For example China, India, Indonesia, the Philippines and Russia have systems of higher education serving 2 million or more students. A further seven developing countries – Argentina, Brazil, Egypt, Iran, Mexico, Thailand and Ukraine – enroll between 1 to 2 million students. To accommodate so many students, some institutions have to stretch their organisational boundaries severely, giving birth to "mega-universities" such as the National University of Mexico and the University of Buenos Aires in Argentina, each of which has an enrollment of more than 200,000 students. However expansion, both public and

private sectors, has been unplanned and often chaotic, resulting in deterioration in average quality (Peril & Promise).

In some countries post-secondary education is perceived as an 'industry' and it is promoted as such. For instance, the government of Cyprus has expressed its intentions to promote Cyprus as a centre of higher education. Noteworthy is the example of Australian universities. In the last few years, Australian universities have worked very closely with the Australian government, managing to develop a unique higher education 'industry'. In recent years, there has been a paradigm shift in the governance of the higher education system throughout the world and marketisation policies and market-type mechanisms have been introduced in countries previously characterised by a high degree of government control (Jongbloed, 2003). In most countries, marketisation has been viewed as a 'compromise between privatisation, academic autonomy and state control'. The tuition and fees continue to rise, increasing the demand for financial aid. To this end, institutions have adopted complex financial aid strategies to increase the number of students with desired characteristics. Also, many private colleges have initiated early admission and early-decision admission strategies to increase the numbers of affluent and academically qualified students. Such practices have increased the pressure on high school students and their families because, if they hope to be competitive in early-admission opportunities, students must have impressive qualifications (Kinzie et al., 2004).

College and university policy-makers have a strong interest in understanding how students choose a college. Student enrolments are the lifeblood of these schools, and student characteristics often define the distinctiveness of individual campuses. As competition for students intensifies and as the college costs continue to rise, higher education policy-makers should seek to understand the reasons that students choose their institutions.

2.3 Market Analysis

The recruiting marketplace is very competitive and sometimes even hostile (Sevier, 1998). Colleges and universities compete with each other for attracting and recruiting students. From a marketing perspective, an institution needs to (i) establish its market position, (ii) identify the competition (iii) determine the needs of various segments and (iv) develop marketing plans and strategies for promoting its educational offerings (Paulsen 1990). This thesis draws upon this marketing framework to study the factors that influence student college choice and the implications on the recruiting and marketing strategies of Cyprus College.

Marketisation, globalisation, intense competition and deregulation of higher education in many countries have forced higher education administrators to implement marketing techniques and concepts, which have been effective in the business environment. The elements of globalization in higher education are widespread and multifaceted and the market is now well established as a

global phenomenon, especially in the major English speaking nations: the UK, the USA, Australia and Canada. In the context of increasing competition for students, higher learning institutions now recognise that they need to market themselves in a climate of competition and to apply sales techniques that will differentiate them from competitors (Armstrong, 2001; Jongbloed, 2003).

College choice is not only a consumption decision but also a long-term investment in further education, career development, and other social and economic rewards associated with a particular degree. Hence, the selection of a college by a student is a complex and time-consuming process that involves collective decisions with parents, teachers, peers, etc. These complex interactions among student, school, process and environment create a very distinctive marketing situation for higher education. Institutions of further learning have to recognise and take these considerations into account while developing their marketing plans (Litten, 1980).

2.4 Higher Education Marketing

Canterbury (1999) described the market for higher education as having several features that distinguish it from the markets for other goods and services. And though marketing for the business sector and higher education have much in common, 'the differences ... are critical in considering the transfer of marketing activities from one to the other' (Litten, 1980, p. 45). In applying

the term 'marketing', Kotler & Fox (1995) argue that schools offer products which are offered in the educational markets and that these institutions engage in marketing practices such as pricing, advertising, selling and product design. Institutions have undertaken activities such as consumer surveys, forecasting and planning, which are all part of marketing research. The application of private sector practices in the higher education sector is not without its critics as some argue that education should not be viewed as a commodity.

The adoption of marketing orientation is considered a response to dramatic and continuing changes facing institutions of higher learning today. However, the concepts of marketing have long been misunderstood since their introduction into the field of higher education (Kotler & Fox, 1995; Zivic, 1989). Jugenheimer (1995) attributed this confusion to the lack of business expertise of a number of college administrators, who tend to see marketing as synonymous with selling or promotional activities. A survey of three hundred educational administrators whose colleges were in trouble due to declining enrolments, increasing cost, and rising tuition were asked the meaning of marketing. Most administrators responded by saying that they saw marketing as a combination of selling, advertising and public relations. A small number suggested that marketing had something to do with needs assessment, marketing research, product development and pricing and distribution (Kotler & Murphy, 1981).   Rubino (1988) found that higher education leaders had little understanding of the concept of marketing and did not posses the institutional

integration necessary to practice it. Also, a strategic orientation did not exist toward marketing at the majority of the institutions, and colleges and universities were unable to distinguish themselves from one another. The administrators still equated marketing with sophisticated selling, evidenced by increased promotions and PR activities. In a similar way Maringe (2006) has argued that in developing countries such as Zimbabwe, the traditional understanding of marketing as a process of selling reflects the one in the developed world.

Another common misperception of marketing is a belief that by increasing the budget for selling and promotion, rather than by changing the products, institutions are able to appeal to students (Kotler & Fox, 1995). However, effective marketing in higher education requires more than just advertising, promotion and selling, which has been proved by many researchers (Bingham, 1989; Dehne, 1993).

Kajcienski (1997) found that the most utilised elements among 20 selected marketing techniques were service, promotion, target advertising and segmentation while the least used included strategic planning, pricing, marketing research and forecasting. The study also reported a significant difference in the usage and priority of marketing elements between public and private institutions.

Institutions tend to utilise the most visible and easily implemented techniques such as public relations, personal contact and advertising, neglecting less visible but more influential strategies such as positioning and marketing plans (Goldgehn, 1990). Nonetheless, findings from various studies confirm that marketing, when implemented appropriately, can be an effective means in student recruitment.

The primary task of University administrators is to determine the needs and wants of the student target markets and to satisfy them through appropriate and competitively viable programs and services (Kotler & Fox, 1985). Discenza et al. (1985) concluded that post-secondary institutions should implement marketing techniques that respond effectively to a changing environment. Also, Francis & Hampton (1999) supported the argument that universities are adapting to the current situation by incorporating market-like behaviour into their business plans. They found a strong relationship between increased effectiveness in recruiting and market-like behaviour.

Wasmer & Bruner (1999) found that private schools are more aggressive in the use of marketing techniques than public institutions. They also concluded that the size of institutions is another relevant factor to the use of marketing strategies. The smaller the size, the more favourable their attitude is toward the use of marketing.

Marketing practices in the developing countries mimic those which have driven Universities in the developed world. University marketing in the developing world is still unclear and unnoticeable though highly regarded as an integral part of the future of higher education. For instance the higher education environment in Zimbabwe mirrors that which has driven marketisation in the developed countries in the past (Maringe 2006).

What follows is a discussion of some important elements of the marketing strategy related to college choice, which will facilitate the discussion about college choice behaviour. Other elements of the marketing strategy, such as Academic programs (Product development) ,cost and financial aid (pricing strategy) are also discussed in detail in section 2.8.1.

2.4.1 Marketing Research

Marketing research serves as the base and guide for marketing activities. It deals with all formal and informal attempts to study a market and to enhance the knowledge of consumer behaviour in that market (Schmidt & Hollensen, 2006). Marketing research could help in the study of competitors, environmental forces, consumer behaviour, customer satisfaction, market targeting and institutional image and positioning. Particularly, with a student-driven focus, a number of institutions have learned to implement marketing research as a way to help curriculum development and to ensure that their services are sensitive to the needs of the customers they serve (Lowry, 2001).

Also, Bonnici & Reddy (1993) stated that curriculum must match students' needs and benefit seeking. Despite its importance, marketing research is more accepted in theory than in practice within colleges and it seems to be generally underfunded in higher education (Zivic, 1989; Walters, 1994).

It is not surprising that the implemented marketing strategies will lose some of the effectiveness when institutions skip research in their marketing process. As noted by Kotler & Fox (1995) and Walters (1994), market research does not have to be expensive; sometimes it even only takes a small amount of time, effort and money. In sum, market research is worthwhile because it provides institutions with the information needed and thereby leads to the success of their marketing strategy.

2.4.2 Segmentation

Another important element of marketing strategy related to college choice is the segmentation of the target audience. Market segmentation is the process of dividing the total market into several smaller groups, such that members of each group are similar with respect to the factors that influence demand and choice (Etzel et al.,, 2007). Thus, recognizing that all students are not alike – they differ in their concerns, interests and preferences for higher educational institutions – is recognition that the market is not all one piece, but segmented. Therefore, institutions can survive or prosper by relating their services to these differences (Litten et al., 1983).

The clearly defined market segments are the foundation of effective marketing strategy. Although markets can often be segmented in several ways, Kotler & Fox (1995) suggested that a good segment should meet certain criteria such being as measurable (size and characteristics can be readily determined), accessible (segments can be reached and served effectively), substantial (large enough to warrant special marketing effort) and durable (persist over time). Demographics and psychographics are important factors in the process of students college choice. For instance, Kolhede (2001) recommended that small private colleges develop products and promotional strategies aimed at female students, who have higher educational expectations than do males regarding elements of the colleges. Moreover, students coming from low-income families are more attracted and more responsive to financial aid programs as compared to students coming from more affluent families (Paulsen, 1990). In most cases, higher-ability students initiate the application process sooner, apply to more colleges and place more significance on academic programs than lower-ability students (Litten, 1982). In addition, prestigious colleges and universities play an important role in the selection process for high-ability students, especially if the student's family comes from a high socioeconomic status (Seneca & Taussig, 1987). According to Rowley and Sherman (2001), not every college can be a Harvard or a Cambridge, but less famous institutions have the ability to develop specific programs that can challenge the respected schools, as well as the opportunity to cultivate excellence in given areas that the name schools

have been unwilling or unable to reach. Greer (1991) concluded that small colleges need to consider several segmentation strategies to draw the attention of those students most likely to show interest in attending. These approaches include: (a) pursuing the markets that are near to the college (b) recognizing that invisible colleges are often not a student's first choice and (c) remembering that while reputation is very important, other factors associated with invisible colleges such as close interaction with faculty, sense of community and a caring atmosphere fit well with the desires of those students who choose to enrol.

2.4.3   Positioning

Ries and Trout (2001) advocated that in today's overcrowded marketplace, a company must create a position in the prospect's mind, a position that takes into consideration not only a company's own strengths and weaknesses, but those of its competitors as well. The concept of positioning is not only applicable solely in the world of business and industry but also considered appropriate in today's higher educational arena. Positioning is defined as the act of designing the company's offering and image so that they occupy a meaningful and distinctive competitive position in the target customer's mind (Kotler & Keller, 2006). Ivy (2001) stated that universities can use marketing to differentiate their images in the higher education area and Mintzberg et al. (2003) found that it is important to create a sustainable positioning strategy.

Ivy (2001) found that it is very important for universities to conduct a market analysis in order to establish their market position and to present the institutional image effectively. He found that although people form images of higher education institutions, they may do so on limited or even inaccurate information. Therefore, universities must understand the image they portray and make sure that it is an accurate and positive one. Sometimes, the image may be the same across the institution or vary significantly because each segment may relate to different features. These images are formed from word of mouth, earlier experiences and marketing activities of the institutions. Gutman and Miaoulis (2003) developed a somewhat different opinion, stating that the goal of image management is to increase the probability that the same image is activated regardless of what element generates the activation. This can be achieved by positioning the university in the minds of the target audience in a way that projects the desired image. Clark & Hossler (1990) explained how institutions position themselves in the educational marketplace. For instance, a college can position itself 'as a top quality college or a low-cost college', (p.78). Oplatka (2002) conducted a study in Israel, and he suggested that low-level institutions should not try to project an image of a high-standard institution because such an attempt may confuse the prospective customers.

If an organisation does a poor job of positioning, the market will be confused as to what to expect. If the organisation, on the other hand, does an excellent job of positioning, it can work out the rest of its marketing planning and differentiation from its positioning strategy (Kotler & Keller, 2006). For

example, Bakewell & Gibson-Sweet (1998) have concluded that students are not well informed about the research differences that institutions have and suggested that 'new universities' in UK should re-position themselves in order to attract more students.

There is a close relationship among position, image and perception. Every person involved in the institution contributes to its image and position in the marketplace (Dimun, 1998). Colleges need to determine these images as they relate both to themselves and to their competitors. Once a clear position is determined, the institution can design useful strategies to enhance its value in the customer's mind by improving its image within a competitive market (Yavas & Shemwell, 1996).

Mazzarol (1998) pointed out a number of issues important to consider when communicating the positioning message to potential students. He emphasized that promotional and behavioural activities aim for direct or indirect effect on the student's mind since marketing of universities to a large extent relies on the quality aspect, which is often communicated through word of mouth. The quality of reputation and level of market recognition are linked to the identification and development of competitive advantages. Lowry (2001) recommended that university administrators to make a long-term commitment to communicate the intended positions and that the positioning messages may need to be repeated for many years before the public begins to accept the

desired identity (image) of a college/university. According to Lowry (2001), a university that pursues an active positioning program should benefit from stable or increased enrolments and greater student retention. He recommended universities to assemble an advisory committee to oversee the positioning strategy. The committee should consist of a group that is representative of the university community, such as administrators, faculty, students, alumni and community leaders, all of whom can provide input for the communication strategy.

2.4.4   Marketing Communications

It is crucial for service providers to manage what they communicate in their marketing, especially when claiming a quality position. Gutman & Miaoulis (2003) found that a problem for many universities is that they are unable to communicate and deliver their benefits. Litten & Brodigan (1982) make a strong point in claiming that the benefit of marketing for the institution is to help uncover misinformation or lack of information in the marketplace.

Some studies of higher education marketing focused solely on the relationship between the use of communication tools and the process of college choice (Armstrong & Lumsden, 1999). A lack of communication can stop the exchange between the buyer and seller since the customer is not aware of the existence of the product or service; nonetheless, promotion works effectively only if other marketing elements are presented. Noteworthy, Kotler (1982)

suggested that an overemphasis on promotion may create new problems for the college itself. The wrong students may be attracted to the college, for instance, but drop out later because they feel the college did not deliver what was advertised. Various studies have identified a mis-match between choice factors of students and messages provided in the information material of colleges and universities (Mortimer 1997; Gatfield et al., 1999).

The review of the literature reveals various means that are used by colleges and universities to communicate their benefits and their services. Potential students are reached through activities on campus, advertisements, direct mail, telemarketing, Websites, scholarship offerings, early registration programs and use of alumni networks (Seymour, 2000). To effectively communicate and market itself, an institution must have a clear understanding of customer needs, behaviours and motivations. No matter what tools are used, all communication should attain at least one of these goals: establish awareness of the existence of the college, create and maintain interest in the college or motivate the prospective customer to take action (Berger & Wallingford, 1996).

2.5   College Choice Behaviour

Literature on student choice recognises that decisions to attend higher education are complex multistage processes involving a series of successive decisions that result in the decision to attend or not attend higher education

(Hossler et al., 1989). Students choose a particular college for a number of different and often very personal reasons. They are influenced by many factors and these influences are wide and varied (Terkla & Wright, 1986). Hossler (1984) described the college choice process as a complex phenomenon, which is a product of the background characteristics for students – their abilities, aspirations, and motivations – the attitudes and plans of close friends and family, as well as the characteristics and activities of the institutions of higher learning that fall within the students' choice sets.

The students entering institutions of higher education today are much different from those of previous generations (Abrahamson, 2000). Often called Generation Y, Baby Boomers II and Millennials, this group has often been described as ambitious, stressed, wayward and indifferent (Howe & Strauss, 2003). Additionally, these people have been characterised as being exposed to greater 'grown-up' activity and less experienced in exercising discipline and decision making (Newton, 2000). As this generation makes decisions about attending college, and ultimately what institution to attend, their process differs greatly from previous generations. It is imperative that those involved in the recruitment process understand both the factors that are most influential in selecting an institution and the methodology utilised by these students in their search process (Letawsky et al., 2003).

Given the complexity of the decision making process, it is clear that many different factors and actors can have an impact on students' enrolment decisions. As with many other complex social phenomena, research on student choice imposes many different assumptions and relies on multiple theoretical perspectives. Various studies have attempted to determine what factors have the greatest influence on student college choice. Although researchers have examined and identified a number of characteristics (parental guidance, financial factors, student background, economic reasons, the institution itself) common to the college choice decision, their findings remain divided. What follows is a reference to some indicative studies about college choice behaviour. Student college choice behaviour has seldom been a major concern in the Cyprus educational arena. Since little data is available, it is helpful for Cyprus administrators to look for relevant information from other countries where researchers have been studying the topic for decades.

Most existing studies are based on surveys and address many variables. The outcomes of some studies in countries with elaborated research in this field such as the United States, Australia, the United Kingdom and the Netherlands are presented below.

Student choice in the United States

The United States is arguably the framework of student choice research, including a host of studies at both the national and institutional levels. Institutions have their own recruitment policies ,of which tuition and student aid

play an important role.   Many of such studies have been discussed and summarised in literature reviews by Leslie and Brinkman (1987) and Heller (1997). Some indicative studies are provided below:

Krampf & Heinlein (1981) found that the prospective students rated very highly the attractiveness of the campus, informative campus visits, recommendation of family, good programs, informative university publications and the friendliness of the campus atmosphere, suggesting that these factors have a great influence on student preferences.

Litten (1982) described the choice process as a complex series of activities, with individuals participating in it differently. Parent education is the strongest influence and groups are likely to respond differently to alternative marketing strategies.

Chapman (1984) suggested that student college preference is influenced by a set of student characteristics in combination with a series of external factors. These factors are composed of college characteristics, financial considerations, sources of influence and the institution's own efforts to communicate with prospective students and their families.

A study conducted by King, Kobayoshi & Bigler (1986) indicated that an important motivator for student college choice were the college faculty members who made strong impressions on prospective students.

Turner (1988) suggested that the most important factors in selecting a university are future job prospects, modern facilities, standard of teaching and international recognition.

Several fixed institutional characteristics such as location, cost, campus environment, academic reputation and the availability of academic programs seem to be important criteria in the college selection of undergraduate students. Study attributes related to academics, such as outstanding academic reputation, number of courses offered, availability of specific programs, accreditation and qualified faculty were assigned far greater importance by respondents than marketing-oriented attributes such as friendly staff, beautiful campus and convenient location (Kellaris & Kellaris, 1988).

In a study at Southeast Missouri State University, Clinton (1989) measured the importance of 22 college choice factors. The survey was distributed to 600 persons who had either enrolled or decided not to enrol. In general, respondents ranked recommendation of parents as the most important factor in their choice, followed by academic program in decision maker's chosen career, quality of education, recommendations of friends and low-cost tuition. Male

students ranked recommendations of friends highest while minority students ranked low-cost tuition at the top. Relationships between the variables for the matriculate group revealed interesting results, such as (a) students desiring a college close to home were greatly influenced by cost, (b) those looking for a college far away from home were most influenced by attractive university housing, (c) parents and friends were most influential for those students seeking a small college and (d) those students who did not visit the campus believed that Southeast did not have their desired academic program. Clinton (1989) concluded that information gained from a marketing study such as this could be effective in determining levels of student satisfaction, which in turn would lead to increased rates of retention.

Findings from 3,708 college freshmen revealed that most students began college planning before their high school senior year and chose college during their senior year. Academic reputation, quality of available programs, costs, faculty reputation and friendliness were top factors considered by students. Most frequently cited sources of college information were students themselves, friends and high school counsellors (Johnson et al., 1991).

Sevier (1993) studied college-bound high school juniors and reported that availability of desired major and total cost of attending college were the most important elements.

Galotti & Mark (1994) noted that parents/guardians, friends and publication materials were rated as most important in the college search process.

Students place great emphasis on such aspects as small class size, student interaction, student faculty ratios and appear more interested in the availability of specific academic programs than in the general reputation of the institution (Sevier & Kappler, 1997).

Findings from two studies of high school students' approaches to college choice, using a 'brand elimination' approach to consumer decision-making, show that different sources of information are important to the student at different stages of college selection (Rosen, Curran & Greenlee, 1998).

Kern (2000) described the results of a study about the college choice process for high school students considering post-secondary education. Findings show that the biggest influence on college choice appears to be parents, institution reputation, friends and the student's own initiative. Financial aid was an important consideration for many students.

Noel-Levitz institution during Fall 2006, analysed the factors influencing college choice of more than 35,000 first year students in U.S., and have identified cost, financial aid and academic reputation as the most influential factors *(Noel-Levitz, 2007).*

Research on how prospective students choose universities and colleges concludes that the decision of whether or not to go to higher education is taken long before individuals apply for college or university .These decisions are primarily influenced by student achievements in school, access to career advice, gender and expectations from peers (family and school). Also the students' choice is influenced by many factors. For instance Hooley & Lynch (1981) examined the choice processes of prospective students of UK universities. The six attributes they identified were course suitability, university location, academic reputation, distance from home, type of university and advice from parents and teachers. The analysis pointed to that course suitability as the most important attribute in determining university choice.

The 'Making the Right Choice' study undertaken by the Institute for Employment Studies (IES) and sponsored by the CVCP, the Higher Education Funding Council for England (HEFCE) and the Universities and Colleges Admissions Service (UCAS) in 1999 revealed that the most used, and the most useful, information sources were the UCAS Handbook, prospectuses and visits/open days at universities and colleges. IT-based media, e.g. the internet and CD ROMs, were used the least. 'Advisers', ranging from family and friends to professional careers advisers, played an influential role in the choice process for many. By far the most helpful overall source of information (people or documents) was the university/college prospectus (CVCP, 1999).

Costs appear to be important for non-traditional students, like those from disadvantaged groups. They prefer to study close to home, taking courses with good employment prospects. In addition, over half of the prospective students who decide not to enter higher education feel that university is not for them and many also think that the student lifestyle does not fit them. This would indicate that socio-economic background may be more important than financial incentives (Callender, 2003).

In 1990 student loans were introduced in the United Kingdom next to the existing means-tested maintenance awards. The importance of loans was gradually increased and in 1999, all student support was transferred into a student loan system with an income contingent repayment mechanism. Tuition fees were introduced in 1998 and since then all fulltime undergraduate students pay a flat rate tuition fee (SLC, 2004).

Student choice in Australia

Australia provides an interesting case because student recruitment is becoming increasingly competitive at a time when the numbers entering university are beginning to stabilise after a number of years of growth, coupled with declining demand from international students. Most Australian universities have concentrated recruitment on overseas markets over the last decade but more recently, with the advent of domestic undergraduate full-fee places, have started to compete more vigorously for domestic students (Shameem& Miller, 2007).

The Australian tertiary education industry has entered a phase of increasing diversity in a highly competitive market. Traditionally Australian universities' marketing efforts were centered on the "open day" concept, but this has now given way to professional marketing departments, together with strategic product development, advertising and, more recently, pricing (Shameem& Miller, 2007).

Tuition fees were reintroduced in Australia in 1989 in the form of the "higher education contribution scheme" (HECS). Students now contribute to the costs of their higher education by means of a flat-rate fee that in 1989 represented about a quarter of the average per student instruction cost. Students are free to pay their tuition up front (receiving a 25% reduction) or to defer payments until after graduation. In 1997, the flat-rate structure was replaced by three different fee levels or tariff-bands reflecting cost-differences between programs as well as differences in expected future earnings. (Vossensteyn & Canton, 2001).

While higher education has now become the norm, for those wishing to achieve some advantage, the notion of which university has become increasingly important (Schultz, 2006). In the Australian context James, Baldwin and McInnis (1999) found that many prospective students do not base their decision on rigorous research and evaluation but rather tend to rely on limited and subjective information ,which includes the nature of teaching and learning,

class size and career prospects. Other studies of first year experience found that a third of the students declared they were not ready to choose a university course during their final year of school (McInnis and James, 1995; McInnis, James and Hartley, 2000). This, of course, has consequences for retention rates after the first year (York, 1999), a great concern for most Australian universities.

A study of first- year undergraduates at the University of South Australia (Martin, 1994) identified and evaluated the following factors as closely associated with study at that university: career preparation, specific academic program, academic reputation, distance from home, library resources and the quality of research programs. In a study by James (2000), the top five influences were: course offerings, location prestige of university and employment rates of graduates.

Mazzaral et al., (1996) examined the factors that influenced international student choice for university studies in Australia. They found that the most important selection factor was the recognition of their qualifications by future employers. Further important considerations were cited as the university's reputation and that of its staff/faculty.

Finally, Soutar & Turner (2002) found that the most important factors of university choice for Australian school-leavers were course suitability, academic reputation, job prospects and teaching quality.

Student choice in Netherlands

The Netherlands provides an interesting case study. The general conclusion from most Dutch studies on what factors influence student choice is that students' higher education aspirations and decisions are primarily related to parental encouragement, education and income, as well as students' motivation, proximity of institutions and personal interest (Van Leeuwen et al. 2002).

Tuition rates are considerable from a European perspective and have gradually been rising in the past decades. In addition, performance requirements were attached to grants as of 1993 and the focus of student support has gradually changed to loans.

Oosterbeek et al., (1992) examined the university choice of prospective graduates in the Netherlands. They found that prospects' future earnings were not a particular factor in the choice of a specific university.

Lin (1997) also investigated the reasons for student choice of a university in the Netherlands. The most important reasons for this decision were the quality of

education, career opportunities, the reputation of the university, faculty qualifications, modern facilities and quality of student life.

Detailed results from research about the impact of specific factors on the college choice are presented later in this study.

2.6   College Choice Models

A number of theoretical models have been designed to study the college choice process in order to identify the influential variables.   The models are distinguished by the methods in which the college choice factors are grouped and the number of factors incorporated into each model (Hossler et al., 1999).

Three categories of theoretical models can be distinguished (Hossler et al., 1999):

1.   **Economic Models** (also called econometric models), which are rooted in the assumptions that prospective students are rational decision makers who make careful cost-benefit analyses

2.   **Sociological models** (also called status attainment), which are based on sociological theory that students choose according to what they think is expected from them

3.   **Combined models** (also called information processing), which combine the ideas of the economic and sociological models

Economic models rooted in econometric assumptions are based on the idea that prospective students are rational, view college choice as an investment and make careful cost-benefit decisions. In sociological models, students are more interested in the status attainment achieved by attending college. These models of college selection examine the interrelationships of variables that influence aspirations for college attendance. According to sociologists, aspirations for college are an essential component for gaining social status (Hossler, Schmit & Vesper, 1999).

While the economic and sociological models focus on student decision-making related to choosing a college, neither model provides an explanation of the process of specific college choice. Combined models share the rational assumption cited in economic models but also incorporate information seeking. They attempt to describe the various economic and social forces that affect decision-making in order to find opportunities for intervention in the choice process (McDonough 1997).

2.6.1   Economic Models

Economic models are best described as econometric models, based on the idea that students maximise a utility such as low cost and high quality, using a cost-benefit analysis. Students must decide, for example, if they want to go to college or find a job after high school. If the choice is made to continue schooling, the student must decide what kind of college to attend (vocational,

community college, four-year institution, private college, public or private university, etc.) by weighing the costs against the perceived benefits. Thus, the relationship between college attendance and income potential is crucial in this type of model.

Econometric models typically fit one of two approaches: the income model or the employment model (Manski & Wise, 1983). The income model theorises that college choice decisions are influenced significantly by the rate of financial return in relationship to the money and time invested while attending higher education. The benefits gained depend on the value of the expected return from the education received. Expenses incurred during the investment period are usually tuition, room and board and opportunity costs such as foregone wages (Fuller et al., 1982).

In the employment model, work possibilities are valued more than anticipated lifetime earnings. The model focuses on a growing economy, which then creates opportunities for employees with certain qualifications, college educated students among them. As students consider these economic trends, they choose school that will most likely increase their chances of obtaining a job with satisfactory earnings (Fuller et al., 1982).

All of the econometric models assume a weighing of various factors to make a choice. Students will utilise these factors in determining if the selection of a

particular college outweighs the perceived benefits of attendance at another institution or a noncollege alternative. Although the type of choice and specific factors judged to be most important varies with each model, the underlying framework concerning the relationship between factors is similar (Hossler et al., 1989).

Economic models assume that a student's future is unlimited and filled with possible choices, which can be narrowed down according to a set of clear criteria (Hossler et al., 1999). Common to all college-going models are expected costs, which include tuition, room and board and associated living expenses. All of these cost variables are influential in the selection of a college choice (Chapman, 1979). Benefits could include the expected or future earnings derived from a degree from a particular institution, quality of student life and extracurricular programs (Hossler et al., 1999; Fuller, Manski & Wise, 1982). Investment in education, according to the often-repeated economic argument, is a rational decision for students who can thereby expect, in the long run, to get back more than they must spend. Rational decision-makers take action if and only if the marginal benefit of the action exceeds the marginal costs (Mankiw, 2004). As a result, economic college choice models argue that students choose the alternative that has the greatest positive difference between benefits and costs, or in economic terms, the choice with the greatest utility (Litten, 1984; Bishop, 1977). College characteristics are also important in this model. In consideration of college characteristics, students

will make a choice between post-secondary educational institution or a noncollege alternative based on the greatest benefit from the most attractive college available to that student (Kohh et al., 1976). College characteristics include admission standards, average ability of students attending the college, educational expenditures, scope of institutional offerings and quality of campus life (Kohn et al., 1976).

The presumption in economic models is that students have accurate information and act rationally to maximise utilities. Unfortunately, students and their families do not always behave as rationally as economists assume. It might be that they lack perfect knowledge of their choices or that economics alone is insufficient to understand college choice (Hossler et al., 1999). Therefore, economic considerations are not the only factors that influence college attendance plans. Results reveal that financial benefits by themselves are insufficient to completely explain student attitudes in the college enrolment decision (Hossler, 1984).

2.6.2   *Sociological Models*

The sociological models of college choice examine the interrelationship of variables of a non-financial character that influence aspirations for college attendance. According to sociologists, aspirations for college are an essential component for gaining social status. Status-attainment models focus on the interactive process between broad social environment variables and students'

individual characteristics in relation to students' college choices (Hossler et al., 1999). The models focus on the socialisation processes that have shaped the possibilities and ambitions of students since they were born, including family conditions, peer interactions and school environments. Different variables may have interactive effects at different stages in the college choice process and the influence of such variables may change over time. The sociological models generally leave financial factors out of the analysis and instead utilises the following groups of independent variables to explain student choice:

- Behavioural variables: student academic performance, student aspirations and motivation;

- Background variables: family background/characteristics (parental encouragement, parent income, education and occupation), gender and influence of others (e.g. teachers, friends).

Such models emphasise group related factors (and their interrelationships) as they influence a student's plan for attending college (Hossler, Braxton & Coopersmith, 1989). For example, 'aspirations for education' play a central role in sociologists' understanding of the status attainment process. The status attainment process is comprised of the various factors that influence one's desire for certain occupations or status positions (Sewell & Shah, 1978).

Student academic ability, along with socioeconomic background characteristics are seen as basic to the model of status attainment developed by Blau and

Duncan (1967). Other researchers have built upon this model over time with other types of influences. Hossler & Stage (1992) looked specifically at the influence of parental encouragement while others investigated the influence of 'significant others' such as family, teachers and peers (Sewell & Hauser, 1975; Sewell, Haller & Portes, 1969). Finally, other inputs to such models include student characteristics such as academic ability, high school academic performance (Sewell & Hauser, 1975) as well as student involvement and achievement (Hossler et al., 1992).

Besides the assumption of rationality used in economics, the sociological perspective differs from the econometric perspective in that it involves a more interactive process between variables that measure broad social constructs and those that measure individual student characteristics. Models that combine both processes, discussed below, may have more explanatory power than those utilising a single perspective (Hossler et al., 1989).

2.6.3   Combined Models (Information- Processing Models)

While the econometric and sociological models focus on student decision-making related to college selection, neither approach alone provides an explanation of the process of specific college choice. Combined models or information processing models describe a series of sequential stages that centre on development features of the general selection process. This developmental feature provides a distinct advantage, as it allows researchers and policy

makers to focus on specific stages of the college choice process (Schmit, 1991; Hossler et al., 1989).

The major difference between the combined models and sociological and econometric models is that the former attempt to identify those factors affecting the decision-making process from an institutional perspective. By identifying the economic and social factors affecting decision-making, institutional analysts are provided opportunities for intervention in the student choice process (Hossler et al., 1989). Indeed, a major advantage of combined models is that the researcher can choose variables from either domain and concentrate on the sociological aspects of college choice as a process while maintaining the decision-making perspective of economics (Hossler et al., 1999). The combined models have been extended by the idea of information-processing. In this perspective, college choice is regarded as a continuous process of uncertainty reduction in which prospective students make successive decisions, based on incomplete information, and then treat the outcomes of one stage as inputs to the next stage (Stinchcombe, 1990).

Hossler et al. (1999) lists four major combined models of college choice: Jackson (1982); Hanson and Litten (1982); Chapman (1984); Kotler & Fox (1995)/Young & Reyes (1987) and Hossler & Gallagher (1987).

Jackson's Model

Jackson's (1982) combined model consists of three stages: preference, exclusion and evaluation (see Figure 2.1). In the preference stage, academic achievement, social context and family background are strongly associated with student educational aspirations. In the exclusion stage, economic theory is applied in making college choice decisions. Factors like location, cost or academic quality may be excluded from student college choice decisions. This process is also based on information gathering activities. Students obtain information about various colleges and then develop a group of potential colleges to choose from (choice set). The most important influence in this stage is availability of accurate information, followed by family academic and vocational background. In the evaluation stage, students evaluate the characteristics of the remaining colleges to make a final decision.
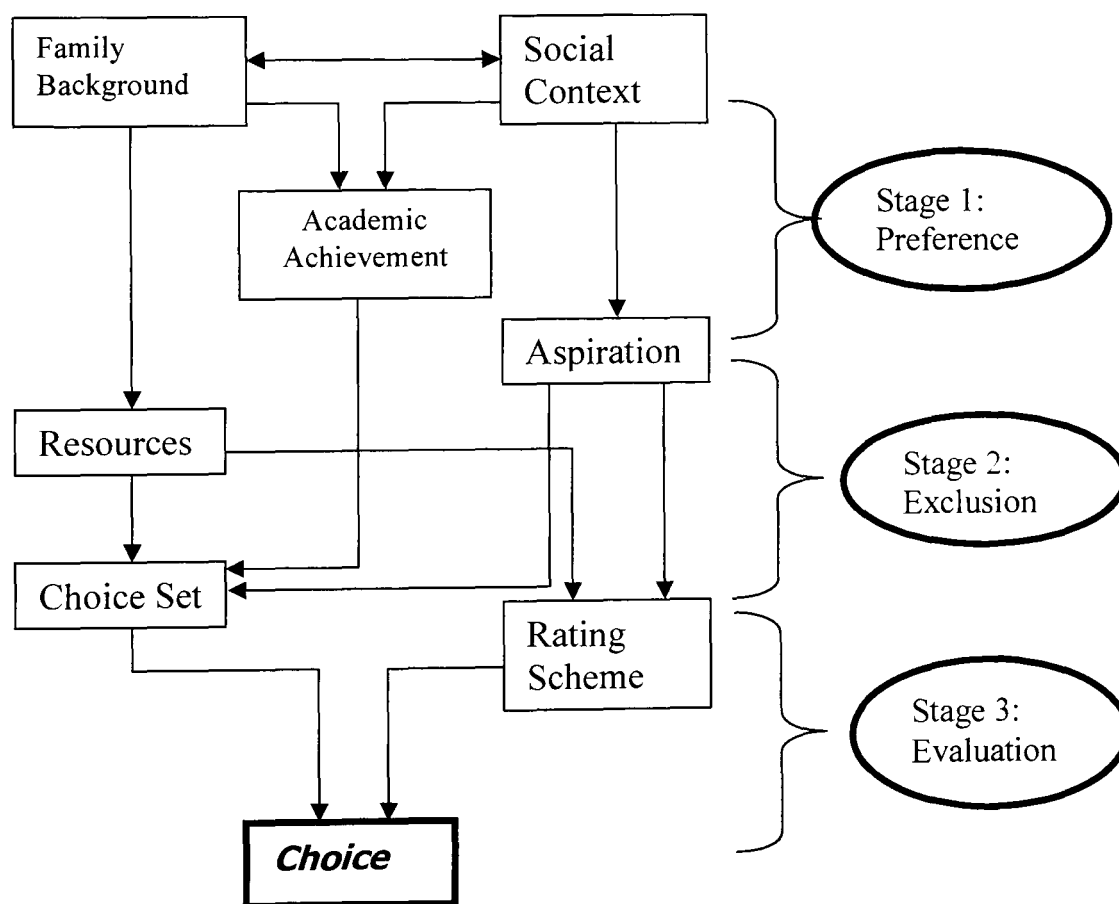
Figure 2.1: Jackson's Model (1982)

Jackson's model combines social variables with economic variables in a way that social conditions define initial lists of schools for consideration and determine how variables interact, while economic variables are used to exclude and or choose various schools.

Hanson and Litten Model

Hanson and Litten's (1982) model shown in Figure 2.2, includes a continuing process of five steps: aspiration, search, information gathering, application and enrolment. The Hanson and Litten model applies a wide set of variables that affect the college choice process: background characteristics, such as parental income and education, race, gender; personal characteristics, such as academic ability, class ranks, self-image; high school characteristics, such as social composition, programs, and curriculum; and colleges characteristics, such as cost, size, programs, and timeliness in responding to student inquiries. Public policy (e.g. financial aid program) is also incorporated into the model as a determining factor influencing college choice.

Student Characteristics

- Race
- Income
- Parents' education
- Family culture
- Parents' personalities
- Religion
- Sex

High School Characteristics

- Social composition
- Quality
- Curriculum

Influences/ Media Used

- Parents
- Counselors
- Peers
- Publications
- College officers
- Other media

College Characteristics

- Price
- Size
- Programs
- Ambience
- Control (public/private)

College Aspirations

Search Process

Information Gathering

Sending Application

Enrolling

Personal Attributes

- Class rank
- Academic ability
- Student's performance
- Other abilities
- Self-image
- Personal values
- Benefits sought
- Personality
- Lifestyle

Environment

- Occupational Structure
- Economic conditions
- Cultural conditions

Public Policy

- Aid (amount and eligibility)

College Actions

- Recruitment Activities
- Academic/ Admission policies

College Actions

- Admit/Deny
- Financial Aid granted (amount, package)

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Figure 2.2: Hanson and Liten's Model (1982)

Chapman Model

Chapman (1984) proposed a combined model of college choice, which is composed of presearch, search, applications, choice and enrolment stages. This model contains both an individual perspective and an institutional one, in which student characteristics and external influences interact to form a student's general expectation of college life. Chapman's model is longitudinal and is based on traditional age (18-21) students. The model suggests that college choice is determined by both the characteristics of the student applicants and external influences. Chapman groups external influences into three general categories: (1) the influence of significant persons, (2) the fixed characteristics of the institution and (3) the institution's efforts to communicate with prospective students. Chapman suggests that attendance at a particular institution is first influenced by background characteristics of the student along with the student's family and second, by the previously mentioned external influences. Chapman speculated that interaction between a student's personal characteristics and external influences would lead the student to a set of expectations about college life in a particular institution. A student considering a group of institutions would likely develop a preference for one college over others; the student could then make a first choice, a second choice, and so forth.

It is important for enrolment administrators to take both aspects into account sequentially when planning recruitment activities. Chapman's model is illustrated in Figure 2.3.

Student Characteristics - Socioeconomic status - Aptitude - Educational Aspirations - Academic Performance	External Influences:
	Significant Persons - Friends - Parents - High School Personnel
General Expectation of College Life	College Characteristics - Cost (Financial Aid) - Location - Program Availability
	College Effort to Communicate with Students - Written information - Campus visit - Admission/ Recruiting

Figure 2.3: Chapman's Choice Model

The Kotler and Fox/Young and Reyes Model

In a model proposed by Kotler & Fox (1995), students go through various stages: 1) considering generic alternatives (like college, work or military service), 2) gathering information, 3) decision evaluation and 4) decision execution. Kotler's & Fox's model of college choice was expanded by Young & Reyes (1987). This comprehensive model is shown in Figure 2.4 and is described below:
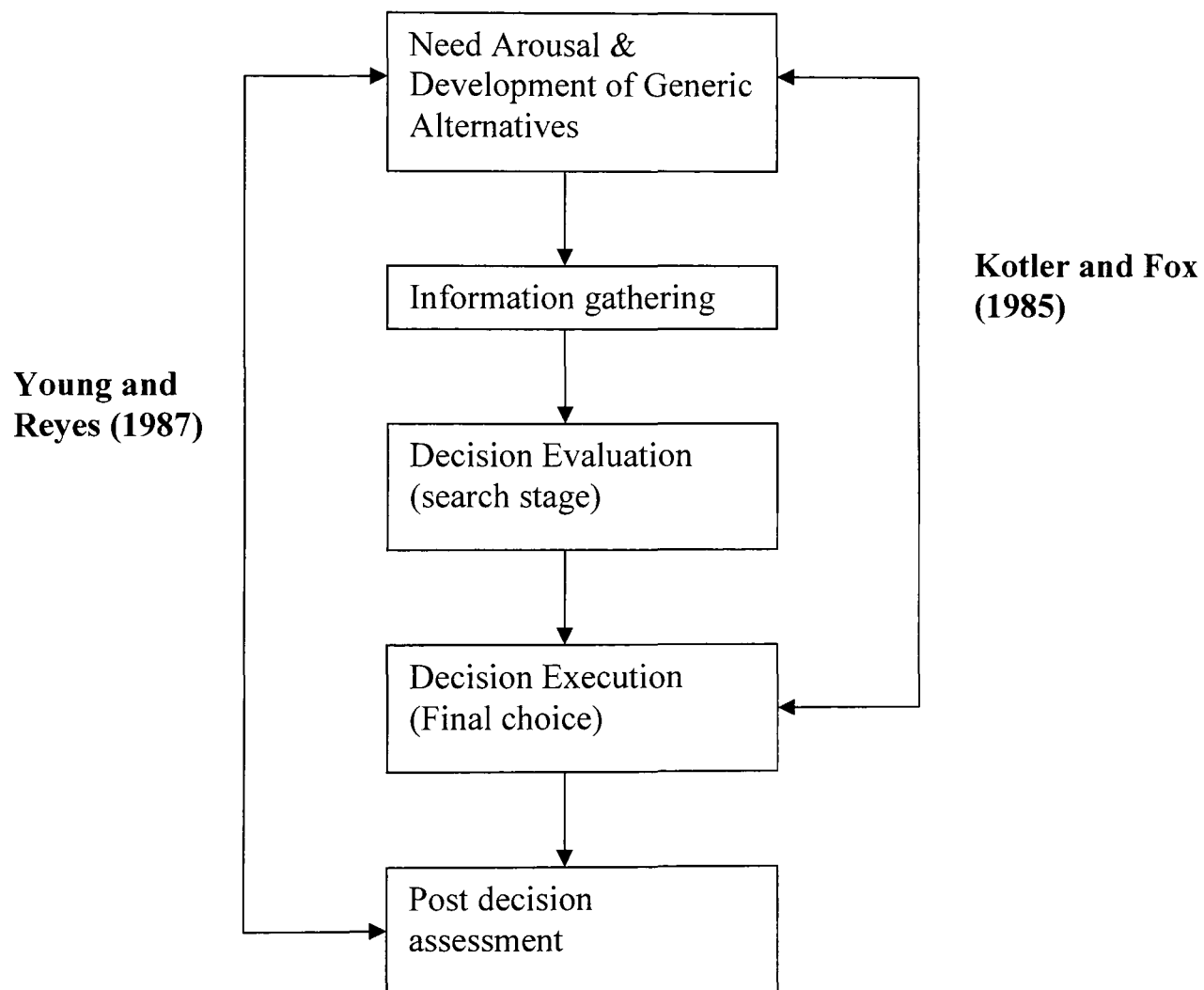
Figure 2.4: Kotler and Fox / Young and Reyes Model

- Stage one has been labelled 'need-arousal' and describes a student's initial interest in attending college. The student asks, 'So what do I do after high school?' and begins to explore alternatives (i.e., college, military, full-time employment).

- Stage two is the 'information gathering' stage. Depending upon a student's need for information, data is gathered about each alternative open to the student. Stage one and two together relate to the 'predisposition stage' of Hossler & Galagher's model to be discussed later.

- The third stage is the 'decision evaluation' stage. Here the student narrows the choice to a set of alternatives. If the decision is to attend an institution of higher learning, additional parameters are established to assist in developing the set of colleges and universities to choose from (i.e., 2-year vs. 4-year institutions, private vs. public, smaller vs. campus based) At the end of this stage, a choice set of institutions is determined. The 'decision evaluation' phase is equivalent to the 'search stage' in the three-stage model of Hossler & Galagher.

- The fourth stage in this model is the 'decision execution' which entails the student moving towards a final decision regarding his/her most preferred institution for enrolment. This equates to the final choice stage (to be reviewed later) in which the student chooses an institution to attend from the choice set developed.

Young & Reyes (1987) acknowledged that consumer behaviour decision processes do not end with the initial purchase decision so they have included in Kotler & Fox's model a fifth stage called 'post decision, assessment'. After making the enrolment decision and attending an institution, students assess their level of satisfaction with the decision and may or may not continue enrolling. This is referred to as 'post purchase dissonance' in the field of marketing (Kotler & Armstrong, 2006 p.154). In higher education, this equates to the concepts of drop-out rate, attrition and the transfer student phenomenon.

Hossler and Gallagher Model

In 1987, Hossler & Gallagher developed a simpler yet more conceptual three-stage model of college choice. Rather than focusing solely on the attributes of students, it is an interactive model that takes into account the nature of higher education options and some of the organisational factors at both the pre-college and college level.

A schematic representation of the model is presented in Figure 2.5.

The model isolates and contains the college choice process within a manageable three-stage framework (predisposition, search and choice).

- **Predisposition**-decision to go to college rather than take alternative status-attainment paths, such as work or military service.

- **Search**-the process of learning about specific institutions and their characteristics.

- **Choice**-the stage when applications are completed and the student chooses a particular institution.

Student Characteristics Gender, race, religion, income, parents' occupational status, education and income, family culture	High School Characteristics Social composition, quality, curriculum, programs	College characteristics Size, programs, campus environment, facilities, quality, image, faculty, control (public/private), cost and financial aid

Predisposition → **Search** → **Choice**

Personal attributes Class rank, academic ability, student's performance, other abilities, self image, personal values and goals, lifestyle	Environment Occupational structure, economic conditions, labour market, cultural conditions	Influencers/ Sources of information Parents, counselors, peers, high school teachers, college officers, alumni

College actions

Recruitment activities, admissions policies

Figure 2.5: Hossler and Gallagher's Model (1987)

During the first stage, predisposition, students decide whether they will attend a higher learning institute, which is determined usually by their background and

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attitudinal characteristics. Once the student decides to pursue post-secondary education, the student enters the search phase, which has been identified as the period during which the student actually begins to seek information about schools. The final stage of the college choice process, selection, is the stage when the student actually makes a final decision on the institution that he / she would like to attend. In the final choice stage, students develop a set of colleges to which applications will be made and decide which institution to attend. In each phase of the model, individual and organisational factors interact to produce outcomes that influence the student college choice. The search and selection phases are particularly important to enrolment managers since it is in these phases that most colleges are eliminated from consideration by students (Paulsen, 1990).

Because of the complexity of the decision-making process and the many variables and factors influencing college choice, no single model of college choice exists. However, literature review reveals that the three-stage model of Hossler & Gallegher has been the most highly examined and remains the operating model for much of the college choice research (Hoyt & Brown, 2003). What follows is a discussion of the various factors influencing students' decision during the three-stage process of college choice.

2.7   Three-Stage Process

2.7.1 Predisposition

The first stage of the college selection process in the Hossler and Gallagher Model is predisposition. Many researchers refer to this stage as the college aspiration formation stage (Paulsen, 1990). This stage is characterised by students determining whether they would like to attend college. During this phase, certain background characteristics influence students (Martin & Dixon, 1991; Hossler & Gallagher, 1987). Predisposition contains aspects of a school context, student demographics, student academic and personal attributes and abilities as well as environmental and economic factors. These factors are supposed to act on students in such a way that enables them to begin to form a predisposition (or aspiration) for college attendance (Pitre et al., 2006).

Researchers indicated that a student's socioeconomic status is a strong indicator of college attendance (Paulsen, 1990; Hossler & Gallagher 1987; Litten, 1982). The socioeconomic status of a student can often open doors of access to certain students or limit their ability to even consider attending college. Students with high socioeconomic status are more likely to go on for further schooling than students with low socioeconomic status (Hossler & Gallagher, 1987). Borus & Carpenter (1984) concluded that a potential student's home environment may affect the decision to pursue higher education

and families with certain characteristics are more oriented toward college attendance.

The interpersonal influences of others, such as parents and peers, are also involved in students' aspirations to attend college (Paulsen, 1990; Hossler & Gallagher, 1987). Students whose parents begin to encourage them to consider college early in their educational career are more likely to attend. Researchers have found that parental encouragement to pursue higher education has a direct effect on college attendance and that parents' education and parental expectations are very important factors in the college decision process, notably at the predisposition stage (Conklin & Dailey, 1981). Parents' educational achievements as well as family income are important factors affecting parents' educational expectations for their children (Hossler et al., 1999). Jackson (1988) found that there is a peer effect that disposes a student's inclination to attend a post secondary institution. Jackson's (1988) study determined that friends were a somewhat influential consideration in attendance decisions as were factors of high school academic performance and involvement in extracurricular activities. Students who have friends interested in attending college are more likely to pursue an undergraduate degree as well. Peers who plan to obtain a college degree positively reinforce college choice decisions (Paulsen, 1990; Hossler & Gallagher, 1987). People (other than parents and friends) who are respected by or who have close relationships to high school students can play a role in the college enrolment decision. High

school teachers and counsellors can also influence the predisposition to attend an institution of higher education (Paulsen, 1990).

The pre-college experiences of students also guide their decision during the predisposition stage. For example, students who have participated in extracurricular activities during high school (e.g. debate teams, sport and social clubs) are more likely to continue on than those who do not participate in such activities. Borus & Carpenter (1984) found in a study of prospective college students that high school activities were a positive predictor of a student's predisposition to attend college.

Academic experiences also influence the predisposition stage. Hossler, Braxton & Coopersmith (1989) found that high school path has an effect on the decision, particularly at the earliest stage of the college choice process. Ability and achievement of a student are other indicators of college attendance. As students' ability and achievement increases during their high school years, they are more likely to attend college. High school performance has been linked to socioeconomic status (Hossler & Gallagher, 1987) and is an important element for determining a student's potential to succeed in the university environment (Yost & Tucker, 1995). Further, high school performance is related to the expectations imposed on students by their parents, peers and teachers (Purcell, et al., 1994). Therefore, the support for university study is likely to be available for students with higher performance scores. What is more, the student's

college choice process for these students becomes more formal at an earlier age (Hossler & Gallagher, 1987). Participation in advanced preparatory courses during high school gives students an opportunity to experience the type of work that is required in college. This enables students to be challenged and determined to pursue higher-level studies (Hossler & Gallagher, 1987).

Students are increasingly knowledgeable about the rising costs of college attendance. College enrolment probability has been found to increase as students become more aware of possible financial aid in the forms of scholarships and grants (Lauer, 2002). In addition, Hossler & Gallagher (1987) found that early information on financial aid as well as institutional costs is an important stimulator in predisposition to college attendance.

It must be noted that colleges and universities have little influence on student choice during the predisposition stage (Hossler & Gallagher, 1987).

2.7.2 The search stage

The second phase of the college selection process has been identified as the search stage. Once students have decided that they are going to pursue post-secondary education, they begin to seek information about colleges and universities that they might be interested in attending (Martin & Dixon, 1991; Paulsen, 1990; Hossler & Gallagher, 1987). Students create a list of these colleges and universities known as a choice set. Using this choice set, students

begin to examine certain attributes of these colleges and obtain information that will assist them in making their decision to apply to particular institutions (Martin & Dixon, 1991; Hossler & Gallagher, 1987).

Researchers have found that a wide variety of colleges are included in an applicant's choice set. Students and parents tend to develop similar college preferences and often, but not always, student and parent individual consideration sets are blended into one single choice set. This choice set determines the institutions to which a student submits applications for admission (Zemsky & Oedel, 1983). Applicants initially choose colleges without considering critical attributes such as size and cost of these institutions (Hossler & Gallagher, 1987).

Aspiring students apply for up to six places in many different degree courses offered by a variety of educational establishments. The vast range of degree courses and institutions available to them complicates the decision-making process (Tackey & Aston, 1999).

Once this list of colleges and universities has been created, applicants begin to seek various resources to assist them in their information search. Matthay (1989) examined the perceptions of first year college students regarding their college decision-making process and the resources used in this search. A survey was administered to 181 first year students from a variety of public and

private, two-year and four-year institutions. The respondents attended schools that ranged from highly competitive to competitive. Results revealed that the four most helpful resources for students in the college search process are college visits, college catalogs, parents and high school counsellors (Matthay, 1989).

Furthermore, Paulsen (1990) found that during the search stage students are interested in important characteristics such as academic programs, faculty expertise, campus atmosphere, financial aid, career placement and others. This information is gathered in a number of ways that include reading publications, talking with admissions' representatives, visiting campus and searching the Internet. Also Weiler (1994) found that many factors influence the search stage, including career counselling, variety of courses, employment opportunities after graduation, costs, faculty teaching reputation, specific academic programs, college faculty reputation and housing opportunities.

During this stage, some students have a greater need for information than others. Some students spend months gathering information while others make a decision in a relatively short amount of time (Hossler & Gallagher, 1987). Students with parents that have had some college experience tend to begin this stage earlier than other students (Galotti & Mark, 1994). Hossler et al. (1999), found that by the time students reached tenth grade, they had developed a short list of colleges and had defined a list of desirable characteristics for

preferred colleges. In their junior year (penultimate year of high school), students developed slightly longer lists of colleges, but the types of institutions under consideration remained fairly constant. Still in this penultimate year, many students became more active in college information gathering and sought the advice of parents, family members, peers, teachers, guidance counsellors and college admission officers. Also during the junior year, cost of attendance became an important factor in their search process. During the senior year (final year of high school), the influence of teachers, peers and counsellors seemed to replace that of parents and other family members. The types of institutions that students considered remained relatively stable throughout the high school years.

As in the case of predisposition, parents continued to exert influence on student college choice, particularly during the early stages of the process, by setting restrictions on cost and proximity (Welki & Novratil, 1987; Litten, 1983). Researchers found that others − counsellors, teachers, peers and college admissions' officers − were influential at the point where students formed their particular 'consideration sets' (the set of colleges they might want to attend), but were less influential when students were reaching final decisions (Chapman, 1981). Kotler & Fox (1995) reported that students in the early stages of the college search sometimes formed images of schools based on limited information that strongly influenced the later stages of their selection process. However, students' decisions regarding which colleges to attend were

ultimately based on specific information about the college academic programs, tuition, cost, availability of financial aid, general academic reputation, distance from home, size and social atmosphere (Stewart, et al., 1987; Chapman & Jackson 1987).

The search stage, while complicated, usually achieves the desired goal. However, in some cases students do not always use the information gathered in the search stage in a completely rational manner. Very often, students and their families do not understand all the factors involved in college evaluation. This may lead to dependence on other individuals, including high school counsellors and admissions representatives. A non- complete search may limit a student's options and eliminate potentially excellent college choices (Hossler & Gallagher, 1987). Hossler & Gallagher (1987) argue that this is the essential phase for colleges to examine when looking to expand their pool of applicants.

The second stage ends when the students have decided on the colleges or universities they will apply to and have completed the applications for those respective institutions. After submitting these applications to their top choices students must wait to learn which colleges have accepted them (Paulsen, 1990). At this point, the student enters the final stage of the college selection process.

2.7.3 The choice stage

The final stage of the college choice process is the choice stage. At this point, students have been notified of their acceptance into particular colleges and universities and ultimately, the student will enrol in one of these foundations (Weiler, 1994). Students make a decision to choose one of these based upon the institutional characteristics that are most important to them and on their own personal characteristics (Paulsen, 1990). Often, this choice process is very complicated. Students must react to a wide variety of information received in a multiple number of ways (Maguire & Lay, 1981). Students have different approaches to making their ultimate decision (Matthay, 1989; Paulsen, 1990). They compare the academic and social attributes of each school that they have applied to and seek the best college to provide them with the greatest number of benefits (Hossler et al., 1999).

When the student receives acceptance letters granting admission and finally selects an institution to attend, the process is considered finalised. However, for some students, the choice stage will end by deferring their admission to a later time. This deferred enrolment may be due to financial problems or some other change in the student's personal life which makes it difficult to pursue higher education (Hossler & Gallagher, 1987; Chapman, 1986).

What is not so clear about this last stage are the details associated with that school. For instance, Zemsky and Oedel (1983) revealed that students most

likely to attend a private institution have parents with higher educational levels, higher academic achievement and higher educational aspirations. Tierney's (1984) work showed parental education and student academic aptitude to be positively correlated with attendance at private institutions whereas Zemsky and Oedel (1983) pointed to family income. Rosenfeld and Peng (1980) found that females are more likely than males to attend private institutions. Student academic characteristics are also important and positively correlated with interest in highly selective institutions. Characteristics such as academic aptitude (Hearn, 1984), academic achievement, educational aspirations (Zemsky & Oedel, 1983), and finally, attendance at college preparatory high schools (Jackson, 1978) are all positively correlated with the choice of highly competitive schools.

Students must certainly compare and contrast institutions within the choice set, but what (if anything) they use as a basis for comparison is not always clear. In consumer behaviour, this is what is often referred to as the 'buyer's black box'. The 'buyer's black box' is made up of characteristics that influence how the buyer perceives things within the decision process itself (Kotler & Armstrong, 2006). If marketers or admissions' administrators could decode the buyer's black box, they could begin to comprehend the rationality (or irrationality) of the college decision process. Once they have an understanding of the process, they could adjust their behaviour and thereby better match the decision needs of the potential students.

The conclusions about the models and theories for student choice are as follows:

- Student choice must be considered a process of cumulative decisions rather than a one-time decision. The stages include the formation of college aspirations, searching for an institution and program, applying, enrolling, and then persisting, switching or dropping out;

- Student choices involve many complex decisions and many factors that impact the direction of the final choices made;

- Studying the impact of one explanatory factor on college choice behaviour cannot be done in isolation but must be analysed in conjunction with (or controlling for) a whole set of influences;

- Models that integrate the sociological and economic perspectives better explain student choice than the models built around one perspective;

- Most of the student choice literature focuses mainly on the decision to enrol in higher education, what institution or program to choose and whether to stay in college or drop out.

2.8 College Choice Factors

As the review of the literature indicates, there are a wide variety of influential factors in the search and choice phases. These factors are divided into two broad categories: those that are controllable from the standpoint of the college

and those that are not (Kellaris & Kellaris, 1988). Chapman (1981) suggests that student college choice is influenced by a set of student characteristics in combination with a series of external elements. These factors comprise: college characteristics, sources of influence and the institutions own efforts to communicate with prospective students and their families. As a result of these influences, college-bound students will decide upon one or more post-secondary institutions to which apply and ultimately attend.

2.8.1 College Characteristics (Factors)

Academic Quality

The academic quality of a school is one of the most influential institutional factors in the decision to attend a specific college or university (Seneca 1987; Stewart, 1987; Terkla, 1986). Litten & Hall (1989) found that college rankings and admission rates are the best indicators of quality for both students and parents. In a study by Rickman & Green (1993), academic quality was a central factor in the college decision-making process for students. However, many different items contributed to the area of academic excellence. They included academic strength in specific programs, the overall academic reputation of the school, and the perceived quality of the student community. In a study by Manski & Wise (1983), academic quality was found to be the most important determinant in the search and selection stages. Students

would prefer to attend a college with highly reputable programs that will conceivably lead to high-paying jobs (Krakowski, 1985).

Researchers have found a positive correlation between college quality and attendance (Litten & Hall, 1989; Manski & Wise, 1983). Kealy & Rockel (1987) surveyed a sample of 1,424 applicants accepted at Colgate University. The respondents were asked to rate the quality of several factors relating to the college. Using regression analysis, the researchers suggested that there are admissions activities that can be altered or added that will increase the perception of college quality to prospective students.

Institutional Image/Reputation

Institutional image or reputation has a tremendous effect on college choice. Extremely persuasive in the college search and selection process, college reputation, is a powerful influence on potential students (Straus & Van De Water, 1997; Adebayo, 1995; Sevier, 1992; Murphy, 1981). Many students make their search and choice decisions based on institutional image or reputation (Sevier, 1994). Sevier (1986) concluded that the reputation of a college was the single most important controlling factor in a student's college decision and academic reputation was ranked as one of the top three enrolment factors across all institution types in a study by Noel-Levitz institution in Fall 2006 *(Noel-Levitz, 2007)*.

Most students value an institution's reputation not necessarily because it represents a better education but because they think a degree from that institution will give them a better chance of achieving their post-graduation plans (Sevier 1987). However, in some cases, students are more interested in the availability of specific academic programs and the reputation of such programs rather than in the general reputation of the institution (Sevier & Kappler, 1997). Finally, it must be noted that students do not necessarily choose institutions with the highest levels of prestige (Grace, 1989). They also select institutions where they think they will fit into the social and academic life (James et al., 1999). Thus, reputation may be linked to prestige and tradition, but it may be a reputation of elitism or for being old-fashioned, which may not be positive (Grace, 1989).

Academic Programs

Erdmann (1983) and Sevier (1994) found that the availability of specific academic programs was the single most important factor in the college selection process. Litten (1982) also found that academic program options were a significant influence to prospective students. Students, then, are most interested in a college because of a specific major yet one with the required recognition (Sanders, 1986). The attractiveness of a particular college tends to increase when the curriculum offerings are greater (Bishop, 1977; Kohn, 1976) and the availability of a preferred major is a key college choice characteristic (Sevier, 1994). Recently, a study by Monster Worldwide incorporation,

revealed that the availability of students' intended major was the most important factor in choosing their future university *(Business Wire, 2007).*

Faculty Members

King, Kobayashi & Bigler (1986) found that an important motivator for student college choice were the college faculty members who made strong impressions on prospective students. These faculty members demonstrated competence and knowledge in their respective academic fields. Additionally, when a faculty member individually contacts a potential student, this attention is often a positive influence regarding the college search and choice process (Hossler, Bean & Associates, 1990). King et al.,. (1986), in their study on factors that influence student perceptions in choosing a school, concluded that the reputation of the institution's faculty is of utmost importance to students. Finally, faculty interaction with students during the admission process is an important element, as the involvement of faculty sends important messages to both the parents and the students about the experiences that the students will encounter when enrolled (Hossler et al., 1999). However, it is questionable whether or not prospective students are in a position to evaluate the quality of academic staff (Zeithaml, 1981).

Campus Environment

Research indicates that campus environment factors such as friendliness and the social atmosphere of a campus plays a significant role in the college choice process (Sevier & Kappler, 1997; Kealy & Rockel, 1987).

Campus appearance, atmosphere and physical setting as well as convenient location are cited as important characteristics to potential students (Absher & Crawford, 1996; Galotti & Mark, 1994; Yang & Reyes, 1987). Domino et al.,. (2006) have demonstrated that the location of the college is important, but what is around the college is also very crucial. Distance from home, location, size of the college or university and campus/community environment are also influential factors in choosing a school (Wanatt & Bowles, 1992; Astin, 1965). The size of the campus is often an important factor to potential students. Some students prefer a smaller campus with personal attention while others look for a large college or university with more anonymity. (Absher & Crawford, 1996; Erdmann, 1983). Finally, in a study by Henley & Rogers (1997), the friendliness of a college campus was an impressive factor for potential students. It must be noted that high calibre students place more emphasis on advanced campus facilities and activities and not on location of campus (MacDermott, Conn & Owen, 1987).

Campus culture and activities

Many researchers found that campus culture and the social activities of the institution are key criteria in the decision to attend a particular institution (Cullen & Edgett, 1991; Grace, 1989). Campus activities such as cultural and athletic events are useful for influencing students in the search and choice stages (Dortch, 1997; Weiler, 1996). Moreover, Litten (1982) found that participation in campus clubs and activities as well as outdoor programs and recreation were significant leverages for a prospective student.

College campuses, like individuals, have unique personalities. The characteristics that make a college unique have an important impact on a potential student's college choice process. These cultural values explain existing behaviour and the environment that pervades at an institution (Hossler, 1984). Some colleges consider these values to be at the centre of all activities and continue to reinforce these aspects (Boyer, 1997). Cultural values have a vital influence for some students, and many students are influenced by a college's commitment to cultural values and this reputation alone may be a significant factor in decision making (Hill, 1995).

Educational Facilities

Educational facilities such as classrooms, laboratories and libraries are important in a student's selection of a college or university (Straus & Van De

Water, 1997; Absher & Crawford, 1996). The quality of academic teaching facilities was also rated as one of the most important factors influencing the college decision process (Sevier, 1998). Non-academic facilities such as parking space, leisure and sport facilities are also adding value to the institution (Shostack, 1977).

Price et al. (2003) found that learning and teaching facilities, most markedly those of library and technology, have a great impact on the student college choice. Moreover, Tackey and Aston (1999) found that accommodation and sports facilities were of lesser importance when compared to teaching facilities.

Cost and Financial Aid

Cost and the availability of financial aid have also been shown to affect the probability of enrolment (Moore, 1991). The amount charged does make a difference in college selection and this fact needs to be acknowledged when establishing pricing policies (Leslie & Brinkman, 1987). Expense has been cited as one of the major reasons why students did not attend a particular institution or college of their preference (St. John, 1990) and cost is a factor that eliminates some institutions from the choice set (Choy et al. 1998; Weiler, 1996). Johnson, Steward & Elberly (1991) found that 80% of students surveyed felt that cost was a major factor to consider during their college choice decision. Recently Domino etc. (2006) found that today's students are interested in a college that will help them financially regardless of who is

paying. The institute of employment studies surveyed over 20,000 students applying to UK universities and found that price was a very significant element that influenced the choice process (Tackey & Aston, 1999). In addition, as a result of the newly introduced higher fees in England, there seems to be a greater tendency for students to consider more carefully economic factors such as job opportunities to supplement their incomes, accommodation costs and family home proximity as a fall-back in times of distress and financial difficulty (Foskett et al., 2006). Further, Paulsen (1990) found that colleges became less attractive to students when expenses were higher at those colleges. Finally, Maringe (2006) noted that rising fees in higher education may result in more denounced consumerism behaviour by applicants and the issue of 'value for money' may begin to become a major part of applicants' decision making.

Noteworthy are the findings of Heller (1997), who concluded that low-income students are sensitive to tuition changes but that higher-income students are almost perfectly price inelastic. Kane (1995) added that increases in net cost over time are related to decreases in enrolment rates for lower-income students, but that they did not constrain enrolment for more affluent students. Middle-income students also seem to have reached a price threshold, particularly in the private sector (Campaigne & Hossler, 1998).

Additionally, the relationship between financial aid and the college choice stage of selection is complex (Hossler et al., 1989). Baksh and Hoyt (2000) found in

a study conducted at the University of Utah that students were more than twice as likely to enrol when they were offered merit-based scholarships. The availability of financial aid was found to be a strong determinant of the college choice process (Hossler et al., 1989; Manski & Wise, 1983). Though, the effects of aid on students' choices were not uniform or consistent. Some researchers found that receiving aid, rather than the amount offered, is what most influenced a student's decision (Jackson, 1978). Other research showed that simply providing financial aid to students was not enough to influence their selection (St. John, 1990).

In a study of more that 2,500 college-bound students, financial aid was found to influence positively student college choice (Somers & St. John, 1993). As a result, students who receive financial aid awards are more likely to enter college (St John, 1991; Jackson, 1988; Manski & Wise, 1983; Litten, 1982). Findings by Leslie et al. (1977) and Fenske et al. (1979) indicate a strong link between financial aid and choice as well. With rising tuition costs, the financial aid available to prospective students has become increasingly important to students and their parents as they finalise school choice decisions (Cose, 1998). Thus colleges need to be thoughtful with regard to cost and financial aid since these pricing issues have a great impact on how students seem to choose among colleges *(Noel-Levitz, 2007).*

Employment opportunities after graduation

Students are often attracted to post-secondary education because of the career opportunities it may provide (Sevier, 1998; Gray, 1996; Adebayo, 1995). Prospective students have a reasonable level of knowledge about their career attainment possibilities (Powlette & Young, 1996), and they use this knowledge to select institutions that can enable them to achieve their aspirations (Little et al., 1997; Wiese, 1994). Paulsen (1990) states that students often make college choices based on existing job opportunities for college graduates. Students are interested in outcomes, and they are influenced by what graduates are doing as well as the contributions that they are making to society (Sevier, 1997). A majority of students enrolling in institutions nominate potential career outcomes as a reason for choosing a particular institution (Chapman, 1993). In addition, students are considering placement rate as part of their search and choice process, wanting to be well prepared to compete in the marketplace. Finally, career opportunities associated with higher education exert the greatest influence in selecting a university (Maringe, 2006).

2.8.2 Sources of Influence

Kellaris & Kellaris (1988) noted the important role significant others play in influencing student college choice decisions. In selecting a college, students are strongly persuaded by the comments and advice of others, such as their friends and family. The influence of these groups operates in three ways: their

comments shape the student's expectation of what a particular college is like; they may offer direct advice as to where students should go to college and in the case of close friends, where the friends themselves go to college will influence student's decision (Chapman, 1981).

Marketing theories suggest that personal influence carries greater weight in specific situations where the product is expensive or the purchase is risky and infrequent. Accordingly, in these situations buyers are more likely to seek information and recommendation from others (Kotler, 1994). Among various sources of information and influence, parents are frequently identified as the primary influencers of college choice, followed by friends, high school counsellors and teachers and college admission representatives (Broekemier & Seshadri, 1999; Rosen et al., 1998; Zivic, 1989). A national study in the U.S. of more than 7,000 college-bound students found that over 80% of high school leavers say that they first learned of their enrolling college from a third party (i.e. friends, classmates, word-of-mouth, family members, high school teachers) while only two out of ten seniors say that the college itself contacted them directly (i.e. mailed materials, college fair, publications, or meetings with an admission counselor) *(Business Wire, 2004).*

Parents

Most parents are involved in the college search and decision process to some degree and often are a source of significant influence (Sharp et al. 1996; Buford, 1987; Sevier, 1986; Litten, 1982).

It appears that parents play a strong but selective influential role in the search and selection phase of college choice (Kealy & Rockel, 1987). Parental influence is particularly strong at the beginning of the search process, when information about numerous institutions is accumulated prior to applying to a few colleges and universities (Sanders, 1986). Welki & Navratil's (1978) study shows a strong relationship between parental influence and choosing to attend a particular college. In a study by Stamats Communication, 70% of students said that parents were the number one influence on their decision of where to go to college (StamatsStats, 2002). Students and parents tend to develop similar college preferences. Often, but not always, student and parent individual consideration sets are blended into one single choice set. This choice set determines the institutions to which a student submits applications for admission (Zemsky & Oedel, 1983). In the decision to enrol in higher education, Chenoweth & Galliher (2004) identified certain family factors two of these were family as a resource provider and family members as role models.

Other researchers believe that parental sway in the college choice process is diminishing. In a study conducted by Boatwright, Ching & Parr (1992), parents were found not to have the same weight on their children's decision to attend a college as they did ten years earlier. They concluded that students are more likely to be influenced by their friends than any other factor. Similarly, Greer (1991) found that parents did not strongly influence their child's decision to attend a particular college. Only 16% of the students surveyed classified their parent's role as one of high influence. While parents may well have more influence than most people, Greer's finding indicates that the college choice is the student's decision.

As a final point, the parents of the Millenials have been described as 'helicopter parents' due to their tendency to actively participate in their children's decisions and actions. The college choice process of these students is greatly influenced by their parents' preferences, desires, needs and financial support (Howe & Straus, 2003)

Friends

Friends can also play a significant role in the college choice process. Students who learn of a college from friends are nearly four times as likely to apply and twice as likely to enrol (Dehne, 2002). Comments from friends will influence students' decision, especially in the case of close friends who are attending or

have attended a particular college. First year college students report that the comments and college choices of their friends are most important in their own college decision (Chapman, 1981).

Adebayo (1995) and Sevier (1998) determined that friends were one of the major information sources that affected a student's college choice and that students are reluctant to choose a college that may elicit negative response from friends.

High School teachers

High school teachers appear to play a very important role in the student college choice for post-secondary education and are very influential players during the search and the choice stages (Stewart & Eberly, 1987).

Faculty who expressed an interest in a prospective student and demonstrated competence and knowledge in his or her field have been found to have a positive impact on a student's enrolment decision (King, Kobayashi & Bigler, 1986).

High School counselors

High school counsellors can have a strong impact on student search and choice processes (Hossler, 1998). Further, Sanders (1986) found that high school

counsellors often identified factors that had been missed or not understood by students during the college search and choice process. Also, Johnson et al., (1991) found that the majority of high school students use the counselor as source of information during the college choice process. On the contrary, Eliophotou (2002), concluded that career counsellors were rather insignificant both as a source of information and influence. While there is not a consensus on the magnitude of the influence that high school counsellors hold on the opinions of prospective students on college choice, it is clear that a significant number of counsellors do exert some influence in this area (Espinoza et al., 2002).

Current students and Alumni

Current students and alumni of colleges and universities appear to have significant influence on prospective students and they are impacting the college choice process, either very positively or very negatively (Kealy & Rockel, 1987). Bruwer (1996) concluded that students select institutions where they will fit into the social profile of the student body and other researchers found that the quality of the student body is of utmost importance to students in choosing colleges (Dehne, 1993; Grace, 1989). Pagano & Tartla (1991) concluded that word of mouth based on personal experience of current students or alumni can be the most effective recruitment tool. About 35% of international students attending U.K. universities have been influenced by another student who has already studied in the U.K. (Bennett, 2006). Additionally, Ingram (2005) found

that alumni have a strong interest in the reputation and future of their former colleges, as this adds value to their diploma or degrees.

Admission representatives

The amount of personal contact received from admission personnel (admission officers, agents) during the recruitment process has been surfaced as a major influence on a student's subsequent enrolment decision (King, Kobayashi & Bigler, 1986; Geller, 1982). College representatives were rated as a top influential factor in a study by Rowe (1980). These visits can be very conducive and beneficial for both the student and the admissions representative (Hossler, Bean & Associates, 1990). Another interesting finding was in a study by Litten (1982), where students with parents who possessed higher education tended to utilise the expertise of college admission representatives more in the college search and choice process than other students. Alfred (1983) believes that the direct communication of college characteristics to potential students is essential if they are to have realistic expectations of the college. It is the responsibility of the college to disseminate information to potential students through the appropriate personnel. Binsardi & Ekwalugo (2003) suggested that universities should try to develop network relationships and interactions between the university representatives and prospective students as a way of influencing the market.

These research outcomes are very important to college admissions' officers. Previous research in the consumer behaviour literature suggested that providing decision-makers with appropriate information is not enough for marketing success. Other people who influence purchase decision need to be taken into account as well (Broekemier & Seshadri, 1999). Indeed, this applies equally to higher education. Given the importance of various roles in the college decision, institutions of higher education should identify who are the primary influencers on their target prospects and then find ways to reach those people in order to positively affect the student's college choice.

2.8.3 Recruitment Strategies and Programs

Other forces such as school recruitment and marketing strategies help guide prospective students' college decisions, particularly in the search and choice phase. Of considerable importance to college policy-makers is the relative influence of various admissions programs and activities in directing students and parents' perception of quality (Kellaris & Kellaris, 1988). Student perceptions of quality are significantly influenced by information from a wide variety of sources such as publications, advertising and recruitment activities and programs (Parker et al., 1989).

Chapman (1981) points out that colleges, in their zeal to recruit students, persist in the belief that they can affect student choices by merely modifying their institutional descriptions or the targeting of their recruitment. He implies

that colleges should improve the information they make available to prospective students to help improve student selection. Furthermore, many students enter college with unrealistic expectations of the college environment. Hence, it is important to supply the potential student with accurate information. This is also supported by Bean (1982), who feels that colleges should have outreach programs for parents and students. These programs should make parents and students aware of college reality.

Lenning & Cooper (1978) also illustrated the need to provide adequate information to prospective students. They refer to a number of studies that showed that students would not have attended or did not attend certain institutions due to the lack or clarity of information they received. Not providing accurate nor comprehensive information to students can result in an unwise choice of institution or programs to study and, consequently, low student morale, high attrition rates and future recruiting problems.

Ramist (1981) also supports the notion that early awareness of college characteristics is important. A student's dissatisfaction discovered after enrolment can lead to student displeasure with the institution. Therefore, colleges should consider providing all information deemed necessary for an informed decision, including accurate cost projections; expected student performance; current student and faculty perceptions; a complete description of student service; a description of student life; a description of all academic

options and the assessment by graduates of the relationship between their education and job requirements.

While institutions of higher education are using many different recruiting tools to appeal to prospective students, Jorgenson (1994) insisted that promotional efforts do little to positively influence the student's college-going decision. He regarded colleges' massive recruiting efforts as an annoyance to students and argued that it is the college reputation that ultimately attracts students. Jorgenson was not alone. Senior high school students in Rosen, Curran & Greenlee's study (1998) reported that they were annoyed with tons of unsolicited information from almost every college and university. Students in the survey spent ten minutes or more on material from schools they had contacted while only spending two minutes or less on unsolicited material. In a majority of the cases, these unsolicited brochures were ignored.

It appears from the research that activities, which require the participation of the student, are perceived as more influential in the selection decision (Kellaris & Kellaris, 1988). Factors such as campus visits and telemarketing, which require students to be active participants, have proved extremely influential whereas other factors (radio, television advertisements) that did not require students to be active participants were less influential (Kealy & Rocket, 1987). In Zivic's study (1989), when asking the effect of selected marketing practices, students pointed out that both live presentations by college personnel at high

schools and on-campus visits were strong factors in selecting a college. Personal visits by college representatives and college tours were also ranked relatively high. In contrast, those nonpersonal communication devices (i.e. brochures, catalogs) were not highly rated.

Therefore, information provided and communicated to the student by the institution is of the utmost importance. Institutions, through their literature communication and marketing activities can help students make the desired college choice. Sands & Smith (1999) claim that marketing and communication are important strategies to improve college and university reputation and image. What follows is a discussion of some of the marketing/recruiting strategies used in the area of higher education.

Campus Visit

Perhaps no other recruitment strategy yields as much weight in the college selection process as the campus visit. It has been found to have considerable impact and influence since it has the greatest effect on student perceptions of college quality (Mathay, 1989; Kellaris & Kellaris, 1988; Chapman, 1981). The result from several studies ranks the campus visit as the most critical source of information for the college-going decision (Stoner & Lincoln, 2000; Rosen et al., 1998; Jorgensen, 1994;). The campus visit is widely regarded as a source of unbiased information; some even say it is the only real predictor of enrolment

(Small, 2000). The empowerment of the campus visit is that it provides a unique opportunity to give tangible evidence of the educational experience offered by the college (Yost & Tucker, 1995). Campus visits allow students and parents to actually see and sense the campus appearance, on-campus accommodation, school culture and the community environment around the college. In an annual study of approximately 10,000 college-bound students, roughly 70% of the students surveyed regarded campus visits as the most useful approach in helping them make their college selection (Small, 2000).

Publications

The prospectus and other college publications sent to prospective students appear to have significant sway when formulating perceptions about colleges. Publications are the recruitment device that most students prefer and the appearance of the publication is vital to its success (Sevier, 1987). University publications prove a powerful source of information, important in defining and shaping student opinion (Cain & McClintock, 1984). College published materials such as the undergraduate catalogue, financial aid brochures, and others are very important sources of information and should be easily available to students (Sevier, 1997).

Galotti & Mark (1994) found that students make use of different college materials and that the use of these materials increases and becomes more meaningful during the search and choice stages. Hite & Yearwood (2001)

found that post-secondary institutions make an effort in their brochures to portray the quality of education available at their schools.

However, the effect of promotional materials on college choice has gotten mixed. Armstrong and Lumsden's (1999) study indicates that university promotional materials do not influence student decisions. Conversely, in Hossler and Foley's (1995) study, student college choice is affected slightly by guidebooks. According to a 1985 Carnegie Foundation Survey, college promotional material is the second most important information source, behind only campus visits, for potential students (Carnegie, 1986). Another survey conducted by Kellaris and Kellaris (1988) reveals the same finding.

Mortimer (1997) posited the necessity of clear communication on promotional written materials. He argued that the language used in these materials should be simple and clear enough for any prospective student to understand. Finally, Hesketh & Knight (1999) and Gatfield et al. (1999), basing their studies on the possible match or mis-match between choice factors of students and the information provided in college publications, have concluded that colleges frequently failed to give sufficient and accurate information.

Young (1991) declares that college recruitment can be improved by telemarketing, and Miles (1988) indicates that utilising telemarketing to recruit admitted (but not yet attending) students is essential. Furthermore, Johnson & Sallee (1994) argue that personalised telephone calls are significant in recruitment. Rosen, Curran & Greenlee (1998) maintain that personal contact is an effective means for schools to influence student college choices. Brown (1996) claims that colleges should expand their use of the Internet to recruit potential students by implementing web pages, and Poock and Lefond (2001) found that prospective students consider the content of a college Website to be of the greatest importance. Gray et al., (2003) concluded that the web was one of the most far-reaching sources of college information. Today, more than ever before, Websites and Internet have become a salient communication vehicle for enhancing institutional image and the perception of quality among potential students and parents. A study conducted by Stoner and Lincoln (2000) reveals that 78% of 12,000 prospective students surveyed use college Websites for their college search. The web ranks third after the campus visit and personal contact as the most important source for college searching. While visiting a college Website, although they expect visual appeal, students' major concerns are admission, financial aid and course information. The Website is able to change the prospective student's perception of the college, positively or negatively, and though the use of webs may not offer significant advantages in the marketplace, not providing them will be disadvantageous (Sevier & Kappler,

1997). Colleges that have reorganised and rebuilt their sites to meet the needs and expectations of external audiences rather than those familiar with the institutions, have reaped in major benefits (Stoner, 2004). For instance, a redesign of the Website of Redlands University has resulted in 27% more visits to the admission pages and encouraged visitors to spend 25% more time engaged with the site.

College advertising

Students are influenced by a wide variety of advertising in various media. These vehicles include newspaper, press releases, radio, television and outdoor advertising; college marketing through the media has grown tremendously in the last ten years (Newman & Couturier, 2001). Jugenheimer (1995) contends that advertising is very seminal for promoting institutions of higher education. Television and radio advertising have been shown to be particularly effective in building institutional image and visibility, notably in specific geographical areas (Hossler, Bean & Associates, 1990). University ads on television should be simple and they should focus on creating an image so as to help a student make the right choice (Kelly, 1999).

Relationship Marketing

Maringe (2006) found that traditional promotional activities (e.g. advertising) do not have a great influence on the choices of students. He urged universities to

refocus their promotional strategy to reflect the real concern of students, suggesting that universities may need to consider other ways of promotion. Bennet (2006) has indicated that one university has implemented a student ambassador program in order to improve its recruitment efforts. As a result of this initiative, the university has increased its enrolment of new students by four times. Hemsley-Brown (1999) made a study of 16-year-olds at five schools in southern England, and the result showed that colleges' word-of-mouth marketing activities have a positive impact on student college choice. Additionally, Elliot and Healy (2001) support this study with such findings that word-of-mouth is the best method for recruiting students. Finally, Binsardi and Ekwulugo (2003) indicated that for universities to succeed, relationships needed to be developed between students and the institution.

It is evident from the preceding that marketing activities can play an important role in the recruitment and retention of students as the process of recruitment and retention are interrelated. A good recruitment program is in essence a good retention process, while a good retention process is a good recruitment tool. In other words, matching students' attributes with institutional attributes will contribute to student satisfaction with the institution. This, in turn, will reflect positively on the institution as satisfied customers relate their positive experiences to others.

2.9   Summary

This chapter provided an overview of the college choice behaviour as it is applied in the process of students' college selection.   Major college choice models were discussed:

1. Economic Models (also called econometric models), which are rooted in the assumptions that prospective students are rational decision makers who make careful cost-benefit analyses

2. Sociological models (also called status-attainment), which are based on sociological theory that students choose according to what they think is expected from them

3. Combined models (also called information processing models), which combine the ideas of the economic and sociological models.

Factors that influence students' decision at the various stages of the college choice process were also reviewed in this chapter. These factors are composed of college characteristics, sources of influence and recruiting strategies and programs. A summary of the various factors is provided in Figure 2.6.

College characteristics (factors)	Sources of Influence	Recruitment strategies (marketing programs)
• Academic Quality • Institutional Image • Academic Programs • Faculty • Campus Environment • Campus culture & activities • Educational Facilities • Cost & Financial Aid • Employment opportunities	• Parents • Friends • High School teachers • High School counsellors • Current students • Alumni • Admission representatives	• Campus visit • Publications • Telemarketing • Websites/Internet • Advertising • Relationship marketing

Figure 2.6: Influential factors

Marketing in higher education is an important concept in research of college choice theory. As fierce competition intensifies among institutions of higher education, marketing has proved to be of great strategic significance for the long-term survival of these institutions. Various elements of the marketing concept that are directly related to or affected by the college selection process were also discussed.

Chapter Three - Research Methodology

3.1   Introduction

In Chapter two, the examination of the existing knowledge in the field of college choice behaviour was examined with particular emphasis on theories and models of college choice. This chapter focuses on detailing the research methodology used for answering the research questions as outlined in section 1.5 (p. 13). The chapter has the structure outlined below.

- Research design

- Research questions

- Population and sampling procedures

- Instrumentation, which includes the development procedure, the questionnaire objectives / content and the pre-testing procedure

- Pilot study

- Data triangulation

- Data collection procedures

- Protection of research subjects and ethical considerations

- The techniques for data analysis

- A summary of the chapter

The purpose of the chapter is twofold. It serves to provide:

1.   a background of the methodology and research procedures, and

2. a sufficiently detailed description of the methodology to facilitate future studies.

3.2 Research Design

The aim of this study is to identify factors that influence students to select Cyprus College. In addition, the research findings as well as the primary information that will be collected for the purpose of the study will greatly assist and enhance the process of developing the strategic student enrolment, recruitment and marketing plan of the college. The results will assist enrolment management to better understand the effects of college choice factors as these relate to the college selection process of prospective students. Through a more comprehensive and in-depth understanding, gaining insights of those factors influencing college choice, enrolment managers will be in a better position not only to develop targeted marketing strategies for the prospective college target groups but also to better establish the market position of the college.

The extant literature related to attendance at local colleges is scant. Because of this lack of information, a descriptive survey research design is chosen for this study. Zikmund (2003) states that descriptive studies may be useful to provide general information about areas where little research currently exists, to describe characteristics of the population and to reveal consumer behaviour.

This approach may provide the basis for extending further the research in this area. In addition, the study utilises a combination of qualitative and quantitative frameworks. As Nachmias & Nachmias (1992) have suggested, the combination of both approaches provides a strong basis for the development and implementation of a research design and ultimately allows the application of a triangulation design (as explained in section 3.7) for the purpose of this study.

3.3 Research Questions

The following research questions were developed as a result of the major themes that emerged from the review of the literature on college choice.

1. When do the students develop their plans for university/college education?

2. What college characteristic choice factors are considered important to students in their selection of a college?

3. What information sources are considered influential to students in their selection of a college?

4. Who influences students in their decision to select a college?

5. What recruitment strategies and programs are considered most influential to students in their selection of a college? Determine whether these are effective and examine the implications of these for Cyprus College.

6. What is the relationship of fixed college characteristics, sources of influence, recruitment programs/strategies to students' 'rating' of college choice factors?

3.4 Population and Sampling Procedures

The target population for the study was all native freshmen (first year students) students pursuing an undergraduate degree at Cyprus College. The total number of native freshmen students for the Fall Semester 2006 was 495 students. Since these students would have relatively recently completed the college selection process, it was inferred that they would be the most appropriate sampling frame due to their knowledge, familiarity and recent experience from engaging in a college choice process.

The questionnaires were distributed mainly in all English courses offered by the college during the Fall Semester 2006. Based on the internal academic regulations of the college, all students have to complete at least the top level of the required English courses before they are awarded their degree. In addition, through advising, freshmen students are directed and encouraged to enrol in English courses from their first year of studies. Moreover, a number of additional first year courses (classes) were selected so to include in the sample students enrolled in some programs such as Education. These students are not required to attend English from the first year. The sample was chosen with the assumption that the majority of the students would be enrolled in only one of

the classes surveyed. However, to prevent the possibility of obtaining duplicate data, special instructions were provided prior to the implementation of the survey indicating that students should only complete the questionnaire once. Special instructions were also provided so as to avoid students who were not part of the defined population. Questionnaires were distributed to students during the normally scheduled classroom times. The sample covered classes meeting in the morning, afternoon and evening. Timing of the survey administration was also very important. If the survey was to be administered late in the semester, students may not be as willing to complete the instrument due to the volume and intensity of their course loads. Survey administration early in the semester appeared to be the most appropriate in order to receive timely information with the most directed student attention.

3.5   Instrumentation

3.5.1 Development of the Survey Instrument

A **survey questionnaire** was used to collect the data for the study. Survey research is used to find out information about a population when this information is not available in another way. It also tries to discover relationships among the elements of the survey (Schmidth &Hollensen, 2006).

From the researcher's perspective, a survey questionnaire provides a number of advantages. Relatively inexpensive to produce and print, it is also easy to administer and provides anonymity to the respondents (De Vaus, 1991). Using

a questionnaire requires less time, is less expensive and permits collection of data from a large size of sampling elements as compared to an interview (Gay & Arasian, 2000). Furthermore, survey is one of the best means to investigate attitudes, beliefs and behaviour (Weisberg et al., 1996).

The survey instrument utilised was a self-administered questionnaire, '**Factors influencing Student College Choice' (Appendix B).** It was developed by the researcher based on a review of the literature on college choice, the researcher's personal experience as an administrator in the field of college education and information received from a focus group.

3.5.2 Focus group

In addition to the literature review, a focus group was also employed in this study to gather information so as to complement the development of the survey instrument. The focus group was an organised interactive group interview to gain additional understanding about college choice factors directly from the students involved. The focus group study not only supplemented the data used in the design of the questionnaire but also served as data triangulation. Schmidt & Hollensen (2006, p.63) define a focus group as 'a research technique that collects data through group interaction on a topic or topics'. Compared to individual interviews, which aim to obtain individual attitudes, beliefs and feelings, focus groups elicit a multiplicity of views and emotional processes within a group context. Because of the group dynamic,

focus groups provide an opportunity for effective feedback in a relatively short period of time. The focus group method allows probing for more in-depth responses and opinions; provides flexibility and offers the opportunity to go in different directions if desired; provides high validity and generates quick results (Gibbs, 1997). As Morgan (1988) described, focus groups can be used as a complement to other methods especially for triangulation and validity checking.

In questionnaire design, focus groups help to determine whether the proposed survey topic or data collection procedure is feasible. Therefore, they are especially useful in the early stages of questionnaire development (Bercini, 1991). Focus groups are seen as a useful starting point because they can provide a means for exploring the ways in which potential respondents think and talk about objects and events, for developing initial survey items and for determining the best approaches to response or scale alternatives.

The focus group utilised for the purpose of this study consisted of 8 sophomore and junior students and was conducted at a time convenient to the participants; the chosen venue was a conference room where a comfortable and relaxed atmosphere could be easily created. The researcher acted as the moderator to control the flow of the discussion, informing the students that their participation was entirely voluntary and that their confidentiality would be protected. The researcher began the focus group discussion by explaining its

purposes, laying down some basic ground rules to encourage everyone to participate in the discussion.

The focus group experience provided a forum for participants to discuss personal experiences in an open environment, allowed for spontaneous interaction among participants and resulted in an abundance of qualitative information proving very useful in the questionnaire design. The information outcome from the focus group is provided in **Appendix C**. Feedback from the focus group reinforced the findings of the literature review. However, some factors identified by the focus group, and not cited in the literature review, were incorporated into the final questionnaire. Such factors included the college education fair, organised visit to the College through high school and the possibility to transfer abroad.

3.5.3 Questionnaire objectives and content

- To identify those college characteristics perceived by students as important and unimportant in the college choice process. It is imperative to investigate what students consider important when making the decision to attend a particular college since students' perceptions and opinions drive their decision-making process (Litten, 1982).

- To determine the sources of influence in students' college decision-making process. In selecting a college, students are strongly persuaded by the comments and advice of others such as family and friends. Kellaris & Kellaris (1988) noted the important role significant others play in shaping students' college choice decisions.

- To determine the level of influence that particular informational messages, recruitment programs and strategies have on students' college selection process. Students' perceptions are significantly influenced by information from a wide variety of sources such as publications, advertising and recruitment activities and programs (Parker et al.1989). This information can help administrators make critical decisions about college positioning; allocate resources across the recruitment/promotional mix and provide guidance for the content of promotional materials.

The survey utilised extensively the Likert scale in responding to questionnaire questions. A Likert scale is a type of psychometric response scale often used in questionnaires, and is the most widely used in survey research. When answering a Likert questionnaire item, respondents specify their level of agreement to a statement (Nachmias & Nachmias, 1992).

Part I of the survey instrument included 7 single response questions designed to provide feedback about the plans of participants for university/college education.

Part II of the survey instrument included 20 college choice criteria found to be important in the choice for a particular college or university. The list was fairly representative of the criteria students consider in the college decision process and included academic criteria, fixed college characteristics and financial considerations. All criteria were cited in the literature review and/or were identified by the focus group as **factors** affecting college choice. The extent of perceived importance utilised a 7-point Likert scale, (7= extremely important and 1= extremely unimportant with NA representing not applicable).

Part III of the survey instrument included 12 **sources of information** for prospective students and was designed to elicit feedback on how students had been informed about Cyprus College.

Part IV of the survey instrument included 21 **influencing factors** recognised as influential in the college decision-making process. Included in the list were various recruitment programs, marketing strategies and people deemed instrumental in influencing the students in selecting a college. All factors were extracted from the literature review and/or identified by the focus group as those with input into the college decision-making process. The extent of

perceived influence again utilised a 7-point Likert scale (7 = Most influence and 1 = least influence with NA representing not applicable).

Part V of the survey instrument included 3 single-response questions designed to obtain feedback regarding current satisfaction levels of students with Cyprus College. In addition, 11 areas were included to measure the amount of satisfaction students had had during their attendance at the college thus far. Included were areas such as advising, quality of student life, financial aid, personal attention and service provided by the college. The extent of perceived satisfaction utilised a 7 – point Likert scale (7 = very satisfied and 1 = very dissatisfied with NA representing not applicable).

Part VI of the survey instrument included 3 single – response questions designed to receive feedback regarding future plans of the students, such as plans after graduation and plans for transferring to another college.

Part VII of the survey instrument included 4, single-response questions used to collect demographic data regarding the survey sample.

The questionnaire was written in both English and Greek. The Greek version was administered to the sample since Greek is the native language of the participants and most of them were not fluent in English. When the Greek version was completed by the researcher, two bilingual experts from the

department of English Language and Literature of the college, fluent in Greek and English, were asked to translate the Greek version of the instrument back into English to assure that both surveys expressed the same statements and to ensure content validity for the Greek version of the survey instrument. This process is known as back translation and could reveal any inconsistencies between the English version and the Greek translation (Zikmund, 2003).

3.5.4 Pre-testing the Survey Instrument

To improve face and content validity, the draft survey instrument was reviewed by a group of experienced admission and enrolment management administrators from Cyprus College and from other local colleges. These individuals were selected because of their extensive experience in the field as well as their knowledge in the area of enrolment management. A list of these experts is provided in **Appendix D**. The Delphi method (expert opinion) recognises that using the estimates of many experienced and knowledgeable people is better than using the judgment of a few (Schmidt & Hollensen, 2006). The Delphi may be defined as a method for developing an effective group communication process for dealing with a complex problem and/or a technique used to elicit opinions with the goal of obtaining a group response from a panel of experts, characterised by interaction with controlled feedback. The experts were provided with a draft copy of the survey instrument and were asked to review the questionnaire and indicate whether each question was appropriate and if the question should be kept, revised or deleted. Essentially, the

questionnaire designed was distributed to participants who were asked to respond anonymously. The replies were interpreted, and revised questionnaires redistributed in an effort to reach consensus about the synthesis of the questionnaire. The group of experts noted only some adjustments to the survey, consisting mostly of rewording some statements. This method of validation often results in instrument refinement (Dixon & Martin, 1991). In addition, two experts from the Research Centre of the College (to ensure that data to be collected could easily be analysed) reviewed the questionnaire for its wording, conceptual design, time frame, order of questions, layout and responses format. The feedback received from the two research experts proved very valuable and thus incorporated into the questionnaire as well. Finally, the researcher's program advisor and consultant reviewed and approved the survey instrument.

3.6   Pilot Study

The questionnaire was distributed to 13 graduate students of Cyprus College in the graduate class 'Research Methods', and they were asked by their instructor to comment on the content, layout and design of the questionnaire. Two questions were adjusted and one question was omitted as a result.

Additionally, a pilot study was conducted among 15 first-year undergraduate students. A pilot study is considered the pre-testing or 'trying out' of a particular research instrument; one of the advantages of conducting a pilot

study is that it might give advance warning about where the main research could fail or whether the proposed method or instrument are inappropriate or too complicated (Baker 1994, pp.182-183). Bell (1999, p.49) described a pilot survey 'as getting the bugs out of the **questionnaire** so that subjects in your main study will experience no difficulties in completing it and so that you can carry out a preliminary analysis to see whether the wording and format of the questions will present any difficulties when the main results are analysed'. In the words of De Vaus (1993, p.54) 'Do not take the risk. Pilot test first'.

The questionnaire was administered to pilot subjects in exactly the same way as planned to be administered in the main study, and participants were asked to comment on the instructions, language and the timeframe of the questionnaire. Feedback from the pilot study led to the rewording of three choice factors that were found to be ambiguous. Participants were also monitored to determine the time needed to complete the survey instrument. Overall, participants finished in 11 to 18 minutes with 15 minutes on average. After this ultimate refinement the instrument was considered ready for the study.

3.7 Data triangulation

The application and combination of several research methodologies in the study of the same phenomenon is known as triangulation (Denzin, 1978). Data triangulation is an effective means to reduce biases and to increase the validity

and reliability of the data collected. According to Gay and Arasian (2000, p.137), 'triangulation is a form of cross-validation that seeks regularities in the data by comparing different participants, settings and methods to identify recurring results. The aim is to obtain similar information from different independent sources. Triangulation reflects an attempt to secure an in-depth understanding of the phenomenon in question. Triangulation is not a tool or a strategy of validation, but an alternative to validation. The combination of multiple perspectives and observation in a study is best understood, then, as a strategy that adds rigor, breadth and depth to any investigation (McClintock & Greene, 1985). Through the process of triangulation, any finding or conclusion is likely to be much more convincing and accurate if it is based on several different sources of information. According to Jick (1983), methodological triangulation enhances research studies since the use of both qualitative and quantitative methods minimise and/or neutralise the prejudices and weakness of each method. Research experts argue that by combining varied observers, theories, methods and empirical materials, it is possible to overcome the weaknesses or intrinsic biases and the problems inherent in a single method.

More specifically, the current research study utilised both quantitative and qualitative methods, including a literature review, focus group, survey questionnaires and expert opinion (Delphi method).

For the purpose of this study, data triangulation was achieved through the utilisation of:

i. Broad literature review associated with college choice factors, college models and recruitment practices.

ii. The utilisation of a focus group in the process of the questionnaire design.

iii. Design and implementation of a survey.

iv. Expert opinion (involvement of experienced admissions and enrolment management administrators from different colleges).

The use of both qualitative and quantitative methods for data collection can prove to be advantageous since it enables the researcher to gain a broader perspective of the research problems and issues under investigation.

3.8   Data Collection Procedures

Before initiating the data collection process, the researcher received approval from the Dean of Academic Affairs of the College.   The approval letter is presented in **Appendix E.** The Dean informed by e-mail all faculty members of the intention of the researcher to undertake the proposed research in classes during their normal meeting times.   The questionnaire was group-distributed since it was a convenient, low cost technique for administering them.   The

researcher cooperated with three experienced researchers from the Research Centre, who were present during the questionnaire administration. They read the **'survey consent information'(see Appendix F),** explained the purpose of the research, the time frame needed to complete the questionnaire and answered participants' questions. Participants were informed that there were no risks involved in the completion of the questionnaire and that their participation was voluntary. Students were also informed that they could not be identified through the completion of the survey and that their participation would not affect their current or future relationships with Cyprus College. To ensure confidentiality, students were asked not to write any name or registration number on the questionnaires. Moreover, each questionnaire had a cover note explaining the purpose of the survey, identified the expected time for completion and assured the students of anonymity. Survey administration took place from 30th October until 8th November, 2006, in 21 classes. A total of 390 questionnaires were completed for the purpose of the study. The response rate of 78% (390/495) is considered substantial.

3.9   Protection of Research Subjects and Ethical Considerations

Participation in this study did not impose any apparent physical, psychological, social or legal risks. Participants were informed that there are no right or wrong answers, that participation in the survey is completely voluntary and that no negative consequences would occur if they refuse to participate. Items in

the survey instrument were straightforward and no attempt was made to decline participants or conceal the purpose of the study. As mentioned, approval for conducting the study was obtained from the Dean of Academic Affairs of the college, and furthermore, the study complied with the Cyprus College Research policy.

The study was conducted within an ethic of respect, for participants, of research and of knowledge. Participants in the study were informed of the purpose of the research and their consent was obtained. They were explained thoroughly the purpose, nature and duration of the proposed study. As stated, to ensure confidentiality participants were asked not to write any name or registration number of the questionnaire so supplying information could in no way jeopardise them.

Students were informed that upon the completion of the study, the results would be reported to all relevant stakeholders in order to avoid misrepresentation of evidence, data and findings. In addition, all procedures and results will be reported accurately and in sufficient detail to allow other researchers to understand and interpret them.

Finally, the researcher took into serious consideration issues and biases associated with objectivity and insider researcher.

Senge (1998) argues that the danger for an insider researcher is that he/she approaches situations with assumptions and preconceptions applicable to the home group. Such an approach will not facilitate the researcher in achieving insights and effecting change since 'thinking as usual' will only perpetuate the status quo. He contends that we need to take a holistic view of the systems in place in our lives and our organisations and to appreciate the interconnectivity of the parts within the whole. This is not an easy task if – as insider researchers – we, too, are part of the whole and may therefore lack the objectivity and sense of distance necessary to appreciate interrelationships within it. However, an insider researcher has access to the past and present history of the research arena and could utilise 'ready-made recipes' to aid his interpretations (Schutz, 1976). Such insider knowledge will enable the researcher to encourage the development of the study whilst highlighting the areas of weakness and supporting the research findings in the face of possible opposition.

Indeed, the issue of objectivity is a challenging one for researchers. Our experiences and the meanings we attribute to them are shaped by our backgrounds, the environment in which we live, the culture(s) in which we function and the people with whom we interact. Bell (1993) comments that it is an 'impossible goal' to seek objectivity but that the researcher must nonetheless strive to attain it.

The researcher undertook several actions to relieve the concerns related to the 'insider researcher' and the objectivity issues. Such actions included the following:

1) Involvement and participation of top management personnel and experienced college administrators in the process. (Participation in the development of the instrument; approval for conducting the study; explanation and presentation of results).

2) The College Research Centre supervised collection, data processing and analysis in order to eliminate any bias and misinterpretation.

3) The distribution and collection of questionnaires were handled by experienced researchers, and not by faculty members or the researcher, in order to avoid any bias associated with position authority (faculty – student relationship and administration – student relationship).

3.10 Data Analysis

For the analysis of the primary data, it was firstly coded and entered into the Statistical Package for Social Sciences (SPSS Version 15). The software package firstly allowed for the development of both frequency tables and cross tabulations. Additionally, the software package assisted in the development of the dimensional structure of college choice by employing the Factor Analysis

routine. Furthermore, the use of SPSS enabled the assessment of the overall reliability of the dimensional structure by utilising the Gronbach's alpha reliability analysis provided by the program.

3.10.1 Descriptive statistics

Schmidt & Hollensen (2006) sees descriptive statistics as the formulation of rules and procedures according to which data can be placed in useful and significant order whereas Stevens (1996) states that descriptive statistics deal with the central tendency, variability and relationships in data that are readily at hand. The basic principle for using descriptive statistics is the requirement for absolute representation of data in the form of tabular, graphical and numerical formats. It reduces data into a simpler summary and facilitates the presentation and interpretation of data.

3.10.2 Gronbach's Alpha Reliability Coefficient

Litwin (1995) noted that when a new survey is developed, it is important to test for reliability before using it to collect data from which inferences will be drawn. Litwin also suggested that internal consistency is an indicator of how well the different items measure the same issue.

One of the means widely used to assess the internal consistency of a scale is a method known as Cronbach's coefficient alpha. Theoretically stated, coefficient alpha is a measure of the hypothetical value that would be obtained if all of the items that could constitute a given scale were available, and randomly put together into a very large number of tests of equal size. The average correlation between all possible pairs of these tests is approximated by coefficient alpha (Crano & Brewer 2002). Mathematically speaking, Cronbach's alpha is the equivalent of the average of all possible split half estimates. To determine Cronbach's alpha, one must figure out all the split-half estimates from the sample – a computer analysis will do the random subset of items – and compute the resulting correlations.

The determination of alpha coefficient is simple, especially with the assistance of computer software such as SPSS, Statistica and Minitab. The formula of coefficient alpha computationally is as follows:

$$\alpha = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum_{i=1}^{k}\sigma_i^2}{\sigma_t^2}\right)$$

Where

k is the number of items in the scale,

σ_i^2 is the variance of scores on item i across subjects, and

$\sigma_t{}^2$ is the variance of total scores across subjects where the total score for each respondent represents the sum of the individual item scores.

Since coefficient alpha is a proportion, its value can vary between .00 and 1.00. The degree of internal consistency is usually considered acceptable if this coefficient is 0.75 or better. (Crano and Brewer, 2002). Hair et al. (1998) suggested that the generally agreed upon lower limit for Cronbach's alpha is 0.70, although it may decrease to 0.60 in exploratory research.

3.10.3 Factor Analysis

The procedures for factor analysis were first developed early in the twentieth century by Spearman (1904 cited by Rummel, 1970). However, due to the complicated and time-consuming steps involved in the process, factor analysis was inaccessible to many researchers until both computers and user-friendly statistical software packages became widely available (Thompson & Dennings, 1993).

Kerlinger (1973, p.659) stated that 'factor analysis is an analytic method for determining the number and nature of the variables that underlie larger numbers of variables or measures'. Broadly speaking, factor analysis addresses the problem of analysing the structure of the interrelationships (correlations) among a large number of variables (e.g. test scores, test items, questionnaire

responses) by defining a set of underlying common dimensions known as factors. Simply stated factor analysis permits the reduction of a large number of interrelated variables to a smaller number of latent or hidden dimensions.

A factor analysis usually takes place in these stages:

1) A matrix correlation coefficients is generated for all variable combination

2) From the correlation, matrix factors are extracted. The most common method is principal factors.

3) The factors are rotated to maximise the relationships between the variables and some of the factors. The most common method is varimax, a rotation method that maintains independence among the mathematical factors. Geometrically, this means that during rotation, the axes remain orthogonal (they are kept at right angles).

The analysis assumes that the measured variables are linear combinations of some underlying source factors. According to Kim and Mueller (1978, p.8), it assumes the existence of a system of underlying factors and a system of observed variables. There is a certain correspondence between these two systems and factor analysis 'exploits this correspondence to arrive at conclusion about the factor'.

With factor analysis, the researcher can first identify the separate dimensions of the structure and then determine the extent to which each variable is explained by each dimension. Once the dimensions and the explanation of each variable

are determined, the two primary issues for factor analysis – summarisation and data reduction- can be achieved.

It has to be noted that Factor analysis is always a potential candidate for the 'garbage in garbage out' phenomenon. Thus the possibility of poor results is high if the researcher indiscriminately includes a large number of variables, expecting that factor analysis will 'figure it out'. The quality and meaning of the derived factors reflect the conceptual underpinnings of the variables included in the analysis. Even if factor analysis is used solely for data reduction, factor analysis is most efficient when conceptually defined dimensions can be represented by the derived factors (Hair et al., 1998).

There are several different types of factor analysis, with the most common being **Principal component analysis and Common factor analysis**. For the purposes of this study, a decision was made to adopt **principal component analysis**. The rationale behind this decision was made after reviewing the relevant literature and considering views by leading scholars such as Nunnally (1978), Mulaik (1990), Stevens (1996) and Hair et al. (1998). This decision is supported, besides, by the fact that there are complications in the empirical application of common factor analysis and that it is preferable for the purposes of this study to consider the amount of error variance in the process of deriving to factors. Furthermore, in most social science research processes

the use of principal components factor analysis is preferred over common factor analysis (Nunnally 1978; Hair et al., 1998).

Although the two models differ, empirical research has demonstrated that in many cases both component and common factor analysis come up with identical findings (Rummel, 1970; Nunnally, 1978; Gorsuch, 1983; Stevens, 1996; Hair et al. 1998).

3.11 Summary

This study was designed to explore college choice factors that were perceived as important by native first-year undergraduate students at Cyprus College. Moreover, the study examined the level of influence exerted by college information, recruitment activities and specified groups of people in decisions for selecting a college. This chapter provided relevant information regarding the research design, such as the population and sample; the development and administration of the questionnaire and the collection, triangulation and analysis procedures of the data. It further indicated how issues of validity and reliability were addressed.

The next chapter provides an analysis of the responses from participants and provides statistical findings regarding their college choice decision-making process.

Chapter Four - Findings

4.1 Introduction

The main objective of this chapter is to report the findings of the study. Participants were surveyed during the Fall Semester 2006 about choice factors that influenced their college decision-making process. The questionnaire **(see Appendix B)** was distributed to the participants (n=390), as described in chapter three. This chapter provides an analysis of the responses from participants and outlines statistical findings regarding their college choice decision-making process. The sections of this chapter include: (a) Demographic description of participants, (b) descriptive analysis regarding the perceived level of importance of college choice factors, (c) the empirical clarification of the dimensional structures of college choice factors (factor analysis and reliability analysis) and (d) the chapter summary.

4.2 Demographic description of participants

Females comprised 55% and males 43% of the total sample. The sample consisted of an accurate reflection of the female to male ratio of native undergraduate students at the college. The majority of respondents (70%) had an average high school grade ranging from 14-18, 20% with a school average above 18 and the remaining 7% below 14.

The residency status (home town) of student respondents was as follows:

Nicosia 62%, Limassol 11%, Larnaca 18%, Famagusta 3% and Paphos 3%.

The majority of participants (60%) were less than 20 years old. One third of

the respondents were aged between 21-22, with only 6% of the participants

above 22. The school (based on the major declared) of participants was as

follows: Business School 65.4%, Computer Science and Engineering School

10%, Arts & Education school 8.2% and Humanities & Social Sciences 16.4%.

The demographic characteristics of respondents are presented in Table 4.1.

Table 4.1   Sample Structure

Base: All interviewed		_N_ 390	% 100
Gender	• Male	168	43%
	• Female	214	55%
	• No answer	8	2%
High School Leaving Certificate Grade	• 18+ or A	79	20%
	• 16+ or B	180	46%
	• 14+ or C	93	24%
	• Below 14 or D	28	7%
	• No answer	10	3%
Age	• Under 20	229	60%
	• 21 – 22	127	32%
	• 23 – 25	20	5%
	• 25+	5	1%
	• No answer	9	2%
Home Town	• Nicosia	243	63%
	• Limassol	42	11%
	• Larnaca	71	18%
	• Famagusta	13	3%
	• Paphos	12	3%
	• No answer	9	2%
School	• Business	255	65.4%
	• CSC & Engineering	39	10%
	• Arts & Education	32	8.2%
	• Humanities & Social Sciences	64	16.4%

4.3 Descriptive Analysis

The purpose of this section is to examine, interpret and draw inferences regarding the perceived level of the various college criteria and influencing factors on college choice process.

Figures 4.1 and 4.2 present the survey respondents' answers to when they **started thinking** about university/college education **(Question 1)**.

One third of the respondents first started thinking about university/college education during the last year of their secondary education (29% during the third year of lyceum and 3.1% during the seventh grade). About 18.3% of the respondents started thinking about higher education in the first year of lyceum, with a slightly lower percentage (16.5%) indicating the second year of lyceum as this time. One out of ten started thinking about higher education studies during gymnasium.

Females tended to start thinking about higher education earlier than males. The percentages of females who started thinking about higher education during gymnasium and the first year of lyceum (38%) were much higher than those of males (21.5%).

When did you first start thinking about university/college education?
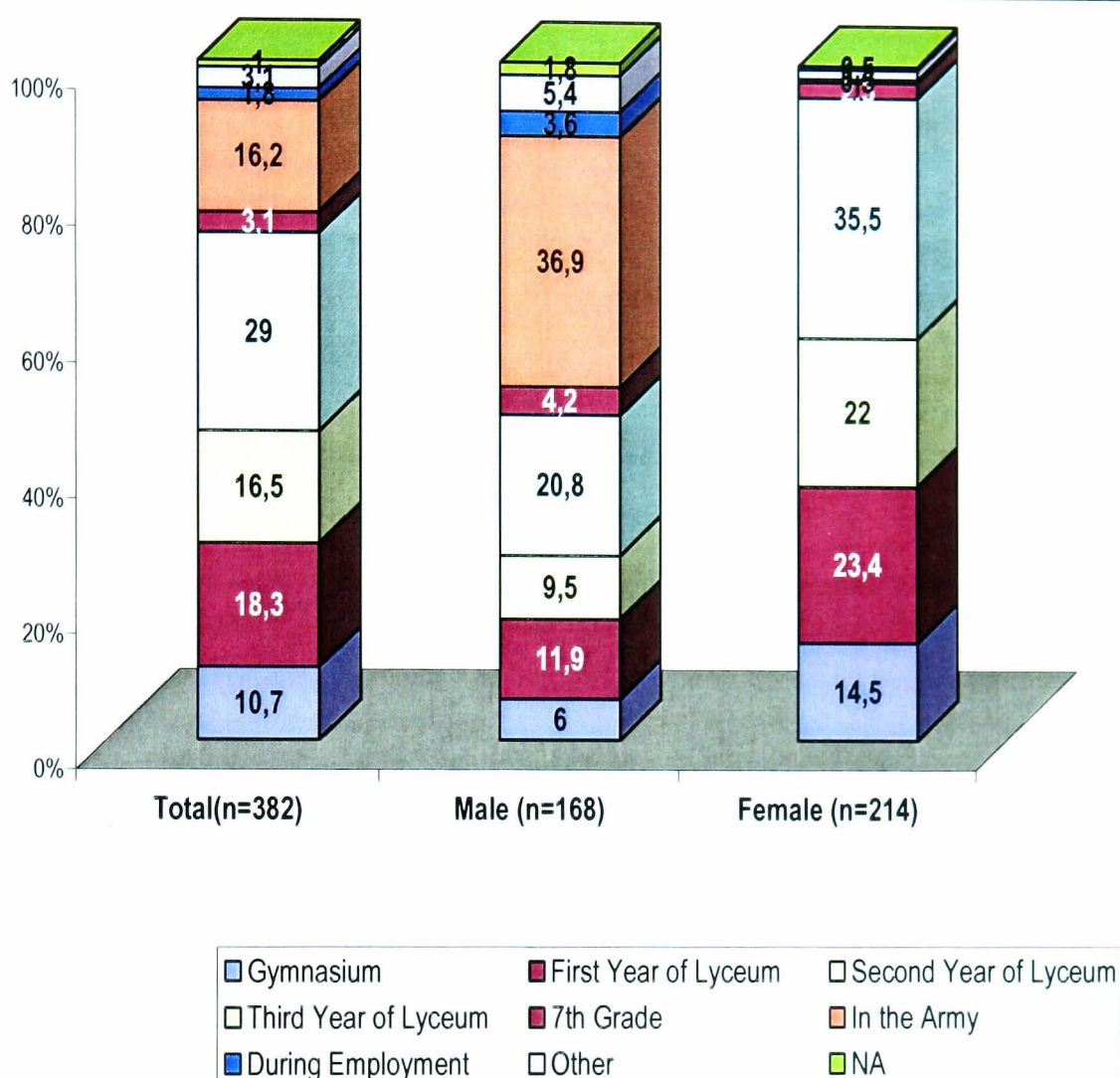
Figure 4.1 **Thinking about University/College education by sex**

In general, both females and males tended to postpone consideration of their higher education as long as possible, with considerable proportions of both claiming that they left it until their last year of Lyceum or in the case of some males, until serving their 2-year mandatory army duty (37%).

When did you first start thinking about university/college education?
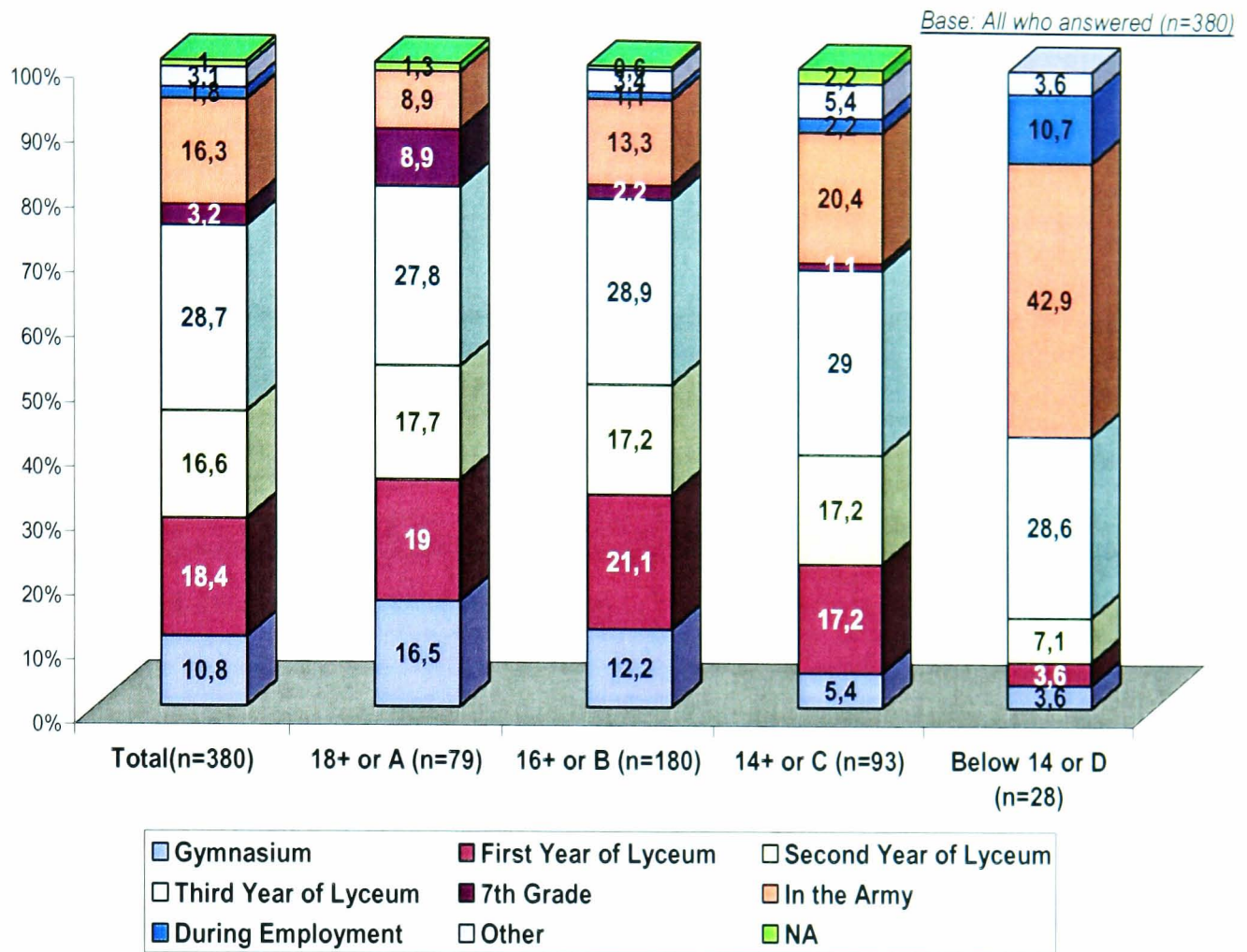
Figure 4.2 Thinking about University/College education by high school average

It seems that students with higher grades (18+ or A and 16+ or B) were much more likely to be in the group that started thinking about university/college education the earliest whereas those with lower grades tended to start considering their higher education later. A higher percentage (16.5%) of students with an average of 18+ tended to start thinking about higher education during gymnasium as compared to 3.6% of students with an average of below 14 or D.

Figures 4.3 and 4.4 represent the survey respondents' answers to when they began the college search process (Question 2).

When did you begin your college/university search process?
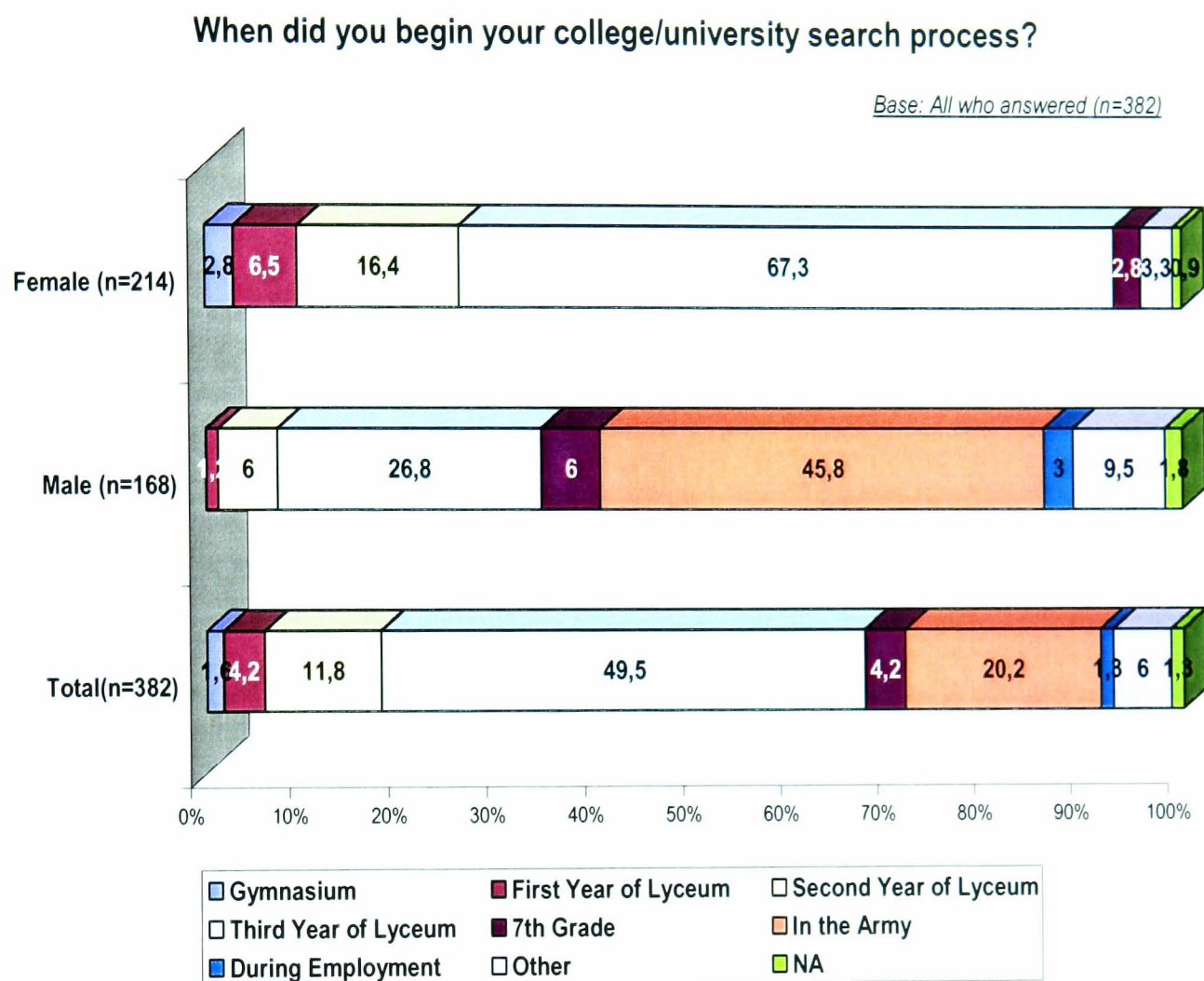
Figure 4.3 Began the college search process by sex

More than half of the students surveyed (54%) indicated that they had begun the college search process during their last year of high school studies (49.5% during the third year of lyceum and 4.2% during the final grade).

When did you begin your college/university search process?

Category	Gymnasium	First Year of Lyceum	Second Year of Lyceum	Third Year of Lyceum	7th Grade	In the Army	During Employment	Other	NA
Below 14 or D (n=28)			35,7		46,4	7,1		10,8	
14+ or C (n=93)	2,2		7,5	48,4	25,8	2,2	11,9	1,1	
16+ or B (n=180)	1,7	5,6	14,4	52,2	3,3	16,1	0,6	4,5	1,7
18+ or A (n=79)	2,5	6,3	15,2	48,1	12,7	13,9	1,3		
Total(n=380)		4,2	11,8	49,2	4,2	20,3	1,8	5,8	1,3

Legend:
- ☐ Gymnasium
- ■ First Year of Lyceum
- ☐ Second Year of Lyceum
- ☐ Third Year of Lyceum
- ■ 7th Grade
- ☐ In the Army
- ■ During Employment
- ☐ Other
- ☐ NA
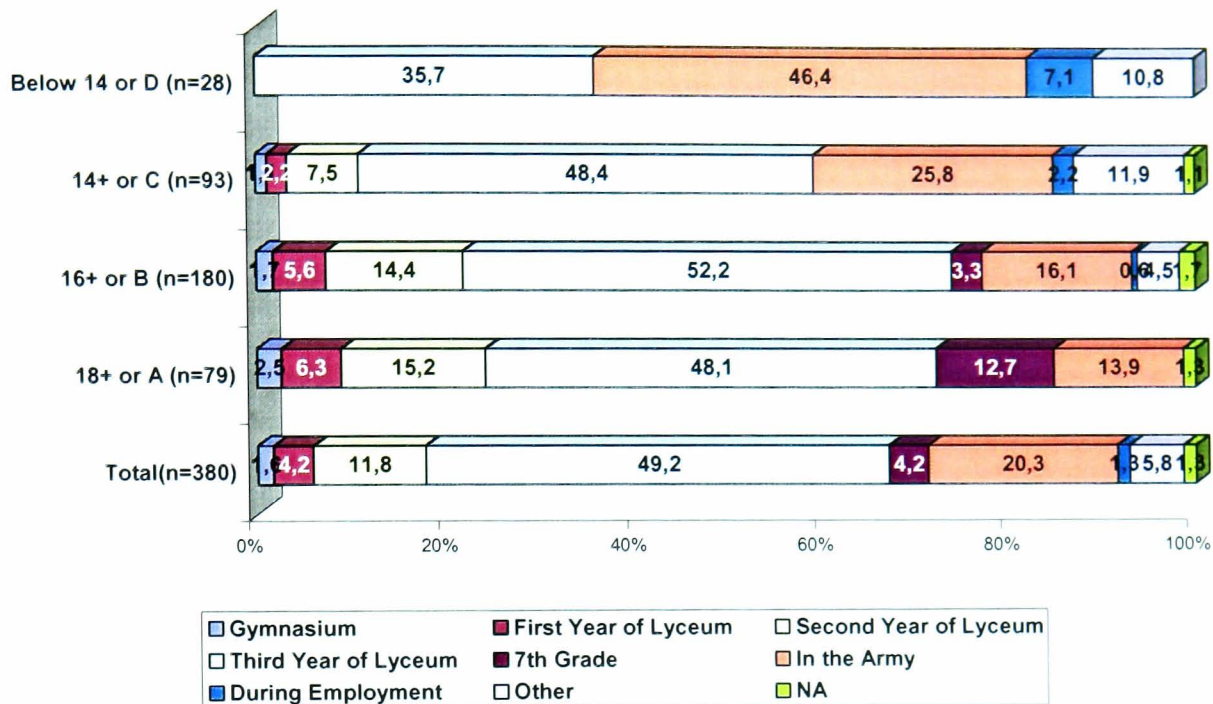
Figure 4.4 Began the college search process by high school average

The majority of males (45.8%) began the college search process during their army service, whereas the majority of females (67.3%) began the search process during the last year of lyceum. Also the percentage of females (16.4%) who began the search process during the second year of lyceum was much higher as compared to the percentage of males (6%). It appears that respondents with higher grades (those having grades greater than 16 or B) began the search process earlier than students with lower grades. It is interesting to note that students with grades lower than 14 or D tended to postpone the search process until their last year at school or in the case of males until serving their military duty.

Survey respondents' answers to the question regarding when they decided **which degree/program of study** they would follow are provided in **Figures 4.5 and 4.6 (Question 3).**

When did you decide which degree/program of study you would follow?
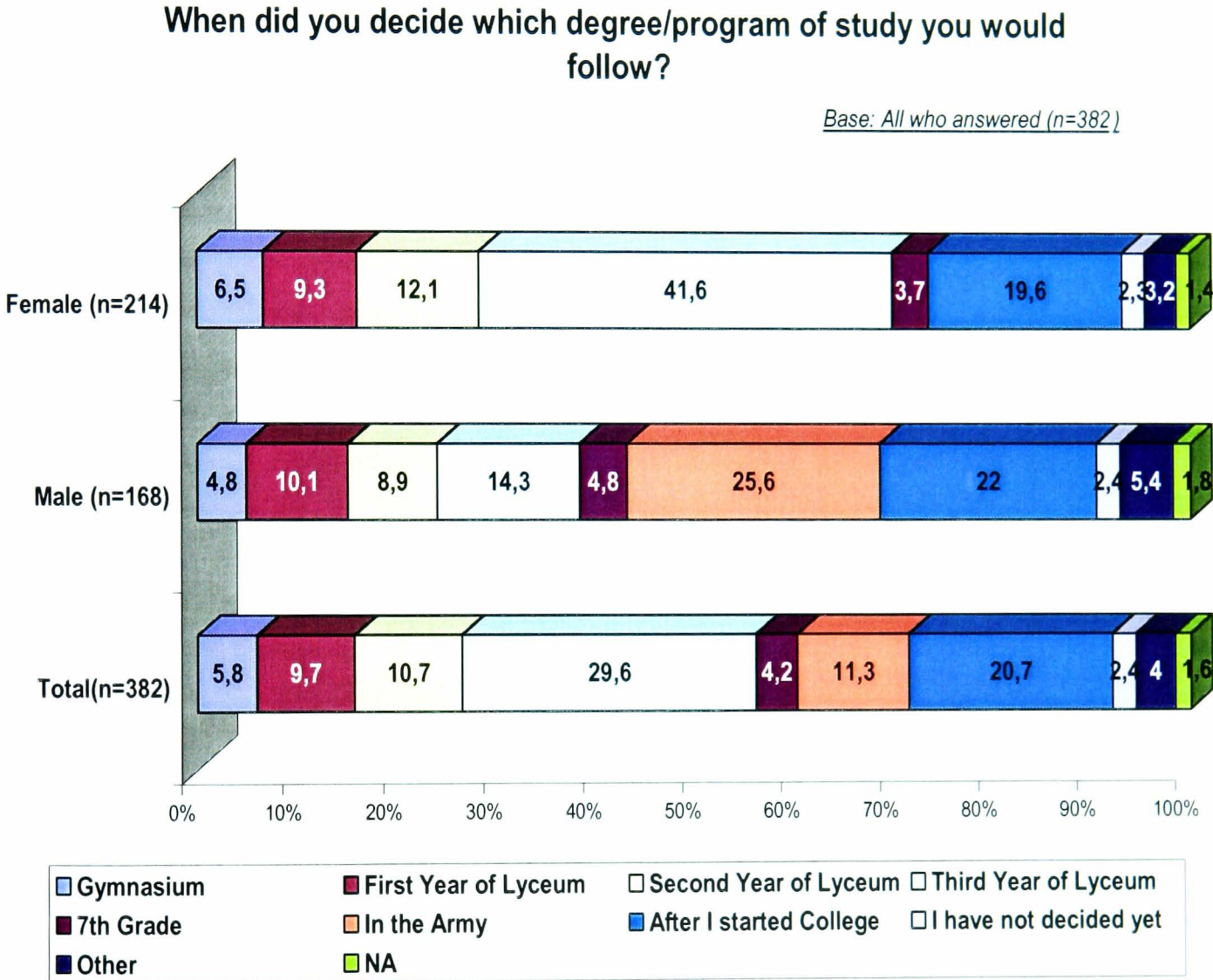
Figure 4.5 Decision about degree/program of study by sex

One third of the respondents decided about their degree/program preference during the last year of their secondary education (29.6% during the third year of lyceum and 4.2% during the seventh grade). About 20% of the respondents

indicated that their career aspiration developed sometime during the first and the second year of lyceum. Over 20% of the respondents decided about their degree/program only after they started college. A high proportion (25.6%) of males indicated that they had decided about their program/degree during their army years.

When did you decide which degree/program of study you would follow?

Group	Gymnasium	First Year of Lyceum	Second Year of Lyceum	Third Year of Lyceum	7th Grade	In the Army	After I started College	I have not decided yet	Other	NA
Below 14 or D (n=28)	7,1	3,6	10,7	17,9		35,7	10,7	10,7		3,6
14+ or C (n=93)	5,4	6,5	7,5	31,2		14	23,7	2,2	7,7	2
16+ or B (n=180)	5,6	12,2	12,8	32,8	4,4	8,9	17,8	1	2,9	1,7
18+ or A (n=79)	6,3	10,1	12,7	27,8	10,1	11,4	19			2,5
Total(n=380)	5,8	9,5	10,8	29,7	4,2	11,3	20,8	2,4	4	1,6

Legend:
- Gymnasium
- First Year of Lyceum
- Second Year of Lyceum
- Third Year of Lyceum
- 7th Grade
- In the Army
- After I started College
- I have not decided yet
- Other
- NA

Figure 4.6 Decision about degree/program of study by school average

Respondents with higher grades tended to decide about their degree/program earlier, as compared to students with lower grades. For instance, about 28% of respondents with grades higher than 16 or B had decided about their program/degree prior to the third year of lyceum (during gymnasium or the first or second year of lyceum). On the contrary, more than one third (35.7%) of students with grades lower than 14 or D decided about their degree/program preference only after they started college.

Respondents' answers to their **first choice of country** of study are presented in **Figure 4.7 (Question 4).**

Which country was your first choice for your college/university education?

Base: All Sample (n=390)

0.51%
0.26%
0.26%
0.26%
0.77%
0.51%
0.26%

14.10%

5.13%

22.82%

55.13%

☐ U.K. ■ U.S.A ☐ Greece ☐ Cyprus ■ Australia ☐ France ■ Italy ☐ Hungary ■ Switzerland ■ Austria ☐ No Answer
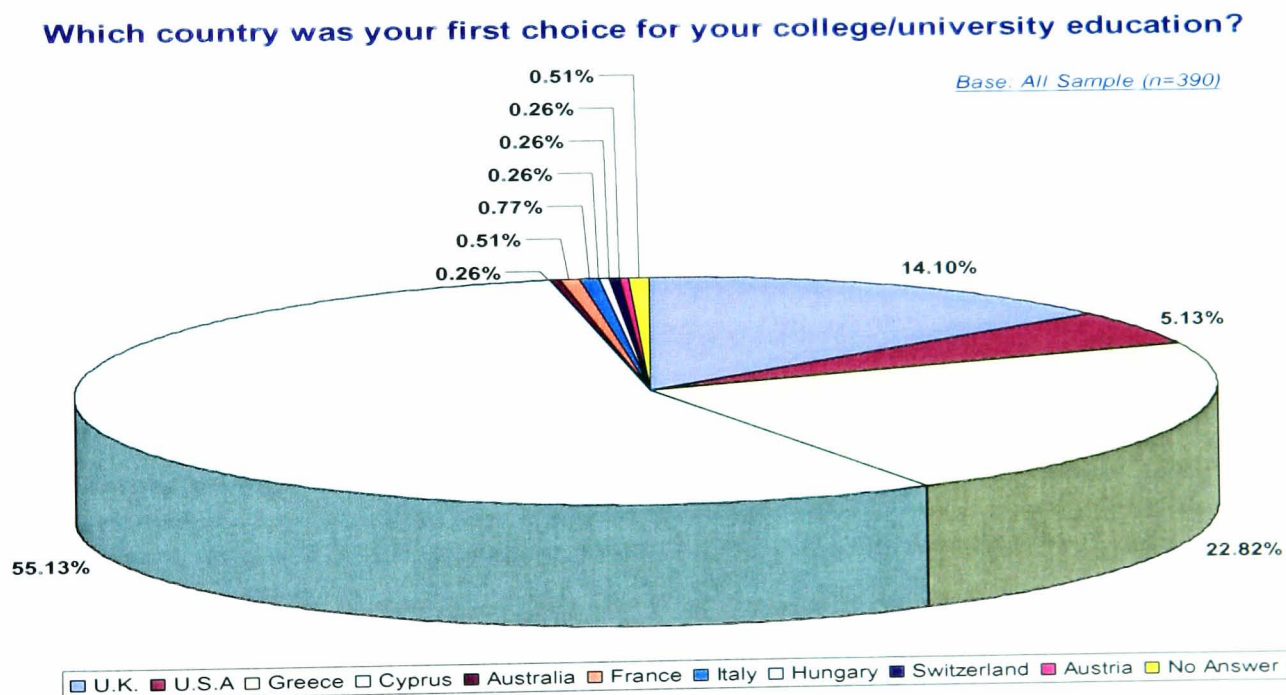
Figure 4.7 Country of first choice

When respondents were still in the planning stage of their education, more than half of them (55%) designated staying in Cyprus as their first choice. About 23% had Greece as their first choice, 14% wanted to go to the UK and only 5% had the USA as their first preference. Very small proportions would have preferred to go to other countries such as France and Italy.

Figure 4.8 gives information about respondents' answers regarding their first and second choices of college **(Questions 5 & 6).**

Which college was your first/second choice?

Base: All Sample
(n=390)
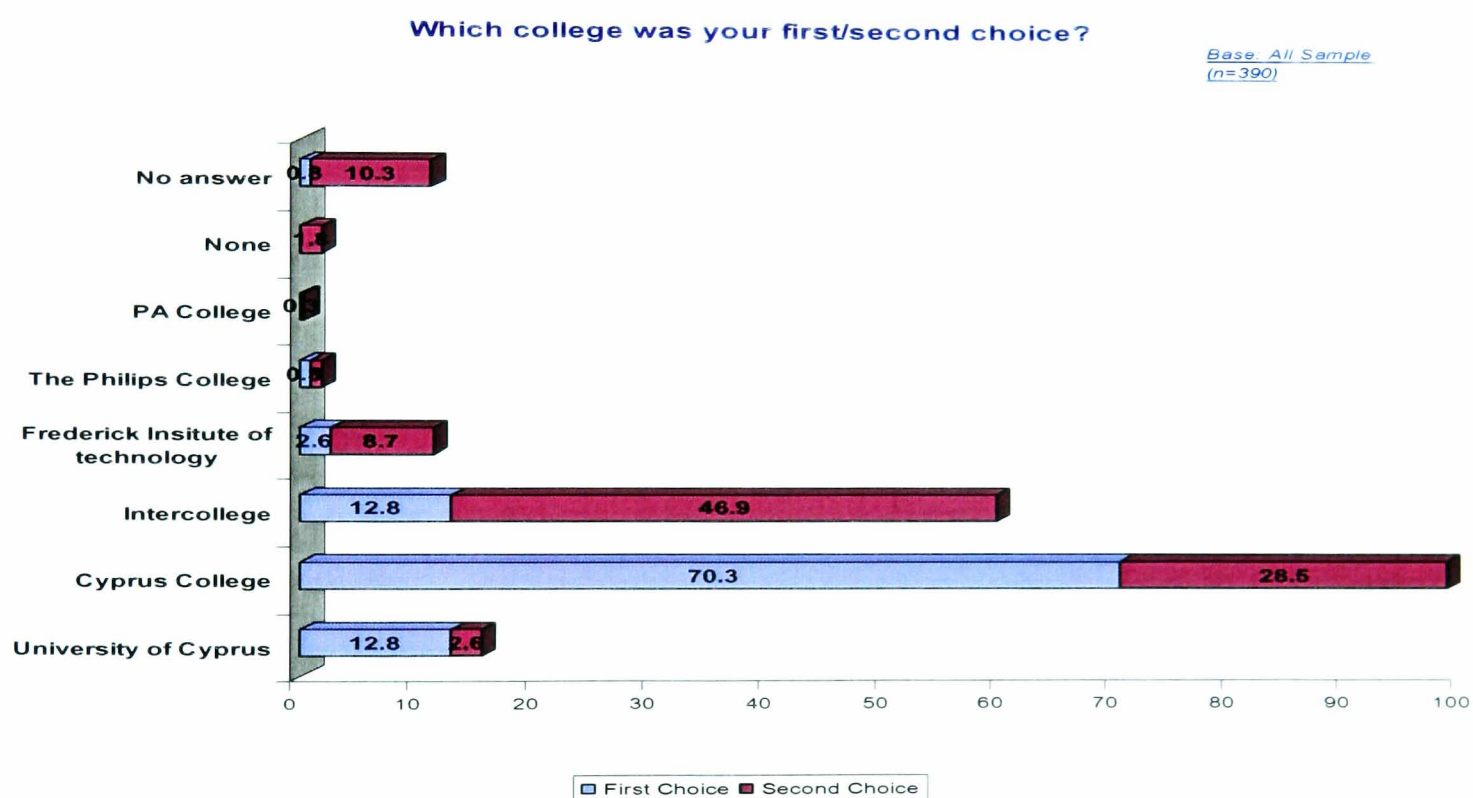
Figure 4.8 First and second choice of college

The majority of respondents (70.3%) named Cyprus College as their first choice. It is interesting to note that one out of three respondents named other

institutions as their first choice (12.8% University of Cyprus, 12.8% Intercollege, 2.6% Frederick and 2.8% other colleges). Half of the respondents (46.9%) named Intercollege as their second choice.

Figures 4.9 and 4.10 and Tables 4.2 and 4.3 provide information regarding what **academic criteria** survey respondents considered important in their selection of college or university. The respondents rated several criteria on a scale 1 – 7, with 1 being extremely unimportant and 7 being extremely important. The means of the various academic criteria follow. **(Question 8).**

How important were the following Academic Criteria in your final choice of a college? - Average Mean-

Criterion	Average Mean
Accredited program of study	6,58
The prospect of becoming a university	6,35
Employment opportunities after graduation	6,06
Reputation of the college	6,02
Possibility to study/transfer abroad	5,72
College with the most accredited programs	5,74
Modern Facilities	5,65
Good reputation of Faculty	5,21
Number of students attending the college	3,91

Figure 4.9 Academic criteria

How important were the following Academic Criteria in your final choice of a college? - Average Mean-
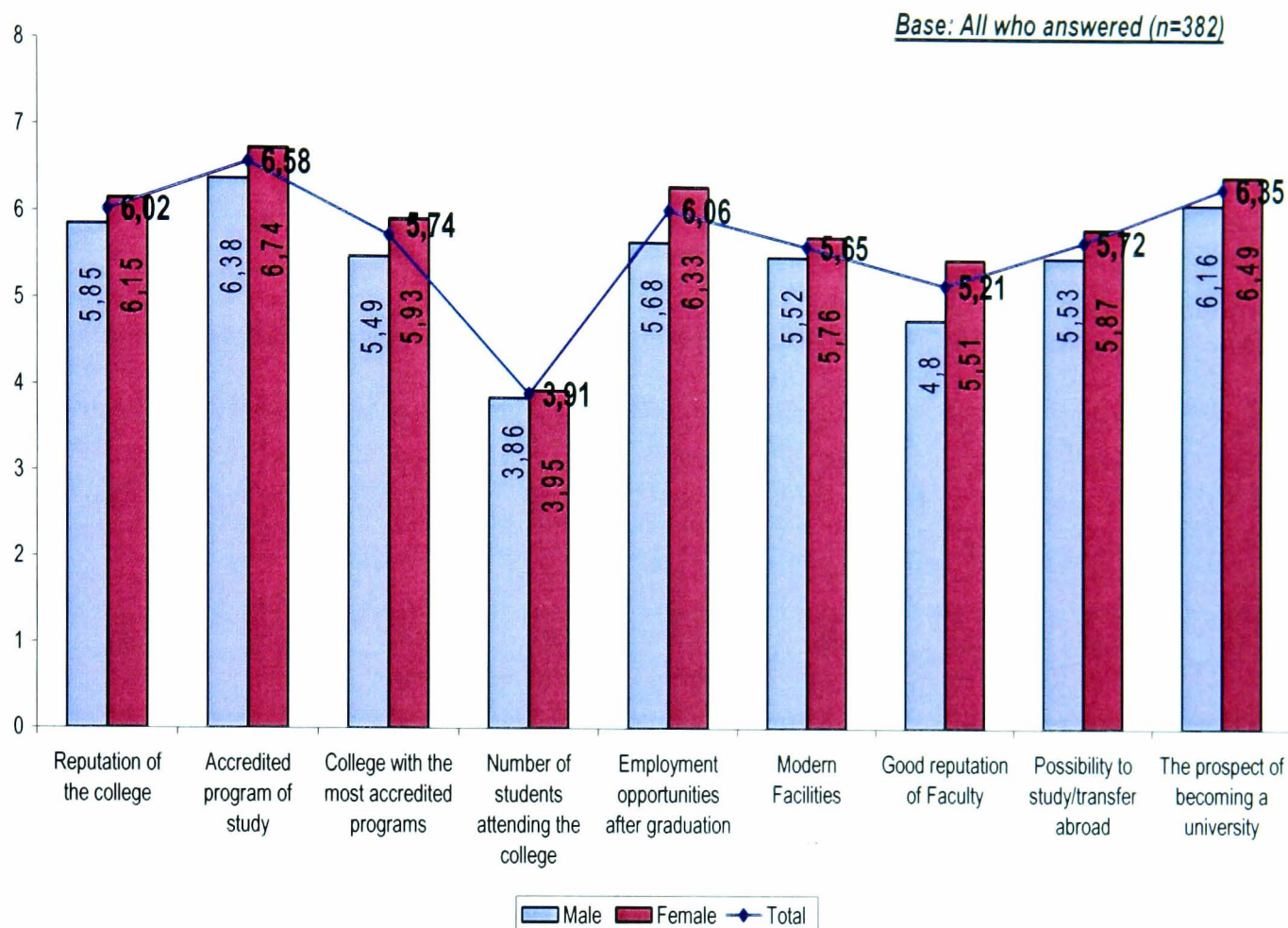
Figure 4.10 Academic criteria by sex

The most important academic criteria cited by respondents were accredited programs of study (M=6,58); the prospect of the college to become a university (M=6,35); the employment opportunities after graduation (M=6,06) and the reputation of the college (M=6,02). The academic criteria considered least important in the college choice process were the number of students attending the college (M=3,91) and the good reputation of faculty (M=5,21).

Employment opportunities after graduation were considered a more important criterion by females (M=6,33) as compared to males (M=5,68).

What influence did the following academic criteria have exerted on your decision to apply to Cyprus College?

	Total	Male	Female	18+ or A	16+ or B	14+ or C	Below 14 or D
Reputation of the College	6.02	5.85	6.15	6.11	5.98	6.05	6.08
Accredited program of study	**6.58**	**6.38**	**6.74**	**6.64**	**6.63**	**6.57**	**6.12**
College with the most accredited programs	5.74	5.49	5.93	5.64	5.74	5.98	5.44
Number of students attending the College	**3.91**	**3.86**	**3.95**	**3.82**	**3.95**	**4.03**	**3.17**
Employment opportunities after graduation	6.06	5.68	6.33	6.07	6.02	6.28	5.44
Modern facilities	**5.65**	**5.52**	**5.76**	**5.65**	**5.82**	**5.58**	**4.96**
Good reputation of Faculty	5.21	4.80	5.51	5.47	5.41	4.96	4.00
Possibility to study/ transfer abroad	**5.72**	**5.53**	**5.87**	**5.92**	**5.92**	**5.58**	**4.35**
The prospect of becoming a University	6.35	6.16	6.49	6.44	6.40	6.22	6.19

Table 4.2 Academic criteria by sex and by high school grade

	Nicosia	Limassol	Larnaca	Famagusta	Paphos	Other
Reputation of the College	5.84	6.44	6.25	6.20	6.55	6.00
Accredited program of study	**6.47**	**6.79**	**6.76**	**6.64**	**7.00**	**6.00**
College with the most accredited programs	5.56	6.07	6.18	5.58	5.82	5.00
Number of students attending the College	**3.80**	**4.25**	**3.88**	**3.73**	**5.00**	**3.00**
Employment opportunities after graduation	5.84	6.38	6.42	6.60	6.00	7.00
Modern facilities	**5.47**	**6.15**	**5.87**	**5.75**	**5.91**	**6.00**
Good reputation of Faculty	4.98	5.84	5.54	5.09	6.09	1.00
Possibility to study/ transfer abroad	**5.58**	**6.33**	**6.04**	**5.00**	**5.64**	**2.00**
The prospect of becoming a University	6.23	6.51	6.68	6.33	6.08	6.00

Table 4.3 Academic criteria by city

The most important academic criteria cited by respondents from Nicosia wer the Accredited programs (M=6,47) and the prospect of becoming a universit (M=6,23). Factors such as accredited programs (M=6,79), the prospect (becoming a university (M=6,51), the reputation of the college (M=6,44) ar the employment opportunities (M=6,38) were more important for respondent coming from Limassol. Noteworthy is the fact that among all respondents th Limassol respondents rated higher than the rest the modern facilities facto (M=6,15). Respondents from Larnaca and Famagusta cited the accredite program of study, the prospect of becoming a university, the employmer opportunities after graduation and the reputation of the college as the mos important criteria.

Factors such as good reputation of faculty, possibility to transfer abroad an employment opportunities after graduation were less important for student with grades lower than 14 or D as compared to the other participants.

The **Non-academic criteria** that respondents considere important/unimportant in their college choice are provided in **Figures 4.1** **and 4.12 and Tables 4.4 and 4.5.** The respondents rated several criteria o a scale 1 − 7 with 1 being extremely unimportant and 7 being extremel important. The means of the various non-academic criteria follow **(Question 9).**

How important were the following non-Academic criteria in your final choice of a college? - Average Mean-

Criteria	Mean
Scolarships/financial aid	5,92
Cost	5,89
Good layout/organization of the campus	4,89
Active students social life	4,88
The quality of students who study at college	4,83
Physical Attractiveness of Campus	4,70
Location of College	4,42
Size of College	4,23
Clubs and social activities	4,18
Athletic facilities	4,05
The availability of campus housing facilities	3,72
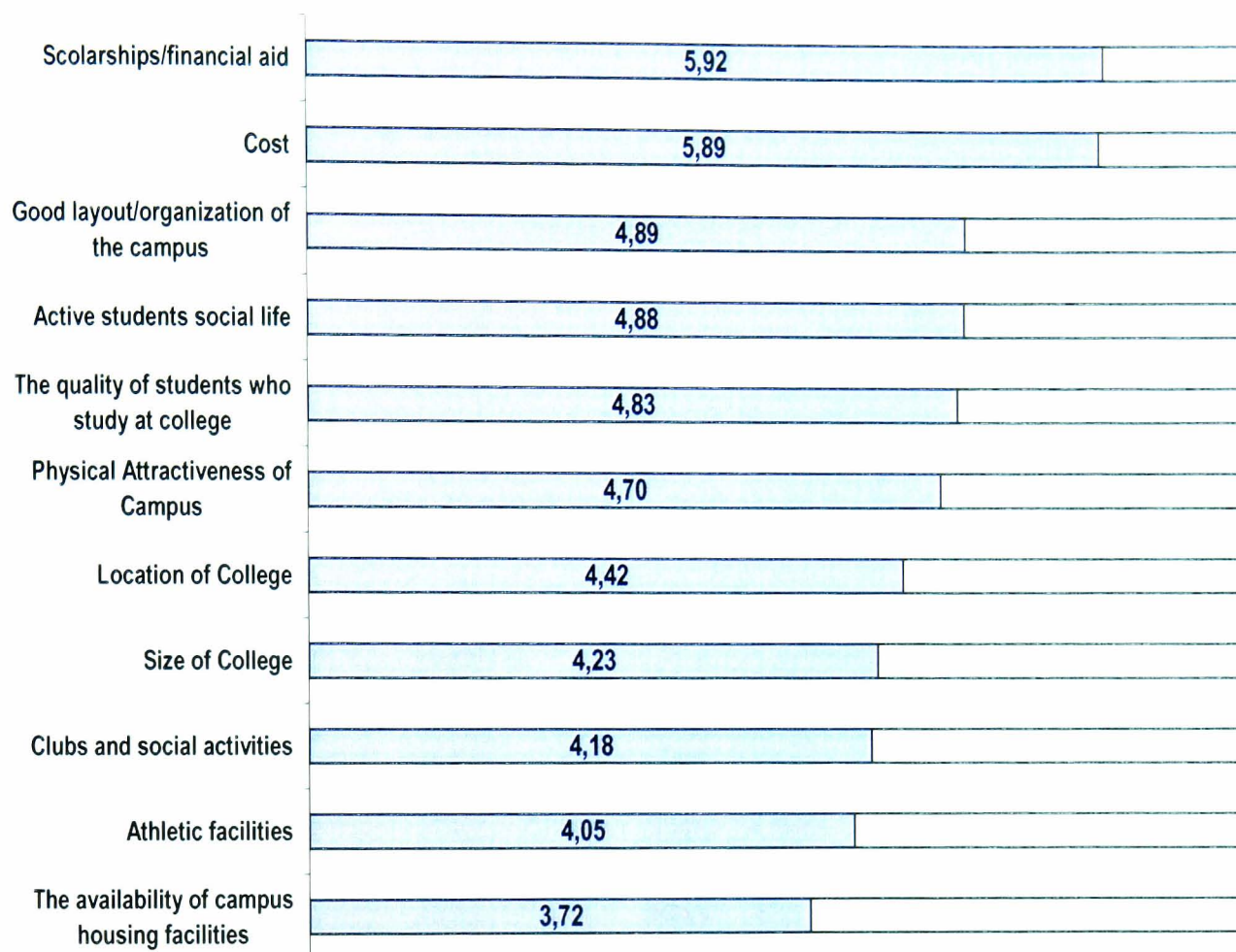
Figure 4.11 Non Academic criteria

Financial considerations such as the availability of scholarships/financial aid (M=5,92) and the cost (M=5,89) were rated as the most important non-academic criteria in respondents' college choice. Other criteria indicated as very important to those surveyed were the layout/organisation of the campus (M=4,89), the active students' social life (M=4,88) and the quality of students who study at the college (M=4,83). The criteria considered of least importance

in the final choice of students were the availability of athletic facilities (M=4,05) and campus housing facilities (M=3,72).

How important were the following non-Academic criteria in your final choice of a college?
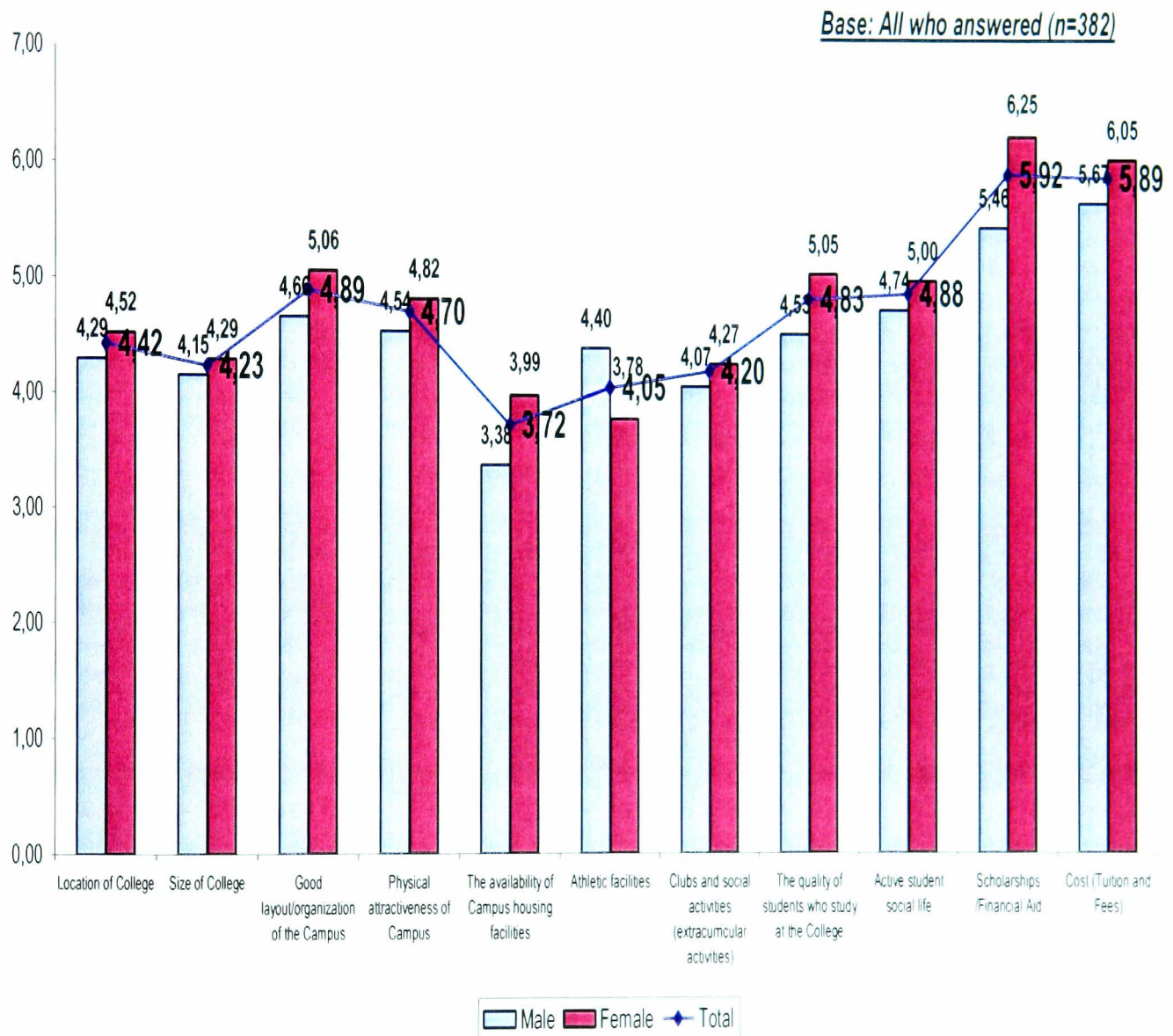
Figure 4.12 Non Academic criteria by sex

However, clubs and social activities and the athletic activities of a college were quite important factors which influenced the final choice of respondents from Limassol. Good layout/organisation of campus was considered of higher importance for respondents from Limassol, Larnaca and Paphos.

How important were the following non-Academic criteria in your final choice of a college?

	Total	Male	Female	18+ or A	16+ or B	14+ or C	Below 14 or D
Location of College	4.42	4.29	4.52	4.04	4.65	4.61	3.63
Size of College	4.23	4.15	4.29	4.38	4.24	4.34	3.54
Good Layout/ Organisation of campus	4.89	4.66	5.06	4.86	4.96	5.13	3.88
Physical attractiveness of campus	4.70	4.54	4.82	4.71	4.76	4.87	3.67
The availability of campus housing facilities	3.72	3.38	3.99	3.80	3.95	3.65	2.23
Athletic facilities	4.05	4.40	3.78	3.83	4.15	4.31	3.21
Clubs and social activities	4.18	4.07	4.27	4.35	4.32	4.12	3.19
The quality of students who study at the college	4.83	4.53	5.05	4.96	5.06	4.56	3.81
Active students' social life	4.88	4.74	5.00	4.83	5.13	4.91	3.54
Scholarships/ financial aid	5.92	5.46	6.25	5.83	6.19	5.68	5.29
Cost	5.89	5.67	6.05	5.58	6.17	5.76	5.60

Table 4.4 Non-academic criteria by sex and by high school grade

	Nicosia	Limassol	Larnaca	Famagusta	Paphos	Other
Location of College	4.55	4.10	5.34	3.80	4.00	4.00
Size of College	**4.11**	**4.43**	**4.49**	**4.00**	**4.45**	**4.00**
Good Layout/ Organisation of campus	4.63	5.16	5.54	4.82	5.36	5.00
Physical attractiveness of campus	**4.45**	**5.11**	**5.23**	**4.55**	**5.27**	**5.00**
The availability of campus housing facilities	3.28	4.46	4.43	4.82	4.64	2.00
Athletic facilities	**3.80**	**5.05**	**4.16**	**4.45**	**4.36**	**7.00**
Clubs and social activities	3.90	5.24	4.32	4.10	4.55	7.00
The quality of students who study at the college	**4.59**	**5.26**	**5.22**	**5.27**	**5.36**	**4.00**
Active students' social life	4.84	5.08	4.79	5.91	5.09	5.00
Scholarships/ financial aid	5.76	**6.42**	6.14	**6.55**	5.73	**2.00**
Cost	5.70	6.49	6.00	6.67	5.55	7.00

Table 4.5 Non-Academic criteria by city

Non-academic criteria were less important for students with grades lower than 14 or D as compared to other participants. There were no significant differences among males or females.

Information regarding participants' **sources of awareness** of Cyprus College is shown in **Figure 4.13 (Question 10).**

How did you find out about Cyprus College?

Source	Value
Friends/Associates	55,6
Friends/associates who already studied there	45,4
The college addmissions office	39,2
College advertisements (Radio, Television etc)	32,1
Parents/family members	27,9
Brochures/leaflets from the college	24,6
I have always known about Cyprus College	21
Career office in my highschool	17,2
Internet/web-page of the college	16,2
Newspaper/magazine articles	9,7
Educational fair	9,2
Highschool teachers	9,2
Friends/family members who work at Cyprus College	1,5
Ministry of Education	0,3
NA	3,1

Figure 4.13 **Sources of awareness**

Friends/associates (55.6%) and people who had already studied at Cyprus College (Alumni 45.4%) were by far the most likely sources of awareness.

A considerable proportion mentioned the college admission office (39.2%) and college advertisements (32.1%) as sources of awareness. Other important sources of information were the college brochures and leaflets (24.6%), the respondents' high school career office (17%) and the Internet/Website of the college (16.2%).

Newspapers/magazine articles (9.7%), education fair (9.2%) and high school

teachers (9.2%) were also mentioned as sources of awareness of respondents.

Noteworthy is the fact that the least likely sources of awareness were the

friends/family members who work at Cyprus College (1.5%) and the Ministry of

Education (0.3%).

Finally, one out of five respondents indicated that they have always known

about Cyprus College.

The respondents were asked to rate the **degree of influence various**

factors had on their college decision-making process. The respondents rated

several factors on a scale 1 − 7, with 1 being least influence and 7, most

influence. The results are shown in **Figure 4.14 and Tables 4.6 and 4.7**

(Question 11).

Please rate the following factors relative to the amount of influence they had on your college decision-making process. - Average Mean-

Factor	Mean
Accredited/Certified program of study	5,74
Specific program of study	5,33
Parents/family members	4,67
Scholarship / Financial Aid	4,62
Friends/associates	4,55
Friends/associates who already study there	4,51
The College Admissions Office	4,31
Personal visit at the College on your own initiative	4,24
College publications (Bulletin, Booklets, Leaflets, other material)	3,73
College personnel (faculty and staff)	3,66
Advertisement of the College (Radio, Television etc.)	3,64
Cyprus College Graduate (alumni)	3,62
Internet/Web Site	2,62
Educational Fair	2,50
Career Centre at my High School	2,36
Telephone call from the College	2,26
College Video/CD	2,23
Visits from College personnel at your High School	2,12
Organised visit to the College (through your High School or after a specific College event)	1,95
Contact with the College through e-mail	1,93
High School Teachers	1,92

Figure 4.14 Influential factors on the decision-making process

Accreditation (Recognition) of the program (M=5,74) and the specific program of study (M=5,33) were cited as the most influential factors on the college decision-making process of respondents. The next most influential factors were parents/family members (M=4,67), scholarship/financial aid (M=4,62) and friends/associates (M=4,55).

Please rate the following factors relative to the amount of influence they had on your college decision-making process. - Average Means-

		Total	Male	Female	18+ or A	16+ or B	14+ or C	Below 14 or D
Sources of Influence	High School Teachers	1.92	1.78	2.03	2.16	2.06	1.68	1.00
	High School Counselor	2.36	1.94	2.72	2.23	2.75	2.13	1.00
	Friends/Associates	4.55	4.75	4.37	4.17	4.76	4.63	3.92
	Parents/Family Members	4.67	4.51	4.80	4.29	4.82	4.79	4.23
	The College Admission Office	4.31	4.15	4.50	4.29	4.34	4.38	4.58
	Friends/Associates who already study there	4.51	4.65	4.41	4.24	4.56	4.76	4.00
	Cyprus College Graduates (alumni)	3.62	3.38	3.75	3.93	3.62	3.65	2.12
Recruitment Strategies	Advertisement of the College (Radio, Television, etc)	3.64	3.09	4.10	3.84	3.76	3.53	2.81
	Internet/Website	2.62	2.30	2.91	2.86	2.65	2.78	1.38
	College Publications (Bulletin, Booklets, Leaflets, other material)	3.73	3.07	4.25	3.68	3.88	3.83	2.60
	Visits from College personnel at your High School	2.12	1.82	2.32	2.14	2.37	1.85	1.25
	Personal visit to the College on your own initiative	4.24	3.92	4.50	4.39	4.23	4.13	4.24
	College Video/CD	2.23	1.76	2.58	2.45	2.27	2.12	1.65
	Organised visit to the College (through your High School)	1.95	1.65	2.16	1.93	2.18	1.75	1.22
	Educational Fair	2.50	2.07	2.80	2.57	2.59	2.48	1.65
	Telephone Call from College	2.26	1.82	2.61	2.54	2.43	1.85	1.82
	Contact with the College through e-mail	1.93	1.91	1.95	1.88	1.97	1.98	1.43
College Factors	Specific Program of Study	5.33	5.08	5.55	5.33	5.51	5.07	5.20
	Accredited/Certified Program of Study	5.74	5.59	5.87	5.95	5.79	5.58	5.64
	Scholarship/Financial Aid	4.62	4.43	4.78	5.28	4.51	4.33	4.58
	College Personnel (faculty and staff)	3.66	3.40	3.92	3.75	3.70	3.52	4.12

Table 4.6 Influential factors by sex and by high school grade

		Nicosia	Limassol	Larnaka	Famagusta	Paphos	Other
Sources of Influence	High School Teachers	1.77	2.03	2.27	2.92	1.27	2.00
	High School Counselor	2.09	2.18	3.23	3.58	2.27	2.00
	Friends/Associates	4.49	4.23	5.19	3.64	4.18	2.00
	Parents/Family Members	4.81	3.79	4.68	4.08	5.09	5.00
	The College Admission Office	4.34	4.12	4.51	4.17	4.64	6.00
	Friends/Associates who already study there	4.46	4.29	5.01	3.92	4.00	6.00
	Cyprus College Graduates (alumni)	3.53	3.54	3.71	4.17	3.27	4.00
Recruitment Strategies	Advertisement of the College (Radio, Television, etc)	3.51	3.73	3.92	4.17	3.91	4.00
	Internet/Website	2.37	3.00	2.97	3.50	3.73	4.00
	College Publications (Bulletin, Booklets, Leaflets, other material)	3.53	3.77	4.09	5.00	4.36	4.00
	Visits from College personnel at your High School	1.93	2.23	2.45	3.44	2.00	4.00
	Personal visit to the College on your own initiative	4.13	4.24	4.40	4.80	5.00	4.00
	College Video/CD	2.04	2.50	2.40	3.33	2.73	5.00
	Organised visit to the College (through your High School)	1.87	2.03	2.08	2.50	1.91	4.00
	Educational Fair	2.37	2.88	2.40	4.20	2.55	5.00
	Telephone Call from College	2.14	2.86	2.27	3.10	1.90	2.00
	Contact with the College through e-mail	1.80	1.97	2.03	3.20	1.45	6.00
College Factors	Specific Program of Study	5.19	5.51	5.63	5.73	5.64	4.00
	Accredited/Certified Program of Study	5.54	6.05	6.22	5.82	6.36	6.00
	Scholarship/Financial Aid	4.74	4.60	4.44	4.36	4.00	3.00
	College Personnel (faculty and staff)	3.65	3.87	3.61	4.00	4.00	6.00

Table 4.7 Influential factors by city

It appears that personal contact with some aspect of the college, such as friends/associates who already study at Cyprus College (M=4,51), the college Admission Office (M=4,31) and personal visit to the college on their own initiative (M=4,24) were highly influential factors. Interestingly, organised visits to the college through high school received a relatively low rating (M=1,95), in terms of the degree to which it was influential.

Factors such as college publications (M=3,73), college personnel (M=3,66), advertisements (M=3,64) and Cyprus College Alumni (M=3,62) were rated as quite influential, but less than the previous group of criteria discussed.

High school teachers (M=1,92), contact with the college through e-mail (M=1,93), telephone call from the college (M=2,26) and high school career centre (M=2,36) were the least influential factors on participants' college decision making process.

When the demographic factors are examined in relation to the influential factors previously mentioned, it seems that parents/family members (M=4,80) are more influential to females than are friends/associates (M=4,37). The opposite is true of males. Friends/associates are more influential (M=4,70) as compared to parents/family members (M=4,51). Also, college publications (M=4,25), college advertisements (M=4,10) and college video/CD (M=2,58) seem to be more influential factors for females as compared to males.

Factors such as friends/associates (M=5,19) and other existing Cyprus College students (M=5,01) are much more influential for respondents coming from Larnaca as compared to respondents from other areas. In the same way, respondents from Paphos are influenced more by their parents (M=5,09) than compared are other participants. Personal visit to the college on their own initiative was the most influential factor for respondents from Paphos (M=5,00) but less influential to Nicosia respondents (M=4,13).

The respondents' **degree of satisfaction** with Cyprus College is presented in **Figure 4.15 (Question 12).**

In general, how satisfied are you with your studies at Cyprus College until now?

Base: All Sample (n=390)

Figure 4.15 **Degree of satisfaction with Cyprus College**

The majority of respondents (78%) reported that they were satisfied overall with their studies at Cyprus College (very satisfied 27.2% and satisfied 50.8%). One out of five indicated that they were neither satisfied nor dissatisfied. The percentage of males (22%) in this category is much higher as compared to the percentage of females (16%). Further, the percentage of lower-grade participants stating 'neither satisfied nor dissatisfied' was much higher as compared to participants with higher grades.

Finally, only 3% of the respondents indicated dissatisfaction with their studies at the college (dissatisfied 1% or very dissatisfied 2%). No significant differences were observed among students from different areas regarding the degree of satisfaction.

The **degree of satisfaction** of participants with specific aspects of Cyprus College is presented in **Figure 4.16 and 4.17 and Tables 4.8 and 4.9.** The respondents rated several areas on a scale 1 – 7 with 1 being very dissatisfied and 7 being very satisfied. The means of the various aspects are presented **(Question 13)**.

How satisfied would you say you are from Cyprus College?
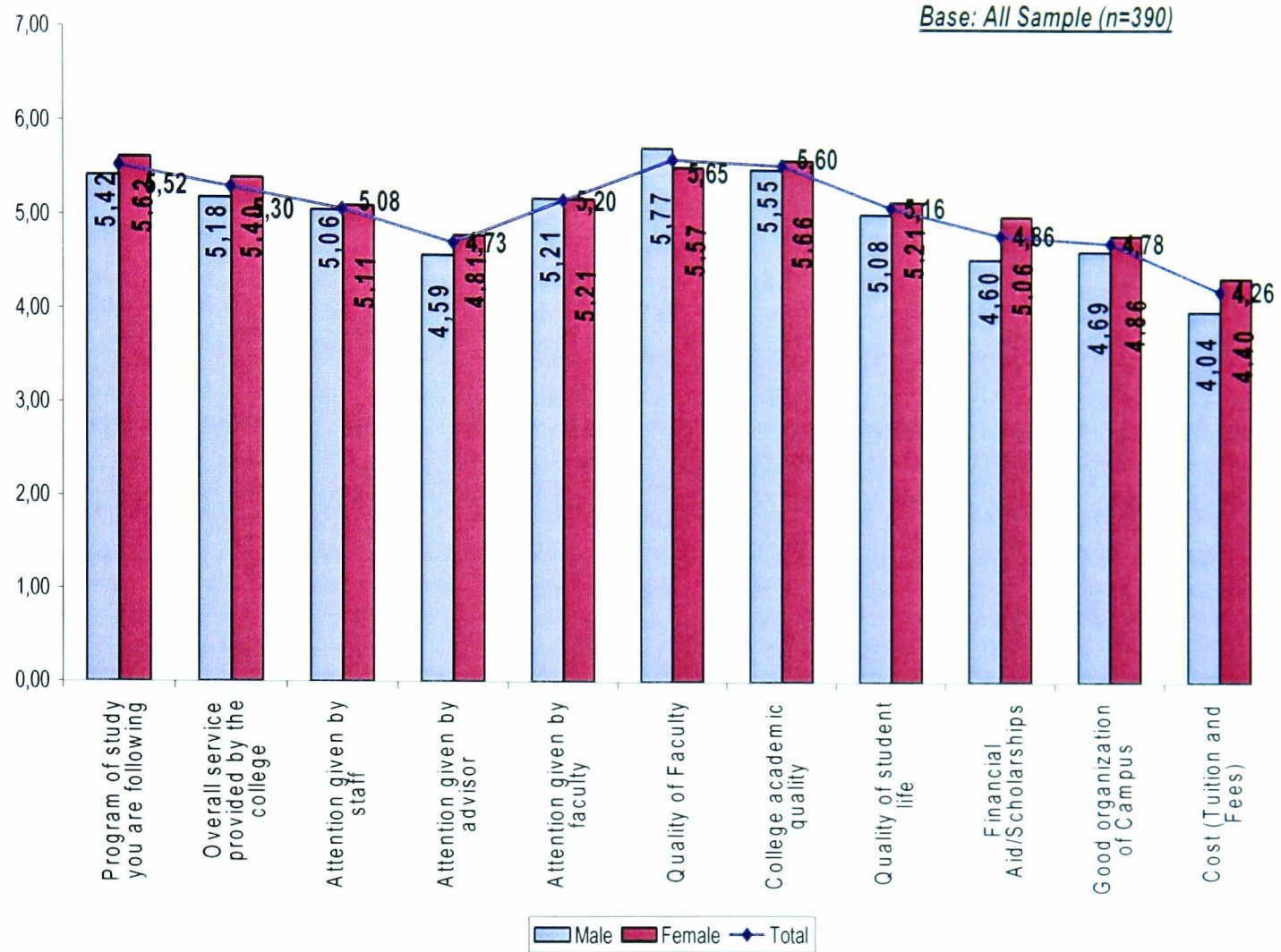
Figure 4.16 Degree of satisfaction of various College aspects by sex

Quality of faculty (M=5,65), college academic quality (M=5,60) and program of study of participants (M=5,52) received the highest degree of satisfaction. Additionally, the overall service and attention provided to students were rated very highly: overall service provided (M=5,30); attention given by faculty (M=5,20) and attention given by staff (M=5,08). On the contrary, the attention provided by advisor was given the lowest degree of satisfaction (M=4,73), just after the cost (Tuition and fees) (M=4,26).

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How satisfied would you say you are from Cyprus College?
- Average Means-

	Total	Male	Female	18+ or A	16+ or B	14+ or C	Below 14 or D
Program of study you are following	5.52	5.42	5.62	5.75	5.58	5.36	5.12
Overall service provided by the College	5.30	5.18	5.40	5.38	5.34	5.20	5.30
Attention given by staff	5.08	5.06	5.11	5.08	5.02	5.22	5.38
Attention given by advisor	4.73	4.59	4.81	4.55	4.69	4.69	5.48
Attention given by faculty	5.20	5.21	5.21	5.36	5.17	5.10	5.37
Quality of faculty	5.65	5.77	5.57	5.69	5.63	5.67	5.68
College academic quality	5.60	5.55	5.66	5.68	5.60	5.59	5.56
Quality of student life	5.16	5.08	5.21	5.16	5.25	5.07	4.88
Financial Aid/Scholarships	4.86	4.60	5.06	4.88	4.95	4.73	4.70
Good organisation of campus	4.78	4.69	4.86	4.49	4.86	4.80	4.91
Cost (Tuition and Fees)	4.26	4.04	4.40	4.36	4.28	4.12	4.00

Table 4.8 Satisfaction with Cyprus College by sex and high school grade

	Nicosia	Limassol	Larnaca	Famagusta	Paphos	Other
Program of study you are following	5.41	5.64	5.80	5.83	5.64	6.00
Overall service provided by the College	5.18	5.32	5.75	5.42	5.36	5.00
Attention given by staff	5.04	5.08	5.30	5.36	5.00	4.00
Attention given by advisor	4.56	5.07	5.21	5.18	3.83	1.00
Attention given by faculty	5.10	5.39	5.45	5.27	5.42	4.00
Quality of faculty	5.52	5.88	5.89	6.10	5.92	5.00
College academic quality	5.47	5.93	5.87	6.00	5.67	5.00
Quality of student life	5.06	5.38	5.36	5.82	4.83	6.00
Financial Aid/Scholarships	4.84	4.49	5.26	4.75	4.55	3.00
Good organisation of campus	4.67	4.95	5.09	5.00	4.67	4.00
Cost (Tuition and Fees)	4.31	3.78	4.34	4.00	4.50	2.00

Table 4.9 Satisfaction with Cyprus College by city

It is very interesting to note that students with lower grades are more satisfied with the attention provided by their advisor as compared to students with higher grades, who are less satisfied with their advisors. Students with higher grades were more satisfied than students with lower grades regarding the quality of student life. Respondents from Limassol are more dissatisfied with the cost than students from other areas. Participants from the School of Arts and Education were much more likely than other participants to claim that they were more satisfied with various aspects of the college.

How satisfied would you say you are from Cyprus College? - Average Means -
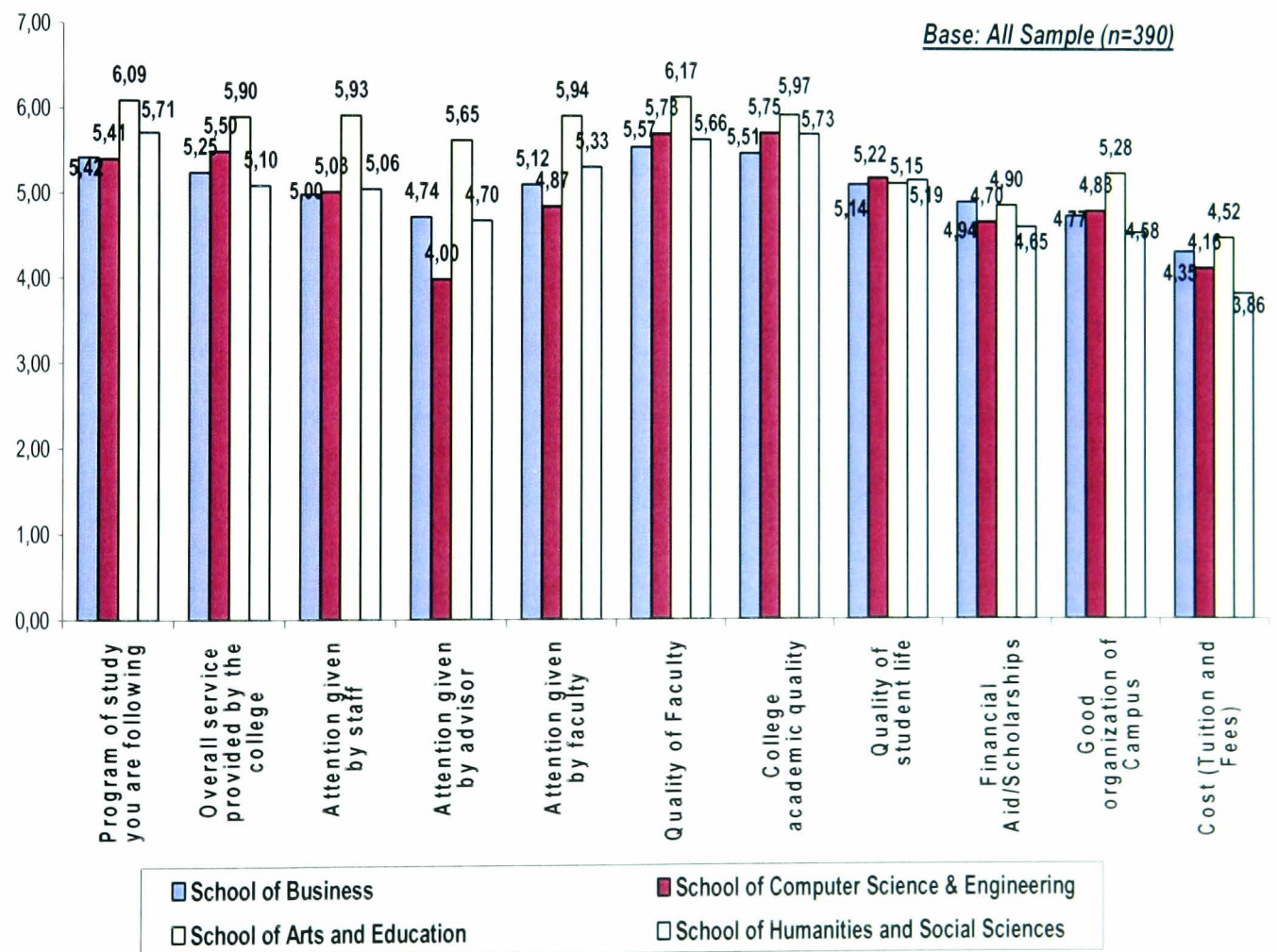
Figure 4.17 Degree of satisfaction of various College aspects by school

Participants' responses about whether they would **recommend Cyprus College** to friends or other potential students are shown in **Figures 4.18** and **4.19 (Question14).**

Would you recommend Cyprus College to friends or other potential students?

Base: All who answered (n=382)
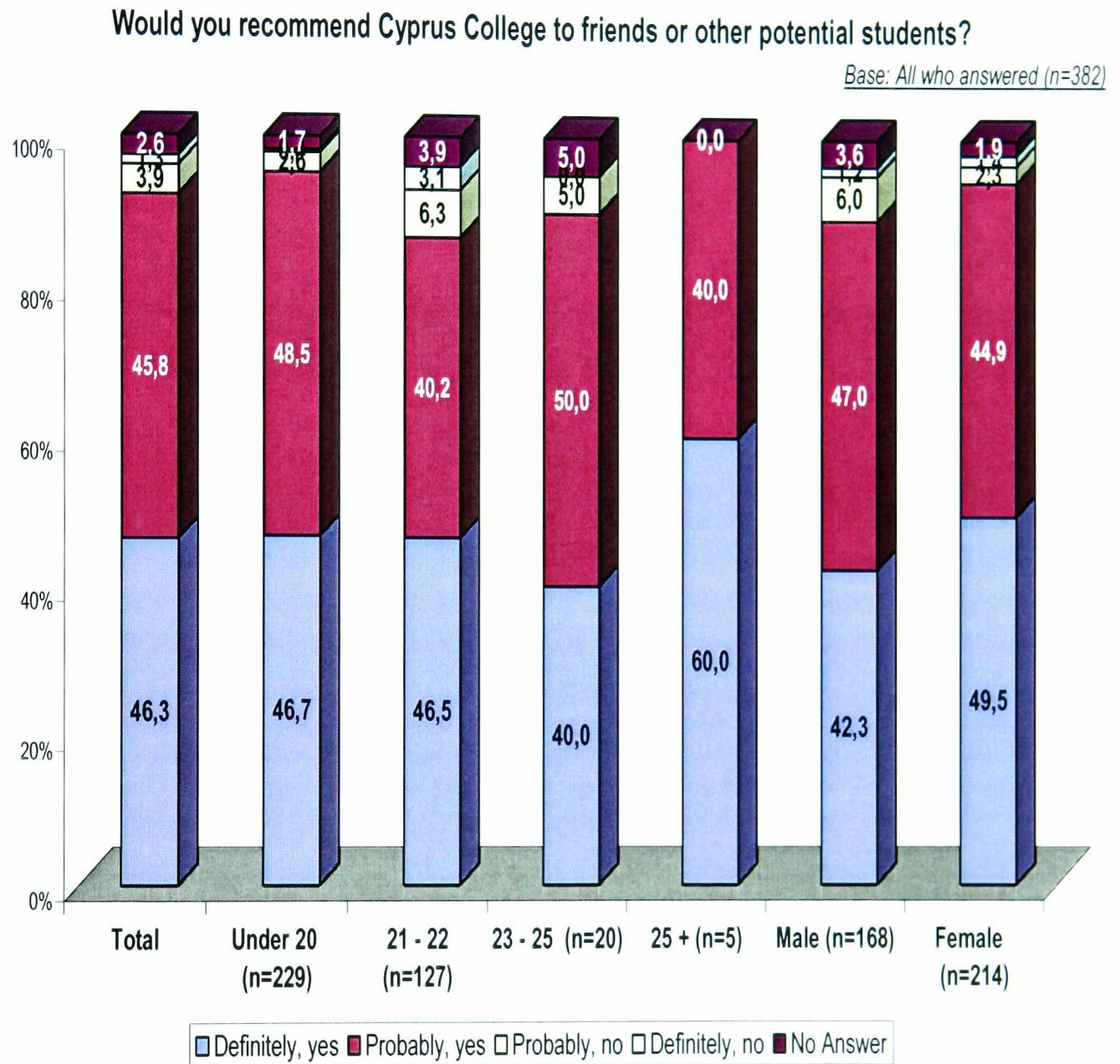
Figure 4.18 Recommend Cyprus College to others by sex and by age

More than 92% of respondents appeared willing to recommend their college to friends and other potential students. ((Definitely yes (46.3%) and probably yes (45.8%)). Participants from Paphos and Famagusta were more enthusiastic

about Cyprus College and more positive in recommending it, compared to participants from other districts.

Would you recommend Cyprus College to friends or other potential students?

	Total	Under 20 (n=229)	21 - 22 (n=127)	23 - 25 (n=20)	25 + (n=5)	Male (n=168)	Female (n=214)
No Answer	2,6	1,7	3,9	5,0	0,0	3,6	1,9
Definitely, no	1,3	2,6	3,1			1,2	1,7
Probably, no	3,9		6,3	5,0		6,0	2,8
Probably, yes	45,8	48,5	40,2	50,0	40,0	47,0	44,9
Definitely, yes	46,3	46,7	46,5	40,0	60,0	42,3	49,5

□ Definitely, yes ■ Probably, yes □ Probably, no □ Definitely, no ■ No Answer

Figure 4.19 Recommend Cyprus College to others by city

Responses to question regarding whether those surveyed would **choose to attend Cyprus College again** if given the choice are provided in **Figures 4.20** and **4.21**. **(Question 15)**.

If you had an opportunity to choose again, would you choose to attend Cyprus College?

Base: All who answered (n=382)

	Total	Under 20 (n=229)	21-22 (n=127)	23 - 25 (n=20)	25 + (n=5)	Male (n=168)	Female (n=214)
No Answer	5,5	5,2	6,3	5,0	0,0	6,5	4,7
Definitely, no	1,8	1,3	2,4	5,0		1,2	2,3
Probably, no	6,5	7,0	6,3	5,0		7,1	6,1
Probably, yes	43,5	40,6	48,8	40,0	40,0	47,6	40,2
Definitely, yes	42,7	45,9	36,2	45,0	60,0	37,5	46,7

☐Definitely, yes ■Probably, yes ☐Probably, no ☐Definitely, no ■No Answer
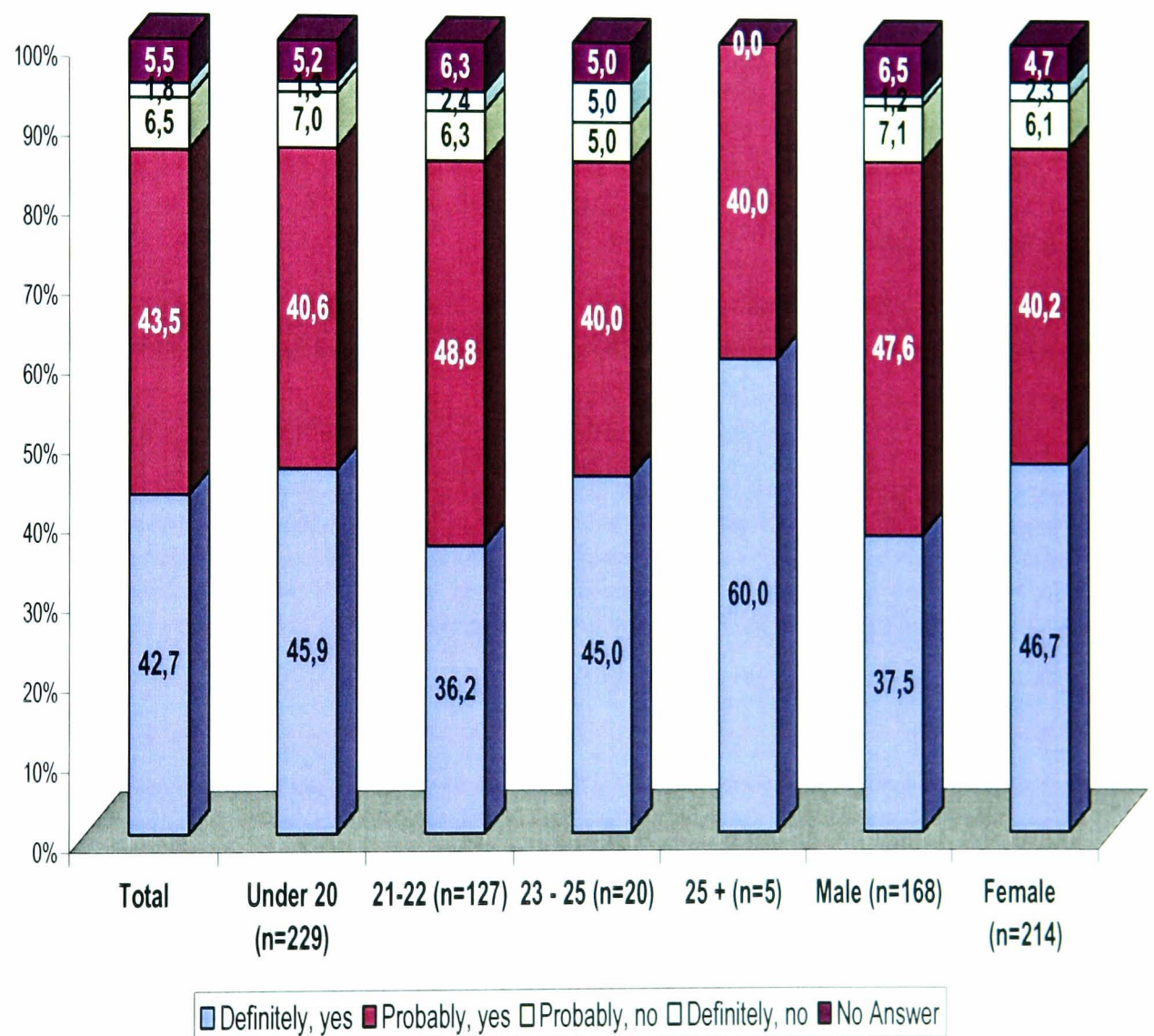
Figure 4.20 Choose to attend Cyprus College again by sex and by age

Over 86% of the respondents indicated that they would either probably or definitely select the college again. Only 2% of the survey sample responded that they would definitely not choose to attend Cyprus College again, whereas 6,7% of participants responded that they would probably not select to attend Cyprus College again. A higher proportion of respondents from Larnaca and Famagusta as compared to those from Nicosia and Limassol responded that they would definitely select the same college again.

If you had an opportunity to choose again, would you choose to attend Cyprus College?

Base: All who answered (n=382)

Legend: □ Definitely, yes ■ Probably, yes □ Probably, no □ Definitely, no ■ No Answer
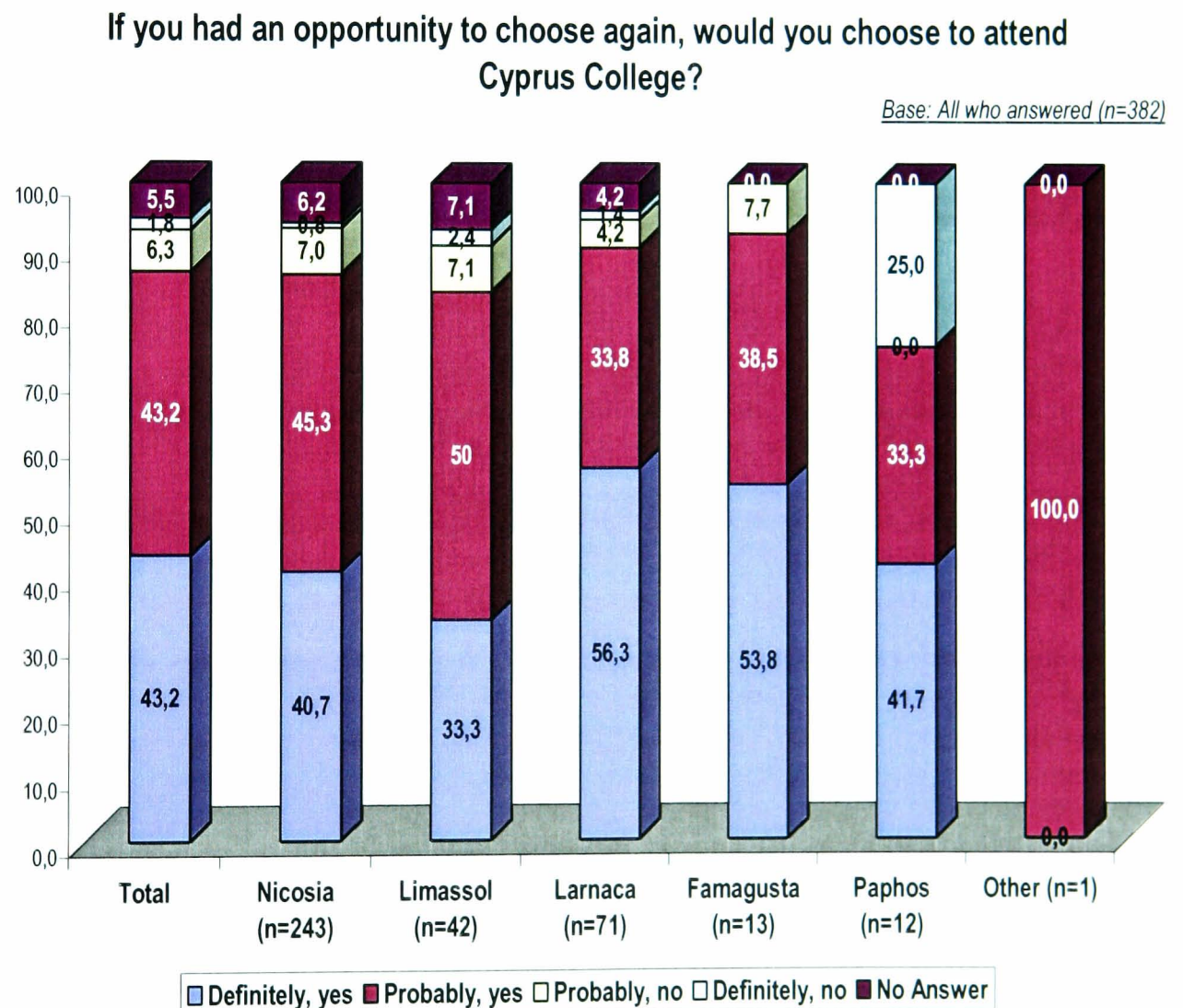
Figure 4.21 Choose to attend Cyprus College again by city

Figure 4.22 provides information about **intentions** of participants **to transfer** to another college/university in order to continue their studies (**Questions 16 &17**).
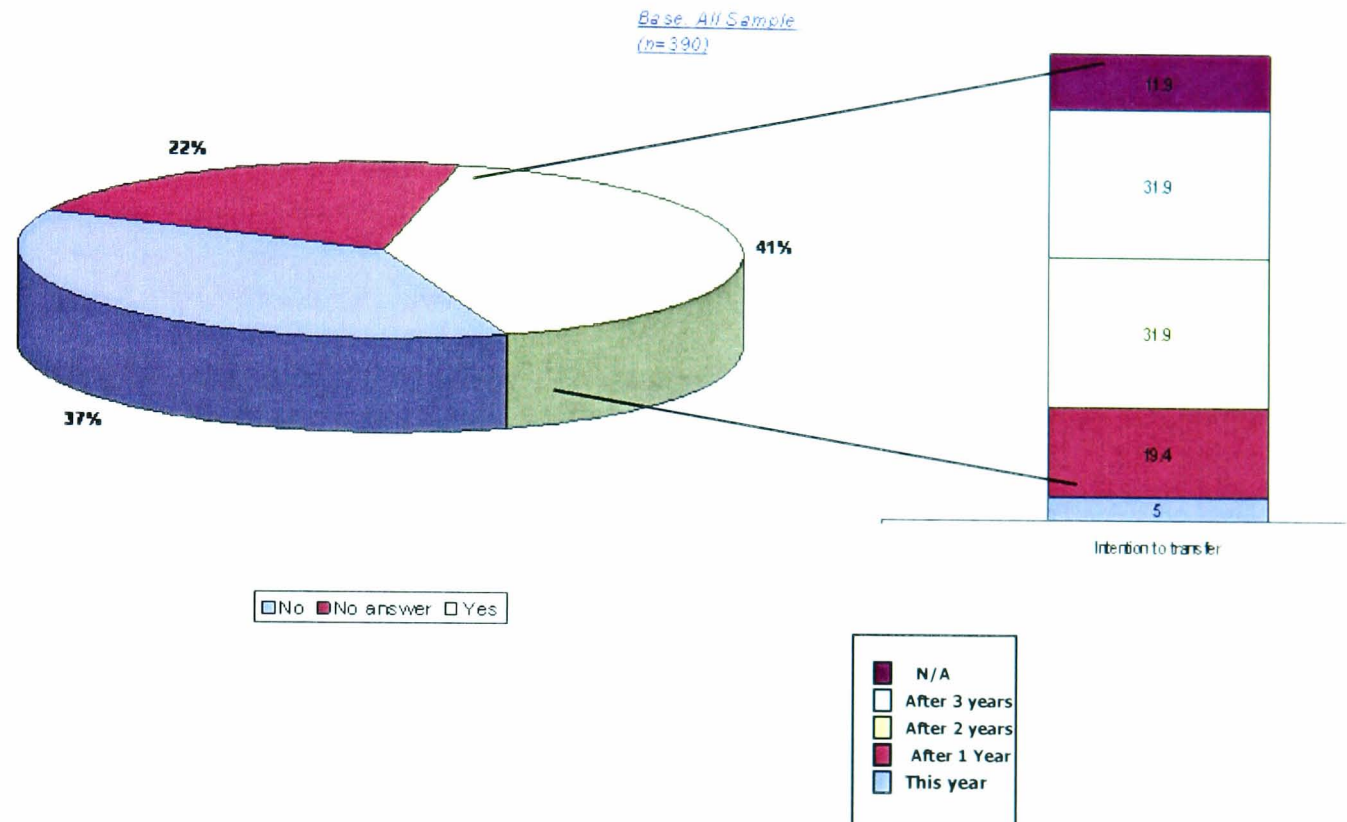
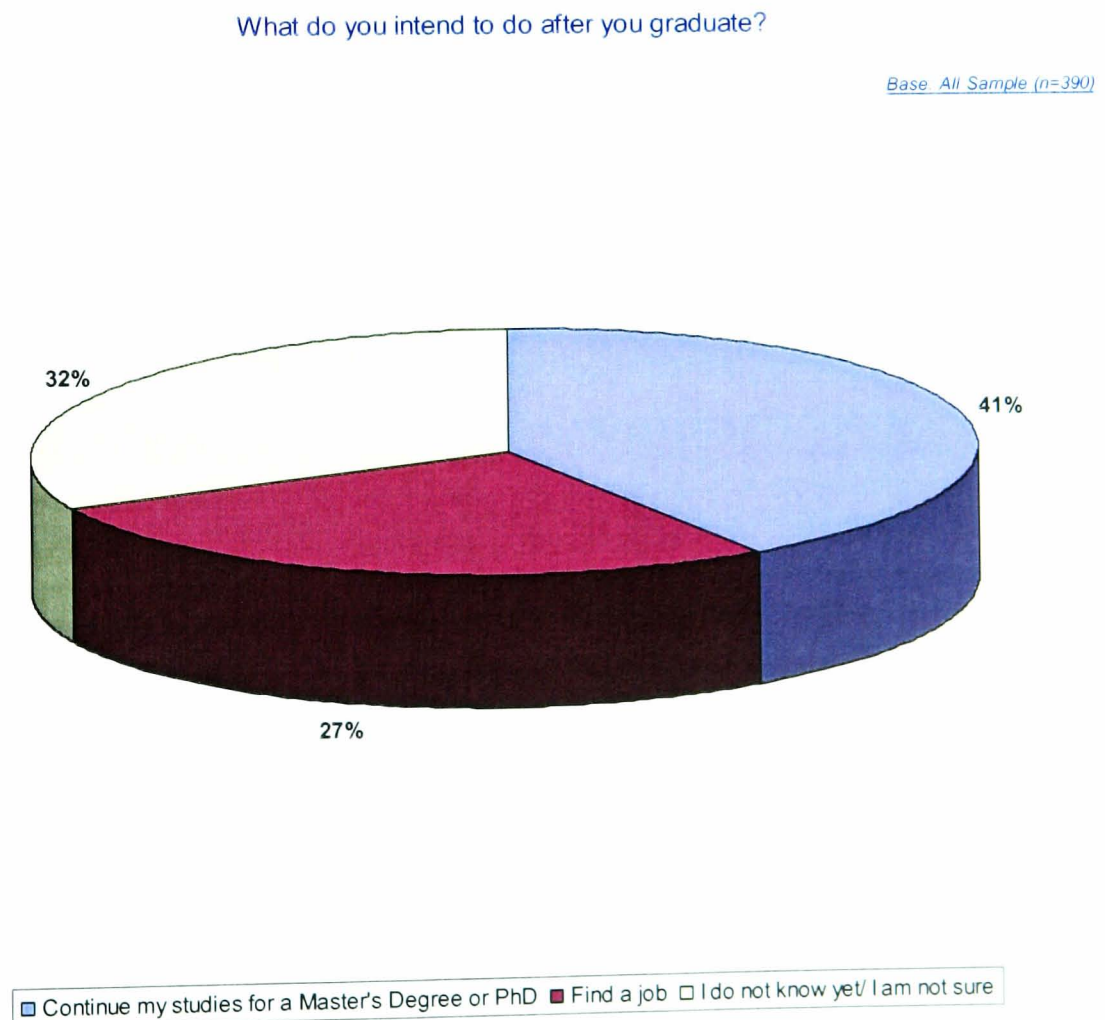**Figure 4.22** **Intentions to transfer to other institutions**

A considerable proportion (41%) of all the students interviewed were planning to transfer to another college/university abroad in order to continue their studies.

Male participants were much more likely than females to claim that they were planning to continue their studies abroad. Furthermore, students with higher

grades were much more likely than students with lower grades to transfer to another institution.

The majority of the participants that intended to transfer to another college/university (about 64%) indicated that they plan to transfer after their second year of studies (31.9%) or after their third year of studies (31.9%). One out of five were planning to transfer after their first year of studies.

Figure 4.23 provides information about plans of participants after graduation **(Question18)**.

What do you intend to do after you graduate?

32%

41%

27%

☐ Continue my studies for a Master's Degree or PhD ■ Find a job ☐ I do not know yet/ I am not sure

Figure 4.23 **Plans after graduation**

A considerable proportion (41%) of the students interviewed were planning to continue for a postgraduate degree. Almost one out of three respondents was not sure about higher studies whereas 27% claimed that they were planning to find a job after their undergraduate graduation.

4.4 The Empirical Clarification of the Dimensional Structures of College Choice factors

The purpose of this section is to enable the extraction of the dimensional structures of college choice factors by empirical means. The rationale behind this decision is grounded to the need to verify the conceptual structure of college choice factors as this has emerged through the literature review.

In order to attain the objective described above, the question items for the criteria for college choice as well as the influencing factors were subjected to a factor analysis. A factor analysis is concerned with exploring the patterns of relationships among a number of variables. The patterns are represented by factors, which are linear combinations of the original variables.

A preliminary test, which provides a first indication concerning the appropriateness of a dataset for factor analysis, is the examination of the correlation matrix. As Norusis supported (1984 adapted from Hopkinson &

Pujari, 1999), where correlation between items is small, it is unlikely that they share a common factor. Through computation of a correlation matrix, tests of the variables confirm whether factor analysis is appropriate for the data. The correlation matrix , extracted from the reliability analysis, indicated that a reasonable number of correlations exceeded the recommended minimum level of 0.3 (Nunnally, 1978; Hair et al., 1998).

Prior to the computation of factor analysis, three indicators were first evaluated to examine whether the data sets were suitable for factor analysis.

The **first indicator** referred to the adequacy of sample size. There is no scientific answer to the factor analysis sample size question. However, there are some arbitrary 'rules of thumb' suggested by leading scholars, concerning the minimum sample size needed to conduct factor analysis.

a.) STV ratio: Bryant and Yarnold (1995) suggested that the subjects-to-variables ratio should be no lower than 5.

b.) Hair et al. (1998) argued that the number of subjects should have a ten-to-one ratio or a minimum sample of 100.

c.) Gorsuch (1983) and Guadangoli & Velicer (1988) have suggested a minimum sample size of 100 to 200 observations as adequate.

d.) Hutcheson & Sofroniou (1999) recommended at least 150 to 300 cases for a factor analysis to be performed.

For the purposes of the current analysis, the survey sample was selected for use, provided that it satisfied the above stated rules of thumb. For the survey sample of the current survey, the ratio of sample size (N=390) to the number of variables was 19.5:1 for the college choice criteria and 18.5:1 for the influencing factors. Therefore, the size of the sample satisfied all the previously-mentioned rules of thumb.

Although there were a minimal number of missing responses, special consideration was given to the way of handling the missing information, since it can affect the factor analysis procedure. SPSS v. 15, the statistical program used, provides two options for handling missing data: mean substitution and pair wise deletion. Mean substitution was used, where the missing value is replaced by the average value from the sample.

The **second indicator** was concerned with **the reliability** of the questionnaire scales (for both college choice criteria and influencing criteria), and these were examined with the computation of Cronbach's alpha. The initial coefficient alpha was 0.890 for the college choice criteria and 0.860 for the influencing criteria, indicating that the scale had a high level of internal consistency, which is an important indication of reliability (Crano & Brewer, 2002). Furthermore, the Cronbach alpha coefficients obtained for both scales comfortably exceed the cut-off point of 0.70 suggested by Nunnally (1978). However, the corrected item-to-total correlations and whether the elimination

improved the corresponding alpha values were set as the criteria in deciding whether an item was to be rejected or retained (Parasuraman, 1988; Lankford & Howard, 1994; Saxe & Weitz, 1982). According to these criteria, items were retained with corrected item to total correlations equal to or greater than the 0.3 cut-off suggested by Hopkinson and Pujari (1999). From the college choice criteria, scale items 1, 2 and 3 (Reputation of the College, Accredited program of study, College with the most accredited programs) had item-to total correlations less than 0.3. However, none of the variables were deleted since their deletion had not substantially increased the alpha value. The exclusion of these variables was going to affect the comprehensiveness and breadth of the indeces of college choice and influencing factors because the variables are considered important indicators. At the same time, their contextual meanings are not conceptually covered for any other variables. Two variables of the influencing factors criteria, (Internet/Website and Scholarship / Financial Aid) had Cronbach alpha coefficients less than 0.3. As in the case of the college choice criteria, an examination of the corrected item-to-total correlations suggested that the items could be retained for further analysis, as their deletion had not substantially increased the alpha value.

The **third indicator**, the Kaiser Measure of Sampling Adequacy (MSA) (Kaiser 1974), was 0.867 for the college choice criteria and 0.849 for the influencing factors, indicating that the data was appropriate for the principal components factor analysis model. A value over 0.5 and above for the entire matrix

indicates appropriateness for factor analysis (Hair et al., 1998). Kaiser (1974) characterises measures of sampling adequacy in the 0.70s as middling while according to Tabachnick & Fidell (1989), values of 0.6 and above are required for a good factor analysis. Moreover, the Bartlett's test of sphericity of the data (2530.512, $p< .000$) indicated that the 20 college choice variables were not independent. This was also the case for the influencing factors (2168.398, $p< .000$).

The satisfaction of the above criteria assured the researcher that the data sets were appropriate for factor analysis (Hair et al. 1998, Stevens 1996).

For the purposes of this study, a decision was made to adopt **principal components analysis**. The rationale behind this decision was made after reviewing the relevant literature and considering views by leading scholars such as Nunnally (1978), Mulaik (1990), Stevens (1996) and Hair et al. (1998). This decision is supported, besides, by the fact that there are complications in the empirical application of common factor analysis and that it is preferable for the purposes of this study to consider the amount of error variance in the process of deriving to factors. Furthermore, in most social science research processes the use of principal components factor analysis is preferred over common factor analysis (Nunnally 1978; Hair et al., 1998).

Although the two models differ, empirical research has demonstrated that in many cases both principal component and common factor analysis come up with identical findings (Rummel, 1970; Nunnally, 1978; Gorsuch, 1983; Stevens, 1996; Hair et al. 1998).

The un-rotated initial solution suggested five factors for the college choice criteria and six for the influencing factors. However, for both solutions the variables were mainly loaded on factor 1. The initial extracted factor matrices were then rotated by using Varimax rotation to generate orthogonal factors. Rotation is used to reorient the factor loadings so as to make the factors more interpretable (Tabachnic & Fidell, 1989). Orthogonal rotation assumes that the factors are at right angles to each other; in other words, the factors are not correlated. The Varimax rotation option in SPSS was used, which tries to minimise the number of variables that load highly on a factor.

The final decision that was made concerned the determination of the number of factors. Based on the studies of Rummel 1970, Dunteman 1989, Stevens 1996 and Hair et al. 1998, four criteria were defined to assist the process of determining the number of factors to be extracted. These are:
-   Kaiser criterion: This is the most common rule of thumb and suggests dropping the least important factors from the analysis. More specifically, the Kaiser rule is to drop all factors with eigenvalues under 1.0. The

Kaiser criterion is the default in most computer programs (SPSS, Statistica, Minitab).

- Scree Plot: The Cattell scree test plots the components as the X axis and the corresponding eigenvalues as the Y axis. As one moves to the right, toward later components, the eigenvalues drop. When the drop ceases and the curve makes an elbow towards a less steep decline, Cattell's scree test suggests dropping all further components after the one starting the elbow.

- Variance explained criteria: This rule suggests the keeping of enough factors to account for about 80 to 90 percent of the variation.

- Comprehensibility – Researcher's judgment: Although this is not a strictly mathematical criterion, it is widely used by researchers and suggests the limiting of the number of factors to those whose dimension of meaning is readily comprehensible.

The best method in an exploratory approach such as the current one was to use the eigenvalues and scree cut-off points as general guides to the dimensionality of the factor space and let the interpretability of the factors indicate the exact number of factors to retain. In the factor analysis conducted in this research, Rummel's (1970) suggestion that the best number of factors to use depends on the researcher's judgment was also taken into consideration. The initial solution of the college choice criteria suggested a five-factor model and the solution indicated that five factors satisfied Kaiser's rule of using only

components whose eigenvalues are greater than 1. In addition, Cattell's scree test (**see Figure 4.24**) agreed with Kaiser's rule as there were only five factors with eigenvalues before the breaking point. A breaking point is the point where the steep descent stops and the eigenvalues start to level off.
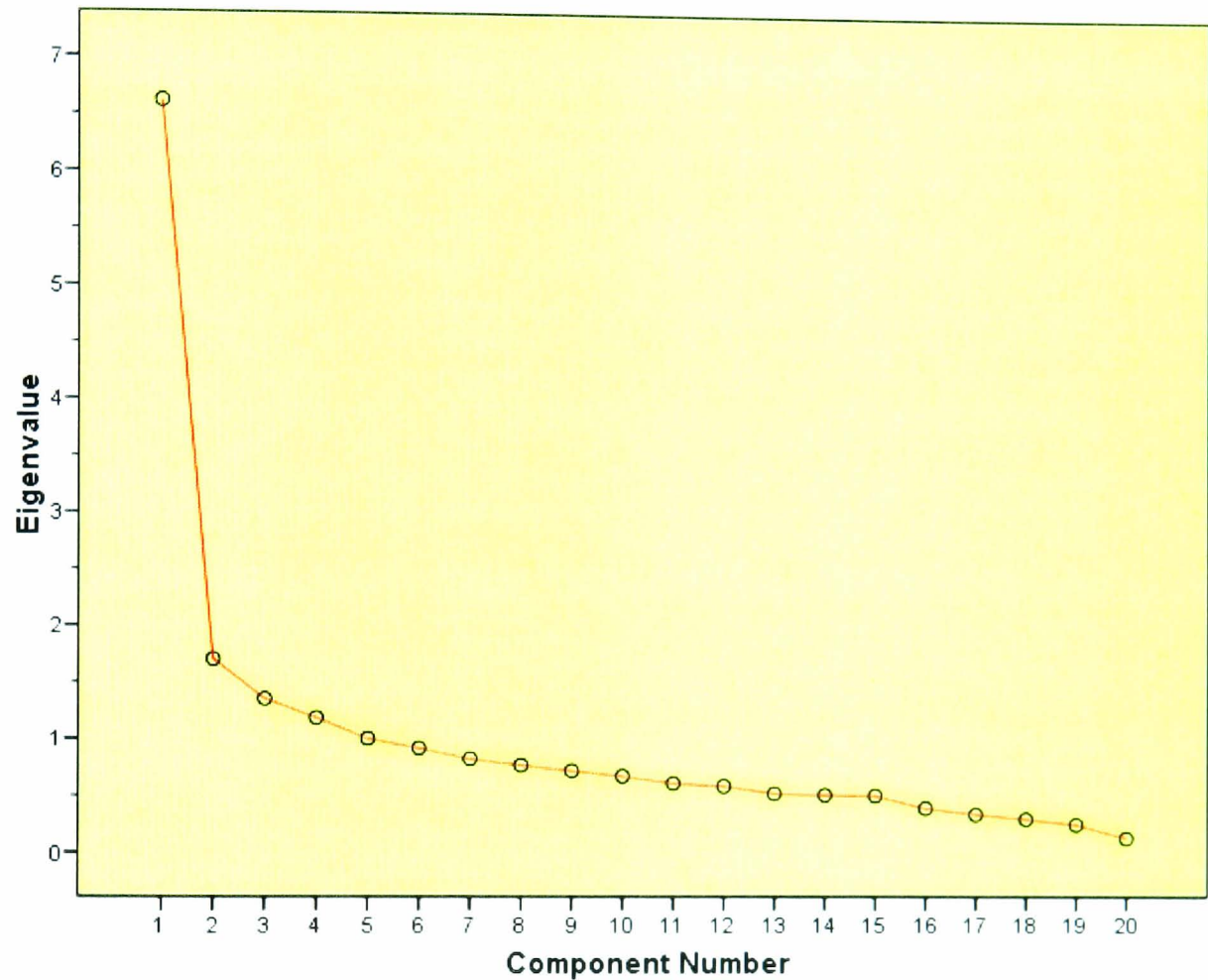
Figure 4.24 Scree - Plot College choice criteria

Based on the above observations, the number of factors were pre-determined at five ('a priori' criterion supported by Kaiser's rule) and factor analysis was performed again. This resulted in the extraction of a five-factor solution, explaining 59.37% of the total variance, with 33.07%, 8.52%, 6.78%, 5.95% and 5.03% of the variance explained by each factor, respectively.

The Cronbach alpha coefficient obtained for the overall scale is 0.890, which comfortably exceeds the cut-off point of 0.70 suggested by Nunnally (1978). Because of the multidimensional nature of the college choice criteria, the alpha of each dimension is suggested to be calculated (Nunnally, 1978). At .867, .707, .647, .719 and .690 respectively, the obtained results do not differ significantly from the Cronbach alpha coefficient of the total scale. These results indicate that the question items selected in the questionnaire appear to be homogeneous and from the same domain of construct. Therefore the internal consistency reliability of the instrument is supported. In summary, the Cronbach alpha coefficients both on the overall and dimensional levels, indicate high internal consistency reliability.

The results of the rotated factor matrix are reported in Table 4.10, the percentage of variance is explained in Table 4.11 and the Pearson correlation coefficients between factors (in the form of factor scores) are presented in Table 4.12

Question Items	F_1	F_2	F_3	F_4	F_5*
Athletic facilities	0.838				
Clubs and social activities (extracurricular activities)	0.804				
The availability of Campus housing facilities	0.673				
Physical attractiveness of Campus	0.613	0.428			
Good layout/organisation of the Campus	0.572	0.332	0.416		
The quality of students who study at the College	0.423				
Active student social life	0.399	0.382			
Size of College		0.808			
Location of College		0.718			
Number of students attending the College		0.681			0.369
Accredited program of study			0.79		
Reputation of the College			0.64		0.313
College with the most accredited programs			0.591		
Employment opportunities after graduation			0.529	0.373	
Cost (Tuition and Fees)				0.811	
Scholarships /Financial Aid				0.766	
Possibility to study/transfer abroad	0.316				0.664
The prospect of becoming a university			0.349		0.628
Good reputation of Faculty				0.431	0.577
Modern Facilities (Library, Computer Labs etc.)	0.307			0.405	0.499
Alpha Coefficients	.867	.707	.647	.719	.690
Reliability of Total 20			.890		

F_1, F_2, F_3, F_4 and F_5 indicate factor 1, 2, 3, 4 and 5 respectively.
** *Factor loadings lower than 0.3 are not listed.*

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.
* *Rotation converged in 15 iterations..*

Table 4.10 College choice criteria rotated Factor Matrix: Principal Axis Factoring with Varimax Rotation.

Factor	Eigenvalue	Percentage of Variance	Cumulative percentage
1	6.616	33.079	33079
2	1.706	8.528	41.607
3	1.357	6.785	48.391
4	1.190	5.950	54.342
5	1.007	5.034	**59.376**

*Two-tail

Table 4.11 Eigenvalues and variance explained of survey data – College choice criteria.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	1				
Factor 2	-.0017 (p*=0.777)	1			
Factor 3	.007 (p*=0.907)	.024 (p*=0.685)	1		
Factor 4	-.015 (p*=0.801)	-.006 (p*=0.915)	.029 (p*=0.623)	1	
Factor 5	-.026 (p*=.667)	.024 (p*=0.69)	-.048 (p*=0.424)	0.007 (0.907)	1

*Two-tail

Table 4.12 College choice criteria - Correlation coefficients between factors.
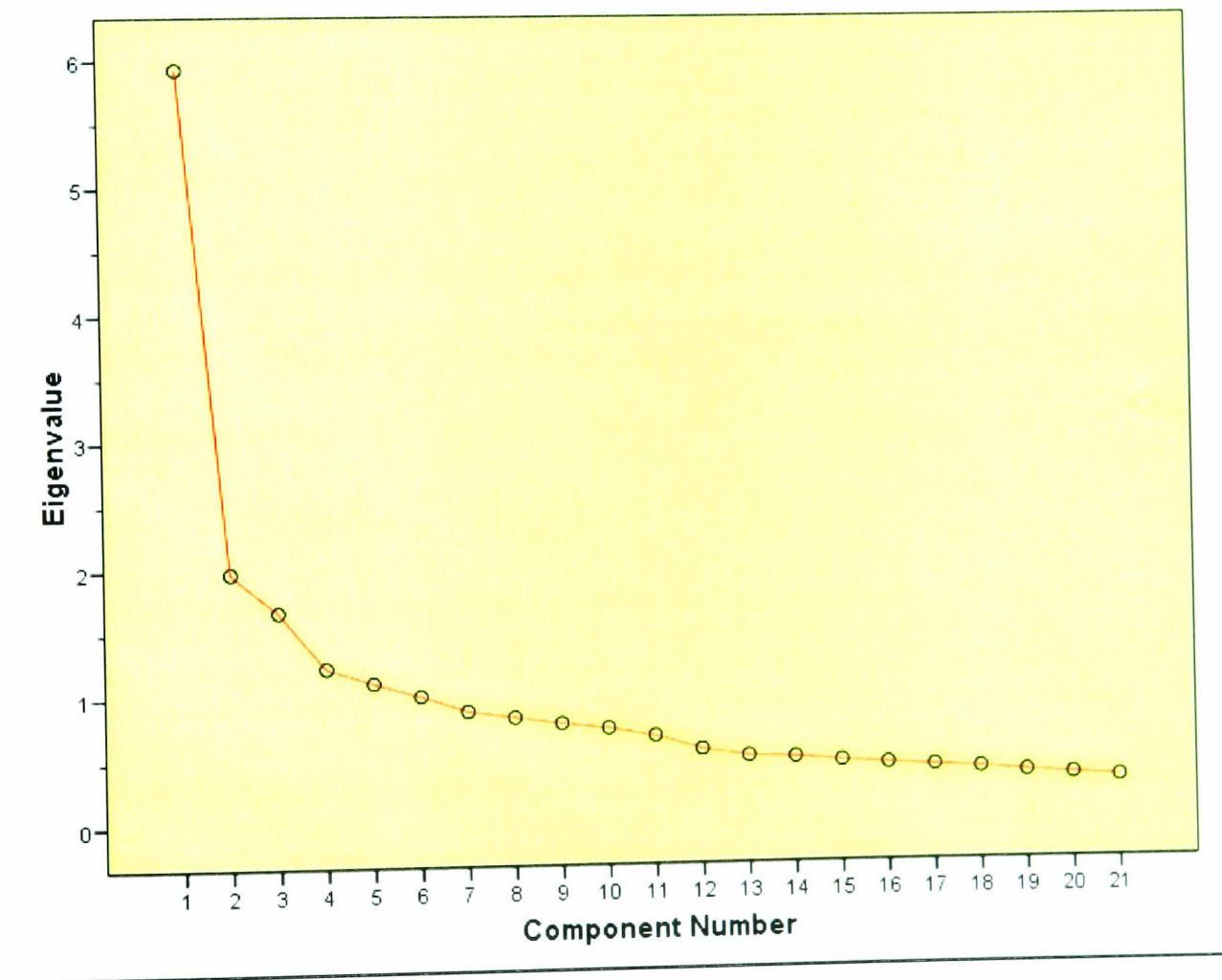
Figure 4.25 Scree Plot – Influencing Factors.

The initial solution of the influencing factors provided a six factor solution, all of them satisfying Kaiser's rule. A visual inspection of Cattel's scree test indicated

six factors with eigenvalues before the breaking point (see Figure 4.25). The same procedure, followed for the college choice criteria was applied, and the number of factors was predetermined at four. The final solution produced a six factor dimensional structure of the influencing factors explaining 61.45% of the total variance, with 28.23%, 9.39%, 7.94%, 5.84%, 5.27% and 4.77% of the variance explained by each factor, respectively.

The Cronbach alpha coefficient obtained for the overall scale was 0.860, which comfortably exceeds the cut-off point of 0.70 suggested by Nunnally (1979). As in the case of the college choice criteria the alpha for each dimension was calculated. The obtained results (see table 4.13) do not differ significantly from the Cronbach alpha coefficient of the total scale indicating that the question items selected in the questionnaire appear to be homogeneous and from the same domain of construct. Therefore the internal consistency reliability of the instrument measuring the influencing factors is supported.

The results of the factor analysis of the influencing factors are reported in Table 4.13, the percentage of variance is explained in Table 4.14 and the Pearson correlation coefficients between factors (in the form of factor scores) are presented in Table 4.15.

Question Items	F_1	F_2	F_3	F_4	F_5	F_6*
High School Teachers	0.772					
Career Centre at my High School	0.716					
Organised visit to the College (through your High School or after a specific College event)	0.665					
Visits from College personnel at your High School	0.663					
Telephone call from the College	0.612			0.321		
Contact with the College through e-mail	0.601	0.329				
Advertisement of the College (Radio, Television etc.)		0.714				
Internet/Website		0.67				
College publications (Bulletin, Booklets, Leaflets, other material)		0.639				
Educational Fair		0.614				
College Video/CD		0.561				
Friends/associates who already study there			0.78			
Friends/associates			0.762			
Cyprus College Graduate (alumni)			0.607			
Parents/family members			0.589			
The College Admissions Office				0.779		
Personal visit at the College on your own initiative				0.723		
College personnel (faculty and staff)				0.663		0.355
Specific program of study					0.835	
Accredited/Certified program of study					0.801	
Scholarship / Financial Aid						0.868
Alpha Coefficients	.833	.730	.681	.688	.591	-
Reliability of Total 21				.860		

F_1, F_2, F_3, F_4 and F_5 indicate factor 1, 2, 3, 4 and 5 respectively.
**Factor loadings lower than 0.3 are not listed.*

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.
* *Rotation converged in 15 iterations..*

Table 4.13 Influencing factors Rotated Factor Matrix: Principal Axis Factoring with Varimax Rotation.

Factor	Eigenvalue	Percentage of Variance	Cumulative percentage
1	5.929	28.233	28.233
2	1.974	9.398	37.631
3	1.667	7.940	45.571
4	1.227	5.841	51.412
5	1.107	5.274	56.686
6	1.002	4.773	61.458

Table 4.14 Eigenvalues and variance explained of survey data – Influencing factors.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Factor 1	1					
Factor 2	-.001 (p*=.983)	1				
Factor 3	-.024 (p*=.692)	-.036 (p*=.552)	1			
Factor 4	-.014 (p*=.816)	.048 (p*=.434)	.024 (p*=.689)	1		
Factor 5	-0.002 (p*=.968)	-0.024 (p*=.695)	-0.023 (p*=.71)	-0.01 (p*=.867)	1	
Factor 6	-0.026 (p*=.667)	-0.031 (p*=.611)	-0.047 (p*=.436)	-0.018 (p*=.761)	-0.005 (p*=.939)	1

*Two-tail

Table 4.15 Influencing factors- Correlation coefficients between factors.

According to Hair et al. (1998), factor loadings indicate the correlation between the variables and the factors so that variables with high loadings on the same factors are grouped together. Hair et al.,. also suggested that factor loadings ± 0.30 to be significant and factor loadings of ± 0.50 as very significant. According to Comrey (1973 cited in Hopkinson and Pujari 1999), a factor loading value of 0.50 and above is considered good and very significant; 0.45 as fair and below 0.32 as poor. For the purposes of the current analysis all the factor loadings less than 0.35 were omitted.

The results for the college choice factors as presented in Table 4.10. indicate that 8 items did not lend themselves to easy interpretation because they loaded significantly to more than one factors. Nevertheless, the reported results in Table 4.12 indicate insignificant correlation coefficients between the factors something which means that the overlapped loadings are all marginal. An examination of the results of the rotated factor matrix for the influencing

factors (Table 4.13) reveals that 3 items load to more than one factor. However, the correlation coefficients of the factor scores (Table 4.15) are insignificant leading to the conclusion that overlapped loadings are marginal.

For both the college choice and influencing factors criteria factor solutions, the results can be considered satisfactory. As Hair et al. suggested, in the social sciences solutions that account around 60% of the total variance are considered satisfactory (1998, p.104).

Furthermore, comparing these results with those of studies conducted in the domain of marketing research, the former are considered very satisfactory as they have derived to factors solutions with as little as 23 percent of variance explained. Examples of such studies are Parasuraman SERVQUAL model (1988), with a variance explained ranging from 23.6% to 37.4% and the Cronin and Taylor (1992) study, with levels of variance explained ranging from 29.1% to 57.5%.

The factorial structures for both set of criteria are presented in figures 4.26 and 4.27. The lines linking the variables and the factors are the factor loadings, and those between factors and the constructs are the eigenvalues. The dotted lines connect the factors with the variables loaded on more than one factor.
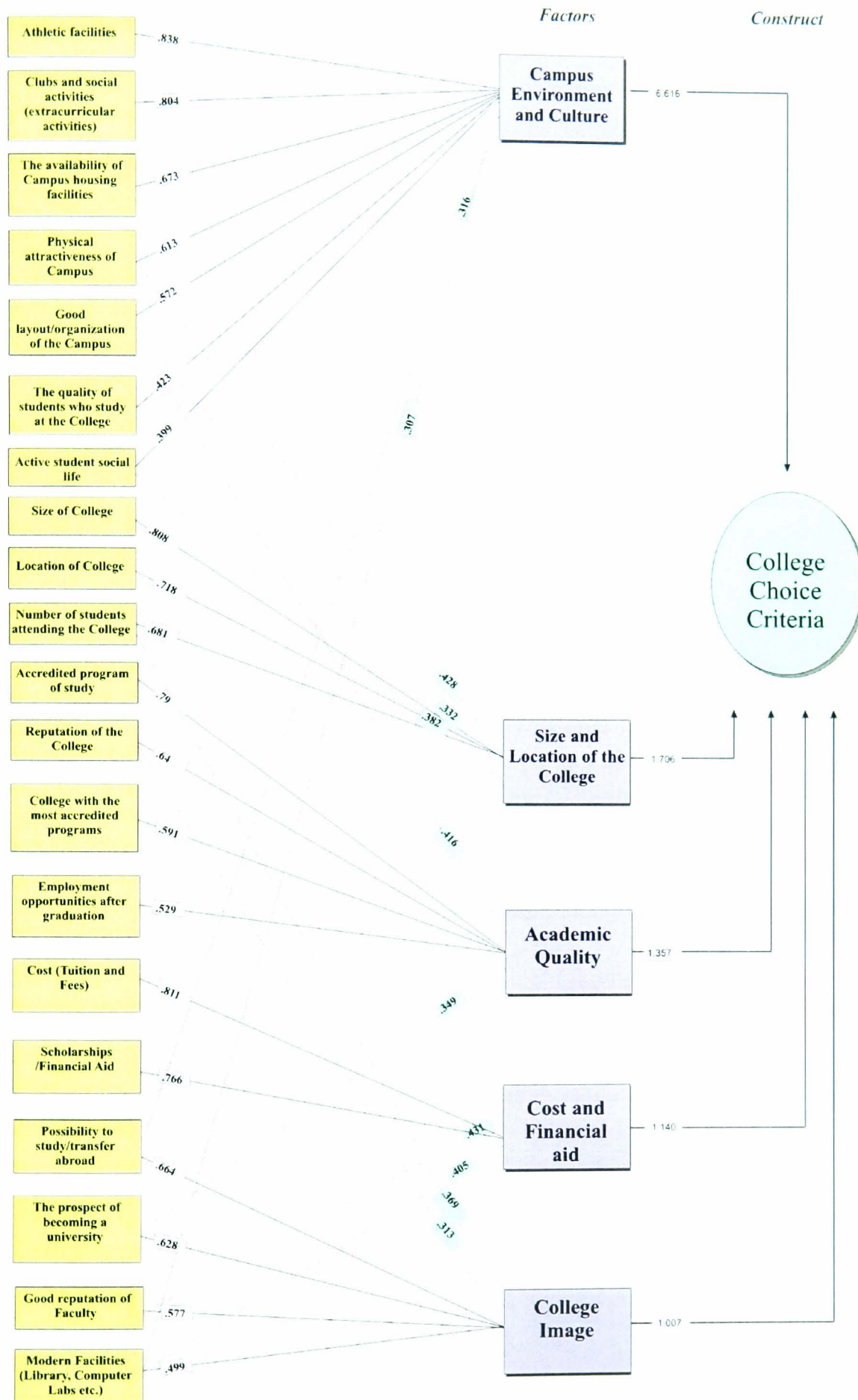
Figure 4.26 College choice Factor Structure.

Figure 4.27 Influencing Factor Structure

By its nature, the process of naming factors is not very scientific and is based on the subjective opinion of the analyst (Hair et al., 1995). However, it appears clear that the patterns of the dimensional structures as illustrated earlier lend themselves to meaningful interpretation and are in line with the theoretical findings of the literature review.

The following discussion involves the naming of each factor. For the dimensional structure derived for the college choice criteria, the following interpretation is provided:

Factor 1 'Campus environment and culture' is dominated by items related to campus appearance, campus physical setting, campus culture and social activities.

Factor 2 'Size and location of the college' consisted of items which strongly correspond to the location, size and the number of students of the college.

Factor 3 contained items associated with accreditation of programs and prospects of employment opportunities and thus labelled 'academic quality'.

Factor 4 consisted of criteria strongly related to tuition and financial aid, labelled 'cost and financial aid' factor.

Factor 5 encompassed items associated with the overall image of the college such as the prospect to become a university, the reputation of faculty, the possibilities of students to transfer abroad and the modern facilities. Thus this factor was named 'college image'.

The interpretation of the dimensional structure for the influencing factors is given below:

Factor 1 was dominated with items related to contacts of participants with the college and included items such as campus visit, telephone call from the college and contact with the college through e-mail. Another component of this factor contained items related to the high school of participants, notably the high school teachers and the career centre at the high school. Factor 1 was named 'contacts of participants'.

Factor 2 contained items associated with various methods of recruitment and promotional strategies, thus termed 'promotional strategies'. Perceived influencing items included in this factor were college advertisements, college publications/CDs, education fair and Website of the college.

Factor 3 included items associated with persons such as friends, parents and alumni who have influenced participants to attend Cyprus College, thus labelled 'sources of influence'.

Factor 4 covered items associated with the Admissions Office, thus termed 'admissions activities'.

Factor 5 consisted of items strongly related to programs of study, thus called 'programs of study'.

Factor 6 was the only factor with one item included, labelled as 'scholarships and financial aid'.

It is evident that factor analysis has produced a dimensional structure that clearly resembles the structure that has been produced through theoretical means (utilisation of the literature). This particular finding is of tremendous importance because it confirms empirically the theoretical structure of this study, which was used as the basis for extracting policy recommendations.

4.5 Summary

Chapter four presented the detailed findings of the study. A descriptive analysis was provided regarding the perceived level of the various college criteria and influencing factors on college choice process. In addition, multivariate analysis such as factor and reliability analyses was provided to enhance empirically the theoretical and conceptual structure of this study. The key findings of the study and the subsequent recommendations are presented in chapter five. The key findings of the study and the recommendations (as these are extracted from the analyses conducted in this chapter) are presented in chapter five.

Chapter Five- Summary, Conclusions and Recommendations

5.1   Introduction

The final chapter of this study on factors influencing student college choice consists of a summary of the overall study; major findings and conclusions; recommendations/implications for practice; recommendations for future research and a conclusion.

5.2   Summary of the Study

The purpose of this study was to identify factors that influence students to attend Cyprus College. The college could utilise the outcome of the study for the development of its strategic student recruitment plan as well as for market positioning and promotion.

Chapter one of this study addressed the importance of examining customer behaviour as part of the business model of strategic market planning as applied to student recruitment. This study is significant because, like in industry, understanding the influences behind consumer choice is the basis for building a solid, comprehensive and consistent marketing and enrolment strategy. The chapter presented an introduction and background of the problem, research

questions, purpose of the study, limitations of the study and definitions of terms.

Chapter two of this study reviewed the literature related to this topic. Literature that was reviewed for this study included the historical background of college choice as well as the importance and practical use of understanding the college choice process. Various models of college choice behaviour and the factors that influence the college choice process were mentioned and analysed. Finally, various elements of the marketing concept directly related to or affected by the college choice process were also discussed.

Chapter three outlined the research methodology used in this study. It provided relevant information regarding the research design such as the population and sample; the development and administration of the questionnaire; the collection, triangulation and analysis procedures of the data. It further addressed the issues of validity and reliability.

Chapter four presented the findings of the study. The results of the data analysis as they relate to the research questions were presented besides.

5.3   Major Findings and Conclusions

As analysed and discussed in the literature review, factors that influence student decision at the various stages of the college choice process are composed of **fixed college characteristics**, **sources of influence** and **recruitment marketing strategies**. Fig. 2.6 in section 2.9 provides an overview of the influential factors.

Chapman (1981) suggested that student college choice is influenced by a set of **fixed college characteristics** such as academic quality, institutional image, academic programs, faculty members, campus environment and cost. The top three college characteristics that participants in this study considered the most influential in their college decision making process were: Accredited program of study (M=5,74), Specific program of study (M=5,33) and Scholarship/Financial Aid (M=4,62) **(see table 4.6)**.

In selecting a school, students were strongly persuaded by the comments and advice of others such as family and friends. Kellaris & Kellaris (1988) noted the important role **significant others** play in influencing student college choice decisions. The top three factors that have been identified by participants as the most influential **sources of influence** in their college decision-making process were: Parents/family members (M=4,67), Friends/Associates (M=4,55) and Current students of Cyprus College (M=4,51). Other sources of influence such

as Admission representatives (M=4,31) and Cyprus College Alumni (M=3,62) also received relatively high ratings **(see table 4.6).**

Student perceptions are significantly influenced by information from a wide variety of sources such as publications, advertising and recruitment activities and programs (Parker et al., 1989). The top three college **recruitment/marketing strategies** that participants in this study considered most influential in their college decision-making process were campus visit (M=4,24), college publications (Bulletin, booklets, leaflets) (M=3,73), and advertisements of the college (radio, television etc.) (M=3,64). **(see table 4.6)**.

It appears that personal contact with some aspect of the college was a very influential factor for participants. Factors such as friends/associates who already study there (M=4,55), the college admission office (M=4,31) and the personal visit to the college on participants' initiative (M=4,24) were highly rated as very important factors considered by students in the college choice process. It seems that students consider the campus visit and the personal contact of major importance. This supports the results of previous studies that found that the campus visit has considerable impact and influence on the college choice process (Mathay, 1989; Kellaris & Kellaris, 1988; Chapman 1981), as it provides a unique opportunity to give tangible evidence of the educational experience offered by the college (Yost & Tweker, 1995). In

addition, personal visit to the college on student's own initiative was considered one of the most influential factors to students when they select their college compared to other marketing strategies. It has been found that the campus visit has considerable impact and influence, and several studies ranked the campus visit as one of the most influential factors for the college-going decision (Stoner & Lincoln 2000; Rosen et al., 1998; Jorgensen, 1994). Therefore, the result of this study reinforced earlier findings. Interestingly, organised visits to the college (through participants' high school) achieved a very low rating (M=1,95). The self motivated campus visit is widely regarded as a source of unbiased information (Small 2000) while visits organised by students' high school might be interpreted by students as a 'biased' action.

Moreover, the literature consistently revealed that the environment, appearance, atmosphere, physical setting and location of the campus are very important characteristics to potential students (Absher Crowford 1996; Galloti & Mark 1994; Yong & Reyes 1987). Further, many researchers found that campus culture and the social activities of the institution are key criteria in the college choice process (Culln & Edgett 1991; Grace 1989). This study supports the above findings and factors regarding the campus, such as good layout/organisation (M=4,89), physical attractiveness of campus (M=4,70), location of the college (M=4,42) and active students social life (M=4,88) were rated as very important criteria in respondents' college choice **(see table 4.4)**.

Financial considerations, such as the availability of scholarships/financial aid (M=5,92) and the cost (M=5,89) were rated as the most important non-academic criteria in respondents' college choice **(see table 4.4).** In the literature review cost was brought to light as one of the major reasons why students did not attend a particular institution of their preference (St John 1990), and cost is a factor that eliminates some institutions from the choice set. (Choy et al. 1998; Weiler 1996). Additionally, the availability of financial aid was found to be a strong determinant of the college choice process (Hossler et al. 1989; Manski & Wise 1983). This finding could be a reflection of rising tuition costs in higher education.

Academic quality is another major factor that students consider when they select a particular institution to attend. This is consistent with the findings of most studies reviewed on college choice. Academic quality is essential for the survival of private institutions, especially when they are competing for student enrolment. Students choose to attend a university for academic achievement, so it is the quality of learning and teaching that attracts students there. It appears from this study that students are very interested and most mindful about the quality of education. Thus, it is no surprise that the academic factors considered most compelling by the sample revolve around the academic program of study and the reputation of the college. The results of the study revealed that respondents rated the accreditation of programs (M=6,58) as being the most important academic factor in their college selection process.

The prospect of the college to become a university (M=6,35), the employment opportunities after graduation (M=6,06) and the reputation of the college (M=6,02) were also considered salient college choice factors **(see table 4.2)**. The literature review revealed that students are most interested in a college not only for a specific major but also because of its required recognition (Sanders 1986). Moreover, academic quality of an institution is one of the most convincing factors in the decision to attend a specific college (Seneca 1987; Stewart 1987; Terkla 1986; Lay 1981) and institutional image or reputation has a tremendous effect on college choice too. (Strauts & Dun De Water, 1997; Adebayo, 1995; Sevier, 1992; Murphy, 1991). Finally, the prospect of the college becoming a university will obviously improve its reputation and image among prospective students.

The finding regarding the employment opportunities of graduates is consistent with earlier findings regarding the important role of educational outcomes and career opportunities in the college choice process (Maringe 2006). Career placement has become an integral part of enrolment management efforts as parents and students become more knowledgeable educational consumers and increasingly demand to know the career and placement outcomes of graduates. Female students (M=6,33) consider employment prospect more important than male students (M=5,68) when choosing a college **(see table 4.2)**. There has been discrimination against females in the job market in the previous years and female students have to face more challenge and difficulties than male students

when they seek employment. This may explain the reason why female students placed more importance on employment prospect than did male students when they made their college choice decisions.

A majority of the respondents (70.3%) in this study reported that they were enrolled in their 'first choice' college. This is not surprising, as Cyprus College (like other local colleges) essentially follows an 'open door' policy. Most students indicated that they were either very satisfied or satisfied with their final decision (77%). These results are similar to those in Sacks' (1978) study, who reported similar findings regarding the level of satisfaction associated with those students who enrol in their 'first choice' college. In addition, Kim (2001) claimed that if current students are satisfied with their school, their positive word-of-mouth testimony will add to the prestige of the institution and in turn help considerably in recruiting potential students.

More than half of the student surveyed (53%) indicated that they had begun the college search process during their last year of high school studies and about 20% of the respondents claimed that their career aspiration developed sometime during the first and second year of lyceum. Noteworthy is the finding that over 20% of the participants decided about their degree program only after they started college. Many times, incoming freshmen will list 'undecided' as their program of study until they become more decisive regarding their career and/or educational plans. Other students are definite about their

program of study and sometimes they base their choice decision primarily on this factor.

5.4 Recommendations and Implications for practice

The findings of this study provide an understanding of student perceptions about Cyprus College and can be used to improve the enrolment and marketing activities of the college. Thus, the findings of the study lead to the following policy recommendations.

1. Cyprus College needs to improve the effectiveness of its marketing communication and continue to utilise effective marketing strategies to enhance student enrolment. The literature review revealed that the adoption of aggressive marketing strategies by private institutions is seen as a response to dramatic and continuing changes facing institutions of higher education today. Enrolment marketing strategies establish a link between recruitment, retention and academic programs, and an institution must continually adopt marketing efforts to keep pace (Hossler, 1991). Also, Kappler (1998) recommended that during the marketing plan process, the first tenet to be considered by an institution is that marketing must be seen as an integrated, institution-wide effort. With a cohesive, **integrated marketing plan**, efforts will be more successful and effective. It is recommended for the college to appoint

an **advisory marketing committee** to develop and oversee the strategic marketing plan of the college. Such a committee should include representatives from the college community such as administrators, faculty, students, alumni and community leaders. A strategic orientation towards marketing is needed for the college to survive in the long term. Marketing should not be held synonymous with promotional activities but instead, as the integration of programs (curriculum), tuition (price), service and promotion. However, so much focus has been placed on promotion during the last years that the college has neglected other elements of marketing, the relevant ones of programs, price and service. Sevier (1998) classified promotion as tactical and other elements of marketing as strategic. While tactical strategies may provide an institution with a competitive advantage, such strategies can easily be replicated and therefore are not sustainable. Enduring competitive advantages are only possible through strategic selections, such as innovative programs. In some institutions the product mix tends to be driven by what faculty wants to teach, and it is not market-driven (Black et al., 2004).

2. One of the most important academic criteria cited by respondents was the 'prospect' of the college of becoming a university. The college should invest heavily and take all the necessary steps so as to abide with the law requirements about private universities. The **University status**

is expected to boost the image and the reputation of the college, and it will greatly enhance the enrolment efforts. In addition the college should capitalise on its cooperation with the Laureate International Universities network. The strategic relationship with the **Laureate network** provides new opportunities for Cyprus College, notably exchange programs, exchange of faculty/staff, offering of dual degrees and exchange of expertise.

3. It is crucial to strengthen the **institutional image** of the college through its communications materials, Website, media vehicles and messages. A consistent and unique image for the college is critical to its success, and it will enhance student recruitment efforts. Rowley and Sherman (2001) advocated that the minimal yield of marketing activities is associated with the fact that institutions fail to develop their **unique identity** and to foster excellence in specific areas. We must ensure that all communication activities portray and are consistent with our institutional image described in the strategic plan of the college as ' a centre of excellence in education, service and research'. Sevier (1999) stressed the importance of linking marketing communications to a university's strategic plan. It is also imperative that all departments of the college understand the value of building a consistent image throughout the range of communication activities. Bontrager (2002) recommended that consistency of the content and visual presentation of

institutional image is critical in times of intense competition. Enhancing all communications (brochures, advertising, and publicity) to consistently present the strengths of the college is vital. These strengths should include programs, faculty expertise, technological innovation, departmental successes, student and alumni successes and significant initiatives. These efforts should be integrated to maximise results and thus, it is strongly recommended for the college to establish an **Office of Communications** and to appoint a communication specialist. Each department (administrative or academic) should designate a liaison with the Office of Communications and should develop a process to collect and disseminate information about events and activities.

4. The fact that one of the least likely sources of awareness of respondents in this study was the employees of Cyprus College implies that the college should try to fully utilise/involve staff and faculty members in an effort to increase the **positive momentum,** reaching prospective students more efficiently. Integrated marketing implies that every faculty and staff member should pull together with a common purpose and everybody should share the ideas and strategies contained in the overall integrated marketing plan. **Internal marketing** is as important as external marketing and beyond those formally charged with the marketing function, every faculty and staff member should know and reflect the college's brand/image promise. No amount of external

marketing will alter an institution's image without the internal belief in and daily practice of the brand/image promise (Black 2003).

5.   Given the weight of **programs offered** on student college choice, a continuous evaluation process on curriculum design and program offerings is required to assure that the college will thrive in the changing, dynamic and competitive environment. It is essential to focus on the various programs and try to develop a compelling **brand identity** for each one that expresses its special qualities (such as accreditation or links of the program with industry). Kotler and Fox (1995) suggested that in a highly competitive market, an institution should strive to develop programs with unique traits and to assure that they cannot be easily replaced elsewhere. The development of additional innovative programs (new brands) will provide a competitive advantage for the college, attracting new segments. For instance, Cyprus College could offer **dual-degrees** with other members of the Laureate International Network. This would provide an excellent opportunity for Cyprus College to ally itself with globally recognised and respected education brands. Further the college should get into **new graduate programs,** as this study revealed that a considerable proportion (41%) of the students interviewed were planning to continue for a postgraduate degree. The college should be very careful, though, in introducing new programs so as not to cannibalise existing programs of study. Lehman and Winner

(1994) noted that one concern with adding new product is current customers switching from the company's existing product to the new one, resulting in cannibalisation of sales for the original product. In addition, the college must ensure that these new programs, as well as all existing ones, receive accreditation. Finally, the college must adopt more **product (programmatic) marketing** and recruitment strategies, highlighting the academic quality, reputation and specific characteristics associated with specific majors; research supports that this would provide a sustainable competitive advantage in the marketplace.

6. Students are influenced by personal and institutional **relationships** thus major focus of the college recruitment strategy should be on cultivating a relationship between the prospective students and the college through its representatives (current students, faculty, staff, alumni). Mazzarol (1998), emphasised the value of relationships with students (customers) in marketing higher education. Moreover, the customisation of communications so that it is personalised, timely and relevant to an individual is of paramount importance. Whether the message is delivered face-to-face, via telephone, through the web or e-mail, a customised message is always more powerful than a generic one. For this reason, the college should invest in a **Student Relationship Centre** and a **CRM (Customer Relationship Management)**

computerised system. Activities of the Student Relationship Centre could include: identification of student problems; guidance on non-academic issues; assistance with various college procedures; assistance with external procedures; helping new students with orientation; aid in recruiting new students and establishing a call centre for new students. Universities that make an effort to build close relationships with students can benefit in terms of recruitment of new students and student attrition (Shaik, 2005). Through close interactions with students, the Student Relationship Centre could provide valuable feedback to the management for the various concerns and problems that students may encounter. The College should also implement a CRM (Customer Relationship Management) computerised system that would allow it to establish continuous relationships with prospective students and create a dynamic one-to-one marketing model. Continuous communication with prospective students helps to seal a psychological bond between the applicant and the institution (Maringe, 2006). The CRM system would store detailed information on every contact with prospective students, a valuable feature not only for personalised communication but also as a means for measuring the effectiveness of various campaigns of the college. The information from the CRM system could be utilised to personalise correspondence, e-mails and campaigns by the college. For example, a potential music major might receive notices of music performances or a sports management major could be updated on

upcoming athletic events at the college. Creating an effective **lead follow-up system** can be the backbone to a consistent recruitment plan.

7. Enrolment management administrators must be made aware of the important role **parents/family members** play in influencing the college choice process. Parents play a significant role in the college decision-making process and it was cited as one of the most influential factors (M=4,67). The parents of the Millenials have been described as 'helicopter parents' due to their tendency to actively participate in their children's decisions and actions. The college choice process of these students is greatly influenced by their parents' preferences, desires, needs and financial support (Howe & Straus, 2003). Because of their meaningful role in the process and the high costs associated with higher education, it is advisable for the college to develop better relationships with the parents of potential students. This empathic connection may be reflected in activities such as publishing a brochure directed specifically at parental concerns and needs; on campus activities designed for parents or mailing with a focus on financial aid policies and procedures. In addition, the college should establish channels of communication with the parent associations of high school students. Assisting parents' associations with their events, for example, could be very beneficial for the college.

8. The influence of **friends and alumni** on the college choice process is significant and provides an opportunity for the college to use existing students and alumni in the marketing and communication strategies. Friends/associates (55.6%) and people who had already studied at Cyprus College (Alumni 45.4%) were by far the most likely sources of awareness. It is highly recommended to organise an Alumni Association and to introduce a 'Student Ambassador' program.

The **Alumni Association** will serve not only former students but also current and prospective students. The Alumni Association could help and sponsor students in career internships and job placement; provide scholarships to prospective students and assist at various recruitment events and activities such as the education fair, presentations in other cities and open days at the college. Further, interactions of alumni with various publics of the college – students, parents and community leaders – will boost the image and reputation of the college. Alumni form a potential source of advice, guidance and encouragement for potential students, and they could have a particularly beneficial role in building confidence in potential students and their parents. A Website dedicated to alumni could be used as a place where they share experiences and ideas, providing also another marketing tool for the college. In addition, alumni feedback could serve as valuable input into the planning process

of the college for new curriculum and services. Finally, alumni could provide a pool of prospective students for the graduate programs and the professional training programs of the college.

9. The college should identify leaders within the student community (e.g. sports figures, winners of beauty contests) and employ them as student ambassadors. The **Student Ambassador program** would allow current students the opportunity to participate in various public relations and recruiting activities such as aiding new student orientation programs; giving campus tours; assisting with special events such as education fairs, career days and open days. All student ambassadors should receive well-planned training about programs, admission procedures and policies of the college. A student ambassador Website, providing information about the program and the profiles of representative ambassadors, could enhance the effectiveness of such a program. If done correctly, this type of **peer-to-peer recruitment** can be very powerful and serve as an excellent and cost effective yield strategy to enhance the conversion rate of interested to enrolled students.

10. This study once again confirmed the weight of the campus visit and the personal contact with some aspect of the college. Every effort must be made to ensure the **campus visit experience** for students and parents presents the campus and the campus atmosphere in the most positive

manner. The college should organise more campus events and should offer more opportunities for prospective students to visit the campus. **Tours** and **on-campus events** should be well organised and involve faculty members and current students in addition to admissions personnel. Faculty members should be trained to focus their discussions with students and their parents on academic specific program/major characteristics that provide a sustainable competitive advantage.

Prior to their visits, applicants base their impressions of the college on a variety of recruitment materials and/or information received from others such as friends or current students. After touring the campus, visiting with enrolled students and faculty and attending a campus activity (e.g. a sports event), the potential students and their families would have a clearer picture of what the college has to offer as well as a feeling for the Cyprus College experience.

11. **College admission representatives** should continue to play an important role in providing information and assisting prospective students through the college choice process. Most students in this study viewed the role of the admission representative as important. Admissions personnel should increase their meetings with students, whether through high school visits, campus visits and/or events.

12. Further development of **the employment and career centre** of the college is highly recommended. The employment opportunities after graduation (M=6,05) seem to be as one of the most crucial criteria that survey respondents considered in their selection of an institution. Upgrading the employment and career centre of the college could increase the exposure of employment services available to students and will help to establish a more defined identity for the office. The employment and career centre could help high school students with their career aspirations by helping them to visualise the employment market conditions, which will prevail upon their graduation. Data related to career and placement statistics, profiles of graduates, and positions of alumni should be communicated in a systematic way to prospective students and their parents. Maringe (2006) noted that employment rates can be used as a key strategy, not only to help student decision-making, but also to act as a powerful promotional tool for new students. Finally, the creation of a separate physical location for the career centre will greatly impact the current student body and it will serve as a marketing tool for potential students and their parents.

As the job market for college graduates turns extremely competitive, students from private colleges often find themselves in a disadvantaged position when they compete for a job with other graduates from public or foreign universities. It is not easy to eliminate the existing social

prejudice against private colleges in a short period of time, but some initiatives could improve the present situation. Enforcement of the new law for establishing private universities in Cyprus will help towards that end. Additionally, the college needs to constantly review its programs and majors, making necessary adjustments to reflect society's requirements. For instance, the college should strengthen its programs by creating more opportunities for students to have practical training such as **internship**. The college should often conduct market research and accordingly modify its programs so that they can keep abreast of the needs and demands of the economic market.

13.   Findings of the study have shown that personal contact with some aspect of the college is much more favourably perceived (influential) than traditional recruitment activities (advertising, publications) and thus **reallocation of the marketing budget** is highly recommended. There is need to review the college's promotional tools and strategies. It could be that students find the information provided through traditional channels misleading (Ivy, 2002) or it may be that students do not find these trustworthy sources for their decision making (Bennet 2006). This is an indictment on the college since the major portion of its marketing budget is spent on advertising (currently 70% of the budget). A refocusing of strategy to reflect the real concern of prospective students could help the college to be more effective in its recruitment

efforts. The college should direct more budget towards the direct or **personalized tools of communication** as compared to conventional media (TV, radio, magazines). More emphasis should be directed and a higher budget allocated to activities, relationship marketing in particular. Promotional efforts and resource allocation must be carried out with an awareness of what is most effective based on continuous measurement and analysis.

14. The **Website of the college** should be turned into a tool for marketing rather than simply being an information tool. Stoner (2004) indicated that many colleges have recognised that a clear, well-organised Website is essential to their recruiting strategy. It is a must to ensure that the overall Website design and navigation are attractive, effective, efficient and accessible to various audience groups (parents, students) and to confirm that the content is relevant, accurate and timely. The college Website should be a key communication tool within the campus community as it is the institutional portal to a broad range of external audiences. The Website frequently offers potential students their first glimpse of Cyprus College, and thus quality control over content must be maintained, with information updated regularly and consistently. The Website must present a face that is consistent with the college's desired image as well as user friendly. Stoner (2004) claims that on many school Websites, the admission information is difficult to find, usually

hidden under links with unfamiliar, institutional names. He added that redesigning the college Website can bring major benefits.

15. **Publications, brochures and other marketing media** utilised in the recruitment process should be created specifically to reflect various programs and unique market segments. Messages must go beyond features (size of the campus, attractiveness of the campus, residence halls) and focus on student outcomes, for example job placement and industry partnerships. Publications should highlight those college characteristics considered most important by the sample particularly accreditation status, university status, availability of financial aid and employment opportunities. College publications should reflect the real Cyprus College experience so as not to result in a mis-match between student expectations and reality. College prospectuses have taken on some of the characteristics of travel brochures and may set up presumptions and expectations that institutions are unable to dispel (Yorke, 1999). Furthermore, the college could elicit and implement the advice of current students in developing promotional materials. For instance, Luton University found that conversion rates rose by 60% when current students advised on recruitment materials (Stephenson 2003). Since 20% of the respondents indicated that their career aspiration developed sometime during the first and second year of lyceum, it is advisable for the college to start disseminating information

to high school students in their first year of lyceum. A specific publication explaining aspects of various careers should be very useful for students and their parents at this stage.

16. Participants in this study tended to postpone any thinking relating to their higher education for as long as possible, with considerable proportions claiming that they left it until their last year of Lyceum or in the case of males, until during their army service. Thus, **the medium of television,** with its potentially immediate and direct impact is indispensable for the advertising of higher education colleges in Cyprus. The reason is twofold: (a) Because the selection of college is often a 'last minute' decision, therefore immediacy is a crucial element and (b) Because the 'top of mind' awareness of college can play a vital part in the decision making process – and television advertising can contribute significantly in creating top of mind awareness (Briggs, 2001).

17. The overall student satisfaction identified in this study can lead to positive **word-of-mouth** advertising that in turn will bring recruitment benefits for the college. The commitment of the college to create positive word-of-mouth testimony is critical to the success of student recruiting. Given the significance of advice from current college students on prospects' college choices, it is primary for institutions to raise the level of current student satisfaction. Colleges and universities that

embrace the notion of service to students, will dramatically influence marketing and enrolment outcomes (Dimun, 1998).

18. **Financial considerations,** markedly the availability of scholarships/financial aid and the tuition cost were considered the most salient non-academic criteria in respondents' college choice. It appears from the findings of this study that students are very price sensitive. Efforts must be made in the recruitment process to enhance the value proposition by focusing on features, benefits and outcomes while still maintaining a competitive price structure. The availability of financial aid and scholarships should be communicated very clearly so as to ensure that students and their parents are fully aware of the many options available for funding the high costs associated with post-secondary education. The college allocates quite a large proportion of tuition income (about 17% of total tuition) to the financial aid program, and a specific leaflet that will address the various financial aid options available should be developed. The options should be presented as a selling point on the Website of the college besides. The findings suggest that colleges and universities should be concerned with tuition costs. Colleges tend to raise tuition every year with the intention that such a strategy will benefit their growth potential. However, the college should take into serious consideration the fact that the market is very price

sensitive. Finally, a price analysis should be conducted among the market competition to ensure effective positioning on the price variable.

19. Generally, all factors related to learning and teaching facilities (good layout/organisation and physical attractiveness of campus, location of the college) received substantively high ratings. When institutions possess a particularly **distinctive campus,** the literature review indicates that it is a marketing benefit. In general, higher quality campus environments do seem to have an impact on college choice (Price et al. 2003). The newly built facilities of Cyprus College constitute a valuable feature to be used in promotion; one that would differentiate it from its competitors, demonstrating its superiority.

20. Improving the effectiveness of **academic advising** and devising a new system could also enhance satisfaction. The attention provided by an advisor received one of the lowest degrees of satisfaction in this study. Advisors should understand the critical weight of their role, and they should be prepared to provide true guidance to students. They should be proactive; they should seek out their advisees and try to anticipate problems before they occur. Advisors should treat each student as an individual with different learning needs and future plans. This study indicated that a large proportion of students decide about their degree/program only after they start college (20% of the respondents)

and thus special attention is needed for undecided students. For instance, advisors should impart to students that academic major should match students' strengths, interests and career goals.

21. Cyprus College should extend the use of **marketing research** so that a systematic database is developed one from which the longitudinal nature of college choice can be derived. Kotler and Fox (1995) have suggested that the absence of marketing research may lead institutions to make poor decisions, failing to use marketing in an efficient manner. Research methods such as student surveys, focus group studies and even field observations can be employed: this would lead to better understanding of student college choice behaviour and uncover student perceptions of college image, academic programs, campus features, services and other relevant information. Research findings could help the college adjust its current practices so that it can make better use of its recruitment budget and efforts.

The policy recommendations presented are listed below in Table 5.1. In order to help establish implementation priorities, an effort was made to provide a rough assessment of two very critical elements: first, the ease of implementation within the current environment and, second, the need for incremental financial and human resources. These estimates were arrived at after informal but serious discussions with key academic members and senior

administrators of the college.

Policy Recommendation	Ease of Implementation in existing environment			Estimate of incremental financial and human resources		
	Easy	Some Effort	Difficult	Low	Medium	High
1. Integrated Marketing Plan		X		X		
2. Advisory Marketing Committee	X			X		
3. University Status		X				X
4. Laureate Network		X			X	
5. Institutional Image/Unique identity			X			X
6. Office of Communications			X		X	
7. Internal Marketing			X		X	
8. Unique brand identities (programs)		X				X
9. Student Relationship Centre	X				X	
10. CRM computerized system	X				X	
11. Collaborations with parents	X			X		
12. Alumni Association		X		X		
13. Student Ambassador Program	X				X	
14. Campus Visit Experience		X			X	
15. College admissions representatives	X			X		
16. Employment/Career Centre		X		X		
17. Reallocation of marketing budget	X			X		
18. Website of the college		X			X	
19. Publications/Brochures			X		X	
20. Service/Word of mouth		X			X	
21. Financial Consideration	X			X		
22. Distinctive Campus		X			X	
23. Academic advising			X		X	
24. Marketing Research		X			X	

Table 5.1 Factors affecting implementation priorities

5.5. Recommendations for future research

This study has identified choice factors, information sources and recruiting programs and strategies that were perceived to be most important and most influential in the college decision-making process of students. While the study has contributed to increasing the knowledge of the college decision-making process of students, additional research is needed to confirm and increase the amount of existing research. The following recommendations are provided as suggestions for future research studies.

1. Since college choice behaviour is a complex process, it would be of great significance to conduct a longitudinal study to track and monitor any changes in student perception of factors that influence their college choice from their high school years until the time they enter college.

2. It may be beneficial for the college to administer and analyse customer response on a regular basis. An annual gathering of student information on college choice could provide useful data for trend analysis. Identification of trends can assist with the most appropriate and timely methods for reaching target student audiences. This practice would result in more efficient and effective student recruitment.

3. This study was conducted at one point in time and asked students to reflect back on their college selection process. For many of the students in the sample, this process had occurred several months before. Future research that examines the college decision-making process while still in the initial search phase or just after the final choice phase could provide more accurate and fruitful data. Perceptions of college choice factors, information sources and recruitment programs and strategies could have been altered by faulty recall or tainted by current satisfaction (or dissatisfaction) with their college selection.

4. This study only included those in the sample that selected to attend Cyprus College. While this is critical information and provides a baseline for market research, additional studies with all Cyprus high school graduates would provide additional insight into the decision-making process of students. There is a need to conduct similar studies among students who attend other private colleges in Cyprus to find out the factors that influenced their college choice, and how their perceptions differed from those examined at Cyprus College.

5. The present study only focused on students who were enrolled in the degree programs, so it would be significant to research students who are enrolled in non-degree programs, for instance, students in the

professional school; this would reveal if there are any differences between the two types of students regarding their college choice.

6. This study focused on native students. It is recommended to undertake a study among international students, in order to reveal any differences between the two groups.

7. While this study included students at Cyprus College, duplicating the study in other institutions within the Laureate network may provide interesting findings and comparison opportunities for the Laureate network.

8. This study indicated that students were very concerned about their employment prospects in the future; therefore, it is suggested that research on student occupational aspirations be conducted to find out what they seek for their future careers. In turn, the result would provide the college with useful information as how to improve the program offerings.

5.6   Pilot Implementation

The policy recommendations, and the key factors having an impact on their implementation, were presented to and discussed with the president and the executive committee of the college.

The policy recommendations were very well received. The president established an ad-hoc committee charged with the responsibility of carrying out a more detailed and structured analysis of the implications of adopting the various policy recommendations and to prepare a plan for a three-stage implementation. The first stage will commence immediately after the plan receives approval. The ad-hoc committee consists of the researcher of this project (who is also the Director of Planning and Development), the Vice-Rector, the Director of Administration and the Chief Financial Officer.

5.7   Conclusion

In today's highly competitive recruitment environment, research involving college choice factors is of utmost importance for institutions of higher education. Through a better understanding of college choice factors, schools are better able to leverage their limited recruitment and marketing budgets on those strategies, programs and services that most influence student enrolment behaviour. With this knowledge, professionals involved in admissions and enrolment management can target and tailor their marketing messages to

specific markets and can design and integrate proactive recruitment approaches. Enrolling students in a college that best meets their educational, social, and/or other needs will most likely result in having a satisfied student body, which in turn leads to increased retention rates.

Facing the fierce competition in student enrolment among universities and colleges, administrators, particularly admission officers, must be adaptable to the changing needs of the student market and devise effective ways to improve the academic quality of the institution. Several policy recommendations have been put forward in this study, and they are expected to serve as a guideline not only for Cyprus College management but also to other higher education leaders who wish to improve the effectiveness of their marketing and recruiting efforts.

This concluding chapter summarised the entire study, drew conclusions based on the findings of the research, presented analyses and explanations of the findings, generated some viable policy recommendations and suggested directions for future research studies.

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