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HIGH SCHOOL STUDENT PERCEPTIONS OF COMMUNITY COLLEGES: THE
ROLE OF PERSONAL, INSTITUTIONAL, AND ENVIRONMENTAL FACTORS
IN THE COLLEGE CHOICE PROCESS

By

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ABSTRACT

HIGH SCHOOL STUDENT PERCEPTIONS OF COMMUNITY COLLEGES: THE ROLE OF PERSONAL, INSTITUTIONAL, AND ENVIRONMENTAL FACTORS IN THE COLLEGE CHOICE PROCESS

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This study sought to explain how high school seniors across the United States think about community colleges in the context of the college choice process. The study described what attributes are associated with the community college experience and what influences those attributes. Since a weak college choice process can contribute to later performance problems, a better understanding of the community college within the choice process should mean less talent lost, fewer college dropouts, and a more efficient use of resources by both individuals and institutions.

This study focused on perceptions about community colleges and the environmental, personal, and institutional factors that influence such perceptions. The study involved an analysis of closed- and open-ended questions from a survey of over 36,000 college-bound high school students, and addressed the question: "What attributes, values, and influences can help explain perceptions about expected experiences at community colleges within the context of the college choice process?"

The study results indicated that geographic region, income, race, and academic preparation all had an impact on serious consideration of a community college as an option during the college choice process. In addition, different racial and income groups perceived community college attributes differently. For example,

lower-middle income students had an unusual aversion to the community college, while higher income students indicated a high overall favorability of community colleges. A large number of respondents did not see the community college as a transition away from their home and high school, and for many this perception was tied to academic reputation. Emotional attachment, developmental growth, and social network appeared more important than affordability to respondents considering a community college. Environmental and personal factors played significant roles in influencing perceptions held about community colleges.

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Inspiration-

As a teen one of my favorite science fiction trilogies was *Foundation* by Isaac Asimov, about a mutant who controlled groups of people with his mind. I was fascinated by the idea that group behavior could be looked at separately from individual behavior and resolved to understand the difference. I had already drafted this acknowledgement when I found *Six Degrees: the Science of a Connected Age* by Duncan Watts. Watts mentions that as a teenager *he* read *Foundation* and was inspired to study how groups behave. I can't help but wonder if Asimov intended to push so many of us in this direction with his ideas, in the same way his mutant pushed with his mind. A special thanks then, to Asimov, for an entire generation of inspiration.

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CHAPTER 1

INTRODUCTION

Introduction

The rising costs of a college education represent a challenge for policy makers striving for a highly educated, globally competitive workforce (Mehlman, 2006). Community colleges, at typically half the cost of four year institutions (Provasnik & Planty, 2008), enrolling forty percent of minority students and forty seven percent of all first-time freshmen (McPhee, 2006; Provasnik & Planty, 2008), might seem a good solution to keep costs contained. However, the largest segment of the first-time college-bound students in the United States, high school seniors, do not consider the community college as a serious college option (Green, Dugoni, & Ingels, 1995; Provasnik & Planty, 2008). Community colleges have very low appeal during the search process (Green et al., 1995) yet almost half of first time freshmen begin their college experience there. If a community college is not a first choice, but a student end up attending one, there could be implications for his or her future success. A poor college choice that results in a mismatch between a student and a college can be a waste of resources from both the student's perspective and from an institutional perspective (Kirp, 2003).

Statement of the Problem

This suggests a contradiction about community colleges: low appeal during the college search process followed by higher enrollments. Studies have shown that either low confidence in an institution (Brafman & Brafman, 2008) or a weak search process

(MacAllum, Glover, Queen, & Riggs, 2007) can lead to poor performance at an educational institution. In the end, a contradiction between a student's first preference and later actual enrollment could impact his or her eventual success and add to the expense of a college education.

Furthermore, while economically needy students may eventually choose community colleges (Grubb, Badway, & Bell, 2003), other data indicates that high school students, including the economically needy, are rarely considering costs when choosing a college (Green et al., 1995; Hauser & Anderson, 1991; Provasnik & Planty, 2008).

While many students choose community colleges as their first choice (Gould, 2004) and view the community college option with high regard, this study looked at the students who did not consider the community college option seriously. By examining the perceptions of those who did not intend to enroll in a community college the study helped to explain why community colleges fared poorly during the search process of the traditional student. This study brings together research about college choice, expected experience in college, higher education marketing and branding, and community college attributes to further explain what might be influencing the consideration to attend or not attend a community college.

Purpose of the Study

The purpose of this study was to provide insight into the perceptions held about community colleges during the college choice process by those traditional aged students who were not seriously considering the community college option. At the

same time, it contributed to understanding the college choice process in general. A three-phase, mixed methods approach was used. By isolating comments about the attributes of community colleges, correlating them to social and demographic factors, grouping shared ideas, and then providing examples of key attitudes, this study provided some insight into the perception held about community.

The reason for looking at the behavior of students on a national level was to consider whether there was a tendency for groups of students to share beliefs and, if so, what beliefs were associated with what groups. It is hoped that this will make clearer the mental models used in the college choice process.

Significance of the Study

The study of perceptual constructs held by the college-bound high school student toward community colleges is significant for several reasons. First, college choice affects both human lives and institutional resources. In today's environment, neither can afford waste. Understanding the antecedents to successful college choice is an issue of national educational policy because a good choice process contributes to student success (Zahs, Pedlow, Morrissey, Marnell, & Nichols, 2005). This choice process is complicated and significant because the decision could have an effect on students' "future career, their future social connections, where they live, and how they see themselves" (Ola & Ilkka, 2007). Second, prospective students need to understand how their background might limit their perception of college choices. If they do not, they may not see opportunities available. Third, higher education institutions spend a large amount of money attempting to understand and influence how college choice is made. Their goal is not only to recruit new students, but also to match the incoming freshman class with institutional mission and values (Kirp, 2003). Creating an institutional mission and student body match is important to all higher education institutions. It is hoped that this research can provide practitioners with useful information about communicating effectively and appropriately with prospective students. Because a weak college search process may contribute to a student's eventual poor performance, understanding the search process may help address success rates at community colleges.

Finally, the social role that community colleges play is complicated and paradoxical. On one hand, community colleges may be seen as last chance, last choice

colleges that have a “cooling out” role, a place where the hopes and expectations of lower socioeconomic groups are purposefully managed out of existence (Clark, 1960; Brint & Karabel, 1989). Media portrayals of community colleges, community college students, and community college faculty are often negative (LaPaglia, 1993). On the other hand, according to past United States Secretary of Education, Margaret Spelling, community colleges “are essential to making that dream of economic well-being come true for millions of Americans every year. It’s one of the best investments we can make in America’s future” (Spelling, 2008). Community colleges are recognized for creating one of the few avenues for upward mobility in the United States for lower socioeconomic and minority groups. Bill Cosby (2007) stated at an American Association of Community Colleges (AACC) conference, “Without community colleges, there would be no democracy.”

Since both policy makers and the public hold these conflicting views of community colleges, it should be no surprise that would-be students are confused about the benefits of a community college education. Complexity is increased when choosers, consumers, and stakeholders are as varied as the general population because of the community colleges’ mixed mission. It is hoped that this research will help policy makers understand how community colleges are perceived, and how those perceptions contribute to the choice process which may in turn impact student success. In the long run, it is hoped community college leaders can consider the way they represent themselves in order to help reduce some of the confusion about their assets.

Conceptual Framework

This research examines several conceptual frameworks related to college choice since there are several ways of looking at the antecedents that influence the decision to attend college (Kinzie et al., 2004). Social capital and expected rewards of an education, consumer decision-making behavior, social context, and transition into adult social roles are among the conceptual frameworks used to discuss college choice. Furthermore, the influence of educational institutions on decision-making through marketing and branding efforts is all a part of the college choice process.

The social network framework is used in examining the socio-demographics of college-bound high school students in order to understand how those factors relate to perceptions of community colleges. The consumer framework is used for an examination of attitudes about community college attributes. Finally, marketing-based brand and consumer segmentation frameworks are used to explain various perceptions and attributes. While these frameworks are different, they all contribute to the understanding of the choice process and lead to several questions about what is important in the during college choice.

Research Questions

This research asked the question: What attributes, values, and influences can help explain perceptions about expected experiences at community colleges within the context of the college choice process? It should also shed light on the larger questions of how background influences choice.

In order to address the research question, several sub-questions need to be considered, including questions about what potential students are looking for, what they know about institutions, who helps them make decisions, how the decision process works, how a student's background influences choice, how an institution influences choice, and what mental constructs influence choice. Sub-questions will help address the major research question while providing a framework for analysis of the results. The sub-questions are:

Research Question 1. Are there any significant socio-economic or demographic factors that help explain how community colleges are perceived during the choice process?

Research Question 2. What do prospective students hold of value when choosing a higher education institution? Is it the same for a community college?

Research Question 3. How important is familiarity in the community college choice process?

Research Question 4. What attributes are associated with the community college?

Research Question 5. What constitutes a barrier to the selection of a community college?

Research Question 6. Is there any evidence that heuristics or mental shortcuts take place when prospective students consider community colleges?

Definition of Terms

The following operational terms are used throughout this research:

Salience refers to the idea that the chooser must be aware of a choice and have it easily accessible in his or her mind (Walker, 2008).

Relevance refers to the idea that the chooser must feel that the choice is of value in some way (Cialdini, 2001; Walker, 2008).

Social context includes demographic, geographic, and socioeconomic characteristics of a population (Lopez, Santos, & Ceja, 2007).

Brand perception refers to the expected experiences at an institution (Clifton & Simmons, 2004).

Attributes refer to the set of qualities, characteristics, and traits ascribed to an institution (Astin, 1965).

Macrosystem “refers to consistencies... at the level of the subculture or culture as a whole, along with any belief systems or ideology underlying such consistencies” (Bronfenbrenner, 1979, p.6).

Influencers refer to forces that change the way people think when making decisions (Cialdini, 2001).

Heuristics, sometimes called mental shortcuts, are cognitive rules that help people make quick decisions and sometimes lead to cognitive biases (Brafman & Brafman, 2008)

Role of the Researcher

As a community college administrator I consider myself an advocate for community colleges and therefore am not unbiased. When I read a 2006 SEM-Works study showing only eight percent of graduating high school students in Michigan (Becker, 2007) indicated a preference for attending a community college my curiosity was aroused. The study reported that some minority groups had an even lower preference for the community college option.

During my own educational journey, I attended a community college as an undergraduate after attending a very rigorous Catholic high school. I transferred to a university but my favorite classes were at the community college; they were small, well structured, and taught by people who cared about my success. I had no reason to question the academic strength of community colleges. As one of LaPaglia's journal writers put it, "it seemed like up to me" (LaPaglia, 1995, p.35).

When I later became an administrator at a community college I noticed that some students, particularly those from affluent school systems, seemed dismissive and negative about their community college experience. On the other hand, those who came as a first choice because of an academic program's reputation had very different attitudes and commitment about their college work. I began to wonder about the "cultural code" of community colleges (Rapaille, 2006) and how the concept of a community college was understood so differently by different groups. My concern about how community college students could succeed if they believed they were attending a second choice institution brought this study into existence.

Summary

While community colleges serve large minority populations and about half of significant of first time freshman students, only a small percentage of graduating high school students consider the community college option seriously during the college choice process. Some high school students hold negative views of community colleges. This research asked whether any social, market, demographic, or decision-making forces influence those views. This is important because a poor college choice could

lead to poor academic performance. A mixed methods study using a survey with both closed and open-ended questions addressed these issues. The results of the study provided insight into how to best communicate the role and attributes of community colleges and will contribute to the larger understanding of the college choice process. While there has been a great deal written about students choosing universities in the search process, there has been much less research about students choosing community colleges.

CHAPTER 2

LITERATURE REVIEW

Introduction

The review of relevant literature includes several areas: the nature of choice and the college choice process; the role of the individual within the choice process; the role of institutions in mediating the choice process; internal influencers on choice and decision-making; and the perception of community colleges within the context of the choice process.

Literature Review

College Choice Overview

Every year, graduating high school students struggle with the decision about whether to attend college, and if so, what college to attend. Simultaneously, colleges and universities attempt to recruit students they believe will be a good match for their institution (Hemsley-Brown & Oplatka, 2006; Kirp, 2003). Would-be college students have mixed beliefs about college access. Some believe that they are not meant for college even though they show academic talent in secondary school (Hansen, 1994). Many do not consider all of the options open to them (Jeffries, 1987). Others are not familiar with the complicated process of applying for college. Some choose a college that is not a good match for them and drop out during the first years there. The result may be lost talent and wasted resources (Kinzie et al., 2004).

Even more importantly, the choice process seems to have an impact on students' later performance. Bean and Bradley (1986) reported that students'

satisfaction with their institutional choice had a significant impact on academic performance. Some college choice research (Hossler 1984; Villella & Hu 1990) has shown that “a weak, inaccurate search increases the risk of choosing the wrong institution to attend, becoming dissatisfied with the institution, and withdrawing before graduation” (MacAllum et al., 2007, p.1). These findings suggest that “some of the seeds of college retention are sown prior to enrollment, during the search and decision making phase” (MacAllum et al., 2007, p.1).

In order for a choice to be made, a type of mental and internal activity occurs. Two factors are typically present for an option to be selected. The chooser must both know about an option and then feel that the option is valuable. These two factors—“salience” and “relevance (Walker, 2008)--are considered precursors to a final decision. Once salience and relevance are in place, an “internal dialogue” or a mental consideration of the choices occurs (Walker, 2008). At some point during the internal discussion, a final determination is made.

This final determination in the college choice process is typically deconstructed to include not only awareness and value, but also readiness. Three stages of this process, as first suggested by Hossler (Hossler & Gallagher, 1987), include predisposition, search, and choice (MacAllum et al., 2007):

- (a) Predisposition is the self-reflective stage culminating in the decision to pursue postsecondary education. Individual and environmental background factors have the strongest influence at this stage, informing one’s self-image, preferences, and inclinations.
- (b) The search stage is characterized by the gathering of information about college in general and specific colleges, and culminates in a “choice set” of preferred college options. At the outset of this stage, social networks tend to

have the strongest influence, but these yield to the institutions themselves as prospective students come to interact more with individual institutions.

- (c) In the choice stage, students and their families interpret the collected information within the context of their personal and social circumstances, resulting in decisions about whether to apply to college, which colleges to apply to, and which college to attend (Rosenfeld, 1980, p.7).

There has been a significant amount of research on the predisposition and choice phases and less research on the search phase (MacAllum et al., 2007). In addition, Hosler's model assumes two things: that a family or supportive others are actively involved in the process and that the process is logical, sequential, and rational. This may not take into account the experiences of some "first generation" college students who do not have a supportive network advocating college. In addition, some choice research suggests there may be influencers more powerful than logic at work.

In other attempts to deconstruct the process, choice is not seen as one decision, but rather as a series of decisions throughout secondary school (Mare, 1977), including "whether to continue in secondary school and, if so, what courses to take; whether to get a high school diploma; whether to plan on going to college at all; whether to go right after high school or wait; what sort of institution to choose" (Rosenfeld, 1980 , p. 10).

Again, this seems to suggest a stable, long term, supportive environment and a logical choice process. However, for some students, the process is not neat. Research on educational equity describes how the process may be very different for different types of students, particularly those lacking social capital (Lopez et al., 2007).

College choice is unique for many students because it is usually “the first life-altering, real-life decision they will make to some extent on their own” (Astin, 1965; Svenson & Salo, 2007). From this perspective, college choice is similar to buying a new home, or getting married, and as a result there is a high degree of involvement and emotion. However, Canterbury (1999) notes several ways that college choice is dissimilar to other major decisions:

- (a) College choice is a “unique decision”- usually made only once.
- (b) Colleges may have the influence of “total institutions,” meaning they provide for social, cultural, financial, and all aspects of life, similar to a nursing home.
- (c) Issues of human development constrain this process.
- (d) The importance of college choice discourages open mindedness.
- (e) Colleges seem to question the competence of their “customers” to choose wisely.
- (f) Family life is irretrievably altered by this choice process.
- (g) What buyers are choosing is not clear (Canterbury, 1999, p. 8)

Canterbury is suggesting that something is occurring within the student that is not clear to the visible eye and represents an underlying change in the chooser’s nature. This is often described in terms of student and personal development, one of several possible frameworks for understanding college choice.

There are several frameworks for looking at what students’ value in the college choice process. There is a significant amount of literature that attempts to describe college choice within the context of social networks and socio-demographic characteristics (Cabrera & La Nasa, 2000) that act as predictors about college choice. Some research examines the social capital involved in choice by considering the

benefits, rewards, and pay-offs related to college choice (Beattie, 2002). Other research looks at the high school student moving into college as a part of an identity development and maturation process (Chickering & Reisser, 1993). There is also a significant body of literature that considers the student a consumer influenced by emotion and brand loyalty (Kirp, 2003).

Social Network Framework

This body of research examines how social networks influence student choice behavior. In this model, influencers include the environment, social status, family status, demographics, ethnicity, economic status, and other shared group characteristics. Bronfenbrenner (1979) suggests that student transition between institutions can best be understood by considering the individual within a series of nested environments, ranging from immediate family to world events. Transition from one institution to another, such as moving from secondary school to a post-secondary institution, is influenced by others in the immediate vicinity, institutions the student is directly involved in, and then by those environmental factors that impact all of them. That is, world events affect the local economy, which affects the employment opportunities of parents, which subsequently colors the message the parent might give a child about the value of educational opportunities. Furthermore, these “ecological” systems create a set of understandings about the world or “macrosystems” that are shared with others in the same environment (Bronfenbrenner, 1979, p.26).

It is as if within each society or subculture there existed a blueprint for the organization of every type of setting. Homes, day care centers, neighborhoods, work settings, are not the same for well-to-do families as for the poor. The systems blueprints differ for various

socioeconomic, ethnic, religious, and other sub-cultural groups, reflecting contrasting belief systems and lifestyles, which in turn help to perpetuate the ecological environments specific to each group. (Bronfenbrenner, 1979, p.216).

Consequently, the name Harvard might suggest “elitism” in one macrosystem and “heritage” in another. Likewise, community colleges may suggest upward mobility to some groups and continuation of high school to others. Bronfenbrenner goes on to suggest that when a person moves from one institution to another, such as moving from high school to college, the success of that transition depends on the supporting social structures, particularly dyads, in the environment. “For a young teenager leaving home for the first time—or for a minority member visiting city hall—going with a friend or knowing someone in the new location can make a difference” (Bronfenbrenner, 1979, p.216). Key network members, or “pointers,” act as guides and are instrumental in the transition. This framework looks at how socioeconomic and demographic factors impact the choice process, and attempts to identify characteristics that are likely to predict behavior, including success and matriculation. It is not only the immediate environment, but also all “nested” environments, such as the state economy and the local labor market, that impact the parents, family status, and subsequent college choice (Bronfenbrenner, 1979, p.26).

Research about social context is often done through large-scale surveys in order to correlate information about group characteristics and choice. Other large-scale surveys have been used to model and predict student choice. In the study “Who Goes Where to College?”, Astin (1965) surveyed 127,212 entering freshmen, correlating college choice with characteristics such as socioeconomic background and parents’

education. Later, researchers used similar models and applied more sophisticated statistical approaches to create predictive models. It was found that “Bayesian methodology was more accurate than a conditional logit approach at creating a choice set” (Carroll & Relles, June 1976, p 7). Researchers also included variables such as tuition, G.P.A. and SAT scores in prediction models. Currently, enrollment simulation is used to predict enrollment trends based on such factors as demographics, economics, social and cultural trends, public policy, tuition and fees, campus sites and campus climates, marketing, and services (McIntyre, 1999).

Several well-known, large-scale, longitudinal surveys of population groups that have been performed by the National Center for Educational Statistics (NCES) including “High School and Beyond” (HSB) and “Deciding on Postsecondary Education” (MacAllum et al., 2007) examine the choices of college juniors and seniors and follow them over time. HSB considers gender, ethnicity, socio-economic status, etc. in describing the social context of college choice. HSB data were used to create several studies, including twenty-year longitudinal studies that follow high school students after graduation. This body of research concerns itself with how large groups of students act and how the individual behaves within the context of a group setting, not with what an individual student might be going through to arrive at a choice. How social networks influence choice and how groups behave is the subject of much research.

Two types of research are common in social network theory. First, there is a type that looks at the structural part of social networks, particularly through links to institutions and personal and familial networks. This type of research focuses on

relational networks (Watts, 2003). Second, there is a type of research that considers how information flows through a network (Iacobucci & Ostrom, 1996). Network research is common in both marketing research and to a lesser degree in enrollment planning research. Social networks and macrosystem views suggest a research sub-question.

Research Question 1. Are there significant socio-economic or demographic factors that help explain how community colleges are perceived in the choice process?

This question looks at whether there are any connections between relationship and social networks and perceived attributes of community colleges.

Social Capital Framework

In the human capital or social capital framework, would-be college students and their families evaluate *institutional* attributes such as cost, location, and program of study, and compare them against their personal reward system, which might include long term economic gain and social connections. “Human capital theory posits that a rational cost-benefit calculus guides students’ decision about whether to continue their education” (Beattie, 2002, p.1). The student may be considered an “adolescent econometrician” making decisions based on future income and other payoffs (Beattie, 2002, p.1). He or she weighs the alternatives and makes a decision about the best institution, presumably based on the long-term economic benefit as a result of social connections and job opportunities after graduation (Beattie, 2002). Research on academic equity describes inequities in the social capital of potential students (Kao & Thompson, 2003; Lopez, et al., 2007; Morgan, 1996).

In the social and human capital frameworks, rewards and economics are what students value most. College choice is considered a rational economic decision (Cabrera and La Nasa, 2000). There is an emphasis on the “return on investment” in college costs and access to financial aid (Manski, 1983). However, not all researchers agree this framework provides the only explanation of college choice behavior.

According to Mumper (1998, p. 83), “The decision to go to college is not based on an economic calculation of costs and benefits. It is, instead, a choice that emerges out of a complex interaction of personal, family and social factors.” Other research suggests that “for traditional-aged students, socio-cultural factors appear to be the main drivers of the college decision making process” (MacAllum et al., 2007, p. 55). Furthermore, while the role that money plays in the choice process would seem very important on a social capital framework, recent years have seen an increase in the number of students choosing more costly private institutions (Green et al., 1995). In fact, some research suggests that during the choice process students do not consider cost significantly. For example in an econometric analysis, Carneiro and Heckman (2002) found that special government scholarship programs did not increase college attendance. Their research found that only a small amount of enrollment gap was explained by lack of money. “Financial interventions, while influential for those predisposed to postsecondary education, are not sufficient to ensure equal access for many economically disadvantaged groups” (MacAllum et al., 2007, p. 55). So while money and costs may have some impact on college choice, they are not shown to be major factors, perhaps because graduating seniors do not have a realistic understanding of the role that money plays in college choice. Understanding what

students indicate they are looking for and what they think they will find if they choose a community college become the next research sub-questions:

Research Question 2. What do students value when they are choosing a higher education institution?

Research Question 4. What attributes are connected to the community college?

The Student Development and Transition Framework

Another way to look at the choice process is to consider the social and emotional development of the student. According to this view, the choice process is about preparing to move from one life to another. Schlossberg's transition theory states that transition occurs whenever by doing something or failing to do something, there is a change in roles, relationships, assumptions, and day-to-day life (Schlossberg & Robinson, 1996; Schlossberg & Entine, 1977). What is important during a transition is that the individual going through it recognizes that there is a difference in their life (Pascarella, et al., 1998). Bronfenbrenner suggests "an ecological transition occurs whenever a person's position in the ecological environment is altered as a result of a change in role, setting or both" (p.26). However, Baxter-Magolda (2001) posits that transition is more about self-authorship and that movement between institutions occurs when an individual takes an active role in his or her own decision-making. According to some researchers, the process of education is about identity development (Chickering & Reisser, 1993). Movement to new levels takes place when there is consistency and congruence in the student's identity formation (Falco, 2006).

Tinto (1997), on the other hand, focuses on the environment that needs to be created in order for students to successfully make a transition. Tinto and others suggest that it is student involvement with the institution that is critical to creating an environment that allows the learner to develop and successfully change (Pascarella & Terenzini, 1980). This creates a challenge for community colleges that serve a large numbers of commuter students (Tinto, 1997).

Identity, identity development, and self-image are other factors in developmental studies. Falco (2006) looked at image congruence theory as a predictor of college preference, attempting to connect the concepts of brand image and self-image (Borden, 2004). Falco used cluster analysis, multiple regression and image congruence theory and found that image congruence emerged as the most powerful predictor of college choice. MacAllum also found that

The concepts of self-image and fitting in, often discussed in the popular media, have been borne out in academic research. Students choose colleges with campus cultures and student bodies that are perceived to match their own self-image of where they belong along both sociodemographic and academic dimensions (Paulsen 1990; Hemsley-Brown 1999; Zimbardo 2005). Paulsen (1990), Hemsley-Brown (1999), and others have found that when students reach the choice stage, they tend to utilize a selection process based on the relationship between their own aptitude and the average aptitude of students attending the choice set of schools (MacAllum et al., 2007, p.13).

In other words, prospective students seem to be looking for an environment where they can feel comfortable and where they believe they will succeed. In order to select such an environment, they take into account characteristics they attribute to the institutions they are considering. These characteristics, or attributes, are often a part of consumer-type research (Davis, 1997).

What the student development framework addresses is the growth process of the individual during the transition from one institution to the next with a focus on internal and psychological formation, most often self-determination (Chickering & Reisser, 1993). Institutions contribute to this growth process by creating supportive structures within the environment (Tinto, 1997). As an example, in the movie “Good Will Hunting”, the main character is conflicted about whether to go to college and follow proscribed goals or to find and follow his personal dream (Sant, 1998). The institutional guides are in conflict about contributing to the goals of the academic field versus helping the main character develop personal strength and agency. This gave rise to the research sub-questions:

Research Question 3. How important is familiarity when considering community colleges as a choice and **Research Question 5.** What barriers are associated with the community college?

College Choice in a Consumer Choice Framework

Whether caused by changes in the individual or changes in the environment, recent student behavior suggests that the traditional “linear matriculation” choice process may no longer be the norm.

‘Student swirl’ was coined by Alfredo de los Santos and Irene Wright in 1990, along with the term ‘double-dipping’ (concurrent enrollment at two institutions), to characterize the back-and-forth, multi-institutional attendance pattern common among students attending community colleges (Domino, Libraire, Lutwiller, Superczynski, & Tian, 2006, p.112).

Student swirl behavior suggests that students consider options at multiple institutions, cost effectiveness, and other possible advantages when making a college

choice. Students may be acting more like consumers, a challenge to institutional notions that students are incompetent and need guidance in the choice process.

When considering college choice within a consumption framework, researchers often look at the values, attributes, and emotions underlying the college choice process and use them to explain and describe the behavior of decision-makers. Modeled on marketing and consumer research, this type of study often attempts to quantify what motivates the consumer in order to better understand how to influence the consumer's decision making (Cialdini, 2001). Emotional and affective aspects of college choice are important in this model, as well as identity, attributes, and value systems. The attribute and niche marketing models use factors to distinguish between products and messages, so that it is possible to identify what is unique and whether it is viewed in a positive or negative way.

As an example of applying this type of research to college choice, Simmons (1997) used, the Seth, Newman, and Gross (SNG) Model, more commonly used to predict market choice and consumer behavior and applied it to college choice. Simmons found that while traditional consumer values were useful predictors, the ranking of values for college choice was somewhat different, with emotion emerging as the major factor in the college choice process. In the consumer framework, the goal is to understand what emotional forces influence college choice. Domino (2006) suggests "the term 'influence' implies a force that exerts considerable strength" (MacAllum et al., 2007, p. 31) while Cialdini (2001) refers to influence as any force that changes the way people think when making decisions.

While parents might seem to be a major influencer, a questionnaire and interview of 3,000 students at a small private college showed that “when they interviewed parents, all indicated they had little or no influence on child’s decision about which college to attend, although all indicated they made an economic choice to support, such as not buying a new car” (Domino et al., 2006 p. 102). Instead, parents identified things like academic majors, school environment, and the campus’s physical appearance as major influencers on their children.

Institutional attributes may reflect the underlying values of the consumer. Often, understanding attribute-based decision-making is helpful to institutions wanting to identify the best ways to appeal to students or groups of students. “Presumably, students use objective (quantitative) data to narrow down a choice set and subjective (qualitative) data to decide between their top-ranked choices. This may in part account for the seemingly capricious decision making reported in the media” (MacAllum et al, 2007, p. 31). Attributes and the perceptions they represent are used to define and clarify consumer thinking.

In summary, there are several distinct conceptual frameworks that are commonly used to describe the college choice process. Four are included in Table 1.

Table 1 Comparison of Frameworks

Framework	Values	Individual's Role	Metaphor
Social Capital	Economic, social rewards	Determine best pay- offs	"Adolescent Econometrician"
Consumer	Feels like good match	Make emotional connection	"Bucky Badger"
Developmental	Internal transition	Recognize transition	"Good Will Hunting"
Social Network	Others pave the way	Find supportive relationships	"Six Degrees of Separation"

As the table indicates, these four frameworks provide different explanations for an individual's college choice behavior; however, they are all important and useful in understanding the college choice process. The powerful role of economic and social rewards as compared to tuition and financial commitments is clear (Beattie, 2002).. However, as the real-life decision "Bucky Badger" quote (Schmidman, 2005, p.1) indicates, some level of decision-making is based on emotional attachments that don't have a visible pay-off. Such mental shortcuts and brand loyalty reflect a consumer approach to decision making. Another aspect, the concept of college as a vehicle for personal growth and transition to the next stage of life, is reflected in the movie "Good Will Hunting" where the protagonist rejects the economic rewards of one college path in order to follow a path of personal growth. Finally, the social context framework, as symbolized by the movie "Six Degrees of Separation" suggests that decisions are impacted by whom one knows and how one is connected to them. In this macrosystem view, social context is the driving force behind decisions. The role of parents, peers, high school counselors and other significant others is all important in the decision

making process. It may be that all of these conceptual frameworks are useful to decision-maker, perhaps layered so that social capital (reward of future opportunities), consumer attachments (brand loyalty), social network (significant others), or individual development (identity congruence) all impact college choice. It makes sense to consider all four conceptual frameworks in explaining college choice so that it is understood holistically, as a transition that is made from one social network to another when an individual is ready, often supported by significant others, with an expectation of reward and in congruence with personal identity development.

While all of these factors are worthy of consideration, it is also useful to consider what influenced the student's belief that a particular institution had the right set of attributes. The student's role in the choice process is, therefore, only a part of the equation. In order to fully understand what is occurring, it is also important to examine influence.

Influence during College Choice

Although much of the preceding research on college choice focuses on deconstructing who, what, where, and how choice occurs, it is also important to consider what influences the construction of mental models during the choice process. Much research on this topic comes from the field of marketing and persuasion. Influence can be defined as anything that exerts some type of force that affects people's thinking or actions (Cialdini, 2001). There are several powerful factors that may have an impact on the college choice process. One category—influences created

by higher education institutions—will be discussed in the next section. What follows is a discussion of the internal activities that influence the college choice process.

Influences on the internal consideration of choice. In order for a choice to be made, a type of mental or internal activity occurs and two factors are typically present for an option to be selected. The chooser must both know about an option, also known as salience, and then feel that the option is of value in some way, called relevance (Walker, 2008). Using the four frameworks mentioned earlier, the student might then undertake an examination of rewards, consider what in the environment is most likely to make one happy, dwell on who the chooser wants to become, or observe what everyone around the chooser is doing. The internal discussion mentioned by Walker (2008) may include all four categories. Relevance, salience and inner dialogue are what institutional marketing efforts often attempt to influence.

The idea that there is an internal dialogue might suggest a rational, sequential process. However, choice behavior may occur instantaneously and be based on long-term culturally transmitted belief systems. Rapaille (2006) calls these “cultural codes” or a set of understandings about an institution conveyed by social context. Bronfenbrenner (1979) refers to them as well. For example, the attributes associated with a college may not be based on specific information but on ideas that have been shaped over a lifetime. As a result, one may not know about a specific course or program that is offered at Harvard, or even Harvard’s mission, but still may have a reaction to the name Harvard. In addition, the internal dialogue that takes place often involves what Cialdini (2001) describes as mental shortcuts.

Mental shortcuts and college choice. Mental shortcuts, or heuristics, are tools that help the individual process large amounts of information quickly. However, speedy processing could result in an irrational choice or be easily influenced by persuasion. Some common heuristics are important to college choice because there is rarely an opportunity to try out, sample, or have a “dry run” at a college. Many high school students are bombarded with information about college options, and the task of figuring out a good institutional match can be overwhelming. Even choosing between a small number of college options can be daunting, given the attributes that need to be considered. As a result, choosers rely on “cultural codes”, “macrosystem” beliefs, and mental shortcuts during the choice process.

Brafman & Brafman (2008) identify several significant heuristics during decision-making that are relevant to the college choice process.

Hidden currents and forces include loss aversion (our tendency to go to great lengths to avoid possible losses), value attribution (our inclination to imbue a person or thing with certain qualities based on initial perceived values), and the diagnosis bias (our blindness to all evidence that contradicts our initial assessment of a person or situation). (Brafman & Brafman, 2008, p. 55).

An example of loss aversion in the choice process might include working to get into top colleges based on the fear of missing out on connections and opportunities.

Diagnosis bias is the “propensity to label people, ideas, or things, based on our initial opinions of them and our inability to reconsider those judgments once we’ve made them” (Brafman & Brafman, 2008, p. 70). In the college choice process this means that first impressions of an institution, often based on a website, a brochure, or a

counselor's opinion, are likely to remain with the chooser throughout the entire process.

Attribution, the tendency to “imbue someone or something with certain qualities based on perceived value, rather than objective data” (Brafman & Brafman, 2008, p. 49) seems particularly relevant to college choice. Value attribution acts as a quick heuristic. “Once we attribute a certain value to a person or a thing, it dramatically alters our perceptions of subsequent information” (Brafman & Brafman, 2008, p. 55). As a result, a student's initial perception of an institution—perhaps based only on a web site—is likely to remain the same, regardless of subsequent information to the contrary.

Several heuristics involve quality perception. First, if something is difficult to obtain, it is perceived as having more value (Cialdini, 2001). A corollary is that if something is easy to get, it is worth less. Most high school students have come to expect a competitive experience applying for college; this challenge is considered a standard part of the process, with more selective schools demanding a more difficult application procedure. If a college does not require a stringent application, it may be considered of lesser quality (Brafman & Brafman, 2008; Cialdini, 2001). “On average, the attractiveness of specific institutions during the search stage increases with their selectivity or ‘quality’” (MacAllum et al., 2007, p.27).

Another heuristic is that the more an item costs, the higher its quality. Its corollary is that less expensive equates to low quality. Many experiments suggest that the same product or activity is evaluated more highly when it costs more (Cialdini, 2001). Furthermore, the perception of value has an impact on enjoyment of events

and performance. In one experiment where subjects were given two identical drinks that were supposed to improve performance and one was more expensive than the other, the majority of subjects given the most expensive drink actually performed better on tests than those who drank the same lower cost product (Brafman & Brafman, 2008, p. 70) Similarly, when subjects were given tickets to the same performance but at two different prices, those who received the higher priced tickets evaluated the performance more positively than those who received lower priced tickets. In the college choice process this heuristic suggests that a degree from a high-priced private institution might be perceived as more valuable than the same degree from a public institution, even if the two provide the same level of academic coursework.

Another heuristic equates scarcity with desirability (Cialdini, 2001). Its corollary is that if there is plenty of something, it is less desirable. One sees this when certain toys are in limited supply during a holiday season, and a subsequent increase in demand occurs. The same seems to be true for higher education. In other words, the harder it is to get in and the fewer seats available make an institution seem more desirable.

Additional heuristics are based on the influence of other people in the choice process. “Social proof” often drives decisions; if it appears that other people—particularly those in trust positions—are doing something, it is a more acceptable activity (Cialdini, 2001). It follows that if a high school counselor recommends a college, it is likely that students will consider attending. Furthermore, an object or institution is considered more desirable if the “like” factor is involved (Cialdini,

2001). This includes both liking the person who is representing the product and feeling that he or she is similar or like the chooser.

Evidence of this can be seen clearly during college recruitment campaigns that show the faces of happy, attractive students of the same ethnicity as the target audience. It seems that no one shows hard-working, stressed, broke, or struggling students during recruitment efforts, even though this may be the reality of student life. Image congruence is an important factor. Choosing an institution where there are people who are either similar to the student or similar to whom the student wants to become is important. An example in higher education practice includes highlighting the reputation of famous research faculty and touting college rankings in order to suggest academic reputation, even though high status faculty may spend little time in the classroom with students.

These heuristics are significant for two reasons. First, they make it difficult for choosers to see institutions realistically which impacts their ability to make rational choices. “Presumably, students use objective (quantitative) data to narrow down a choice set and subjective (qualitative) data to decide between their top-ranked choices. This may in part account for the seemingly capricious decision-making reported in the media” (MacAllum et al., 2007, p. 31). Secondly, shortcuts in decision-making can affect not only college selection but also subsequent performance in the institution. Performance seems to be highly correlated to belief in choice. In one study, the most significant predictor of performance was based on the value attributed to the perception of the choice (Brafman & Brafman, 2008, p.17). Higher education institutions use marketing practices, particularly branding, to encourage mental

shortcuts. Therefore, it is vital to examine the marketing and branding practices of higher education institutions, as these are their tools of influence.

How higher education institutions influence choice. While students consider their options, it is not only significant others, family members, social networks, and peers who influence their decision. Colleges and universities are an important part of the decision equation in that they attempt to reach and convince the potential student about the merit of their institutions. It is important to understand these influencers in order to understand why students might hold a set of perceptions about an institution and its attributes. Colleges then make use of some common strategies to influence students during the choice process.

What makes higher education marketing unique? While reaching out to potential students shares many characteristics with other marketing endeavors, there are some things that make higher education marketing different. First, college culture does not typically support the “student as consumer” model. Faculty in particular do not like to think of education as a product or students as consumers (Stimpson, 2006). Second, college officials often think students are not capable of making the college choice decision independently (Canterbury, 1999). Third, colleges and universities are expected to maintain a higher level of integrity in marketing than other organizations (Holland, 2006). Finally, institutional mission often drives the recruiting process, selection, and student admission, so strategies differ based on institutional type (Krachenberg, 1972; Smith & Cavusgil, 1984).

Common practices in higher education marketing. Marketing practices in higher education are often called “enrollment management” and usually focus on

recruiting and retaining students (Whiteside, 2004). These efforts are tied to the success of the institution and are sometimes based on core institutional values such as helping students succeed, developing independent thinkers, or encouraging diverse students to attend the institution. Financial assistance is another typical form of marketing in that it is used to encourage attendance of specific students. However, according to some, “what schools refer to as recruiting is really a euphemism for advertising, financial aid is pricing, and the bloodletting ritual of revamping the curriculum is nothing more than product development” (Kirp, 2003, p.12; Krachenberg, 1972).

Demographic changes often spur an increase in marketing activities, in part because of a few demographic realities: when the number of higher education institutions increases and the number of college-aged students decreases, competition for enrollment becomes greater (Newman & Couturier). As a result, higher education institutions fluctuate in their enrollments in response to demographic trends (Murphy, 1985). When competition increases, many higher education institutions consider tools developed in the field of marketing and persuasion (Kirp, 2003).

One survey of higher education institutions indicated that the most commonly used marketing techniques include direct mail, literature, advertising on television and radio, and holding open houses (Murphy, 1985; Williams, 1984). More current practices include the use of DVDs, internet-based communication, social media, interactive web pages, e-mail, social networks, and mobile phone messaging (Li, Fall 2005). In many institutions, financial aid is also used as a recruitment technique (Kirp, 2003). One challenge to marketing to first-time students is that they have little

opportunity to become familiar with the institution. As a result, efforts to bring students to campus through college visits and summer youth programs are also popular. Colleges strive to create a positive impression about the experience expected when a student chooses their campus. Efforts to create an expected experience are called “brands” or “branding” (Joyce, 2005).

Branding in higher education.

In marketing terms, brand refers to “the expected experience of a product or service” (Newman & Couturier, p. 65). This concept is useful to colleges because it deals directly with how potential students create a mental model about an institution before having experienced it. Brand also refers to “the sum of the tangible and intangible benefits provided by a product or service and encompasses the entire customer experience” (Mathieson, 2005). Graduating high school students often make their college choice based on intangibles such as reputation, social connections, and what their friends and family members have done. “A brand can be viewed as a composite image of everything people associate with it. These impressions determine how a prospective buyer feels about it and influence his selection. The brand of an institution may include everything, positive and negative, that has been believed about it” (Bullmore, 2001).

However, the concepts of brand and branding are more complex. Brands rely on images of importance that connect to people on many levels (Clifton & Simmons, 2004). Brands also rely on symbolism. “People buy things not only for what they can do, but also for what they mean. The things people buy are seen to have personal and

social meanings” (Palgrave & Macmillan, 2006, p. 346). In the case of higher education institutions, these symbols are a part of school logos, colors, apparel, and other visual materials. These items can represent more than the current experience. They can also represent future experience and identity. “Brand choice communicates by semiotics ‘who I would like to be’ as an individual” (Ballantyne, 2006). “The authenticity of the promise conveyed by a brand name is particularly important in higher education, where the college or university brand becomes part of individuals’ identities, one of the key badges that we all wear in understanding and explaining ourselves” (Moore, 2004). It seems that the brand is a symbol that represents a meaningful part of a future identity. It is not only the promise of expected experience but of who the student will become.

The brand creates an emotional and developmental connection Since the transitioning high school student may be at a point in personal development where it is important to find a connection and a sense of identity, an institutional brand that represents who the student would like to become could be very powerful (Falco, 2006). Branding as a concept begins to make clear how emotional attachment works, that is, how identification with a college or university begins then becomes a part of the identity development of the individual often over a lifetime. Emotional and identity connections to an institution pave the way for future decisions to attend.

Branding efforts for non-profit colleges and universities are different than other types of consumer branding in that a higher degree of integrity is expected of public institutions (Holland, 2006). Higher education is expected to contribute not only to the private good but also to the public good and to avoid the appearance of

simply selling a product. Furthermore, higher education institutions often strive to recruit students that are a good match with their institutional values, so one institution seeks liberal arts students and another looks for engineering types. Institutional culture and goals should be reflected in the brand. The brand should explain what norms will be expected of the would-be student (Toma, Dubrow, & Hartley).

There are many examples of branding initiatives in higher education that demonstrate this alignment with institutional values. Ramsey (2006) provides a case study describing how branding was used effectively to turn around a struggling institution. Dickenson University used its branding process, including strategic planning and re-positioning the goals of the institution, to change from a struggling, marginal institution on the brink of economic collapse to a healthy institution with a clear identity and high enrollments.

In its brochure describing new goals, the President of Sacramento State said, "These values guide what we do at Sacramento State. They're reflected in our new logo and graphic identity package. And they're at the heart of our Destination" ("Sac State Gets an Image Makeover," 2005, p.38).

Other branding efforts focus on visual and symbolic images of the institution. For example, Ohio University spent large amounts of money in order to re-make its logo. "The task of coming up with a signature -- the most basic OU identifier, consisting of its logo next to the words 'Ohio University' in specified typeface and colors ... was between \$200,000 and \$400,000" (Phillips, 2002). As competition for student enrollments increases, institutions spend more on marketing efforts (Wolfson, 2005).

Although branding plays a role in institutional message making and meaning making, not all members of the academic community see branding as positive. Many members of the academic community express anger toward “reducing faculty to a ‘labor force,’ students to ‘clients’ or ‘customers,’ knowledge to a ‘product,’ and education to an ‘industry’... branding is the worst of these practices because it belittles the academic nature of the institution” (Stimpson, 2006 p. 16). Some academicians feel it is important to maintain a distinction between image and academic reputation (Ivy, 2001).

Some suggest that branding is a superficial activity. “Universities on the make hire image creators to give themselves an academic facelift, what the trade calls a new ‘brand’” (Kirp, 2003 p. 11). While college and university officials may see the value of “committing institutional resources to identity changes and visual icons that are meant to explain their mission and portray the student’s expected experience” (Wolfson, 2005); there is still a mixed reaction within the academic community. Community colleges, with their smaller budgets and limited resources, do not appear to use marketing and branding on the same scale as universities (Leone, 2009).

Using the conceptual frameworks mentioned earlier, academic marketing and branding efforts may be classified in the ways described in Table 2.

Table 2 Higher Education Marketing Efforts and Related to Choice Frameworks

Conceptual Framework	Institutional Strategies	Attribution	Heuristics
Social Capital	Promote opportunities for graduates-jobs, careers, professions	Rewards, wealth, connections, pay-offs, accomplishment	Trappings, social connections, expensive=quality
Consumer	Create culture, sports teams, fun, school colors, logo, weekend visits, market brand	Emotional appeal, environment appears safe, fun	Brand loyalty brand and branding, logos, sports teams
Developmental	Appeal to parents, personal values, image congruence	Maturation process, growth opportunities, such as travel abroad "who I want to become"	Safe people are in environment, Selectivity=quality
Social Network	Use peers, blogs, social networking, college visits, photos of groups	Feel accepted, capable	Informal reputation, (e.g. party school) family member or friend attended

Table 2 shows that institutions use different marketing or branding strategies to appeal to students on multiple levels. Within the previously discussed conceptual frameworks, this suggests that different strategies influence the internal mental choice process in varying ways. Primarily universities use many of the strategies mentioned previously. While there seems to be little existing literature about branding practices within community colleges, the question of community college brand can be coupled with the earlier question about whether heuristics are involved in the choice process

because, in essence, a purposely constructed brand attempts to create a mental shortcut.

The Choice to Attend a Community College

Although there appears to be little research on branding community colleges and college choice, the choice to attend a community college is often described as within the context of “enrollment management” (Whiteside, 2004). Enrollment management focuses on three activities: recruitment, retention and student success. Most studies about college choice and community colleges are usually embedded within research that focuses on college choice in general, such as High School and Beyond (HSB) where community college results tend to be a minor part of the findings. Even research about under-represented students—a major population at community colleges—is scarce (Bers, 2008),

According to several national studies of the intentions of high school students, including High School and Beyond (HSB) (Zahs et al., 2005), and Trends Among High School Seniors (Ingels & Dalton, 2008) all based on National Center for Education Statistics (NCES) reports over the past forty years,

The number of high school students who seriously consider going to college has increased from 34 percent to 61 percent for 4-year academic institutions...the percent of seniors intending attendance at 2-year academic institutions increased from a low of 9 percent in 1980 to 18 percent in 2004. Between 1972 and 2004, the percent of seniors planning to attend a 2-year vocational, trade, or technical school declined from 17 percent to 5 percent (Ingels & Dalton, 2008 , p. 3).

However during the same time period, enrollments at community college increased to around fifty percent for first time freshmen (MacAllum et al., 2007, p. 15) suggesting a gap between intentions and actual attendance.

The decision to attend a community college may stem from financial concerns (De La Rosa 2006; McDonough 1997) or uncertainties about college (Post, 1990). Some affluent students whose parents have high education levels also promote community college attendance (Bers & Galowich, 2002). Kurlaender (2006) finds that there is a high rate of Hispanic enrollment in community colleges regardless of academic achievement and SES perhaps because their community-based nature allows students to stay close to home which may be a cultural value. Students who plan early are less likely to enroll in a community college (Bers & Galowich, 2002), suggesting that community college is considered an option later in the choice process. According to the 2007 study “Deciding on Postsecondary Education,” focus groups with students and parents showed that “two-year colleges were the primary choice for lower income and older returning students for three commonly cited reasons: cost, location (also related to cost and convenience), and the inability to meet academic admission requirements at four-year institutions” (MacAllum et al., 2007, p.15).

Other reasons for selecting the community college option cited by parents of traditional-aged students was that “community colleges offered ‘affordable exposure’ since their children had no idea what they wanted to major in or what career or vocation they wanted to pursue” (MacAllum et al., 2007, p.15). In addition, parents stated, “I thought of the community college as being subpar to the local four-year university until I learned that many of the university faculty also teach at the community college” (MacAllum et al., 2007, p.15).

Community colleges and college choice are sometimes tied to research about lost talent and inequity in educational attainment. In “Lost Talent: Unrealized

Educational Aspirations and Expectations among U.S. Youths,” Hansen (1994) uses the HSB data to examine a multi-stage, stratified, cluster sample of 1,100 students to explore non-individual factors that impact social mobility. She describes loss of talent occurring when “a secondary student show signs of early talent and has reduced college expectations over time or is not able to realize early expectations” (Hansen, 1994 p.159). She indicates the loss of talent is significant: 27% had reduced expectations in the period of the study. She found that “class had the largest and most consistent effect on lost talent; membership in a lower socioeconomic group sometimes doubled the risk of lost talent” (Hansen, 1994 p.159). These are the students who may be likely to attend community colleges.

Morgan (1996) also uses the HSB 1992 data to examine longitudinal differences in educational aspirations by different groups, specifically whites, African Americans and females, using regression coefficients for two models of educational expectations. He uses *Significant Others’ Influence* (SOI) as a measurable influence. His conclusions are that “the expectations of females had increased more than males, and the expectations of whites increased more than African Americans from the original 1980 data” (Morgan, 1996, p. 311) which he explains through status attainment theory and labor market incentives based on a social capital framework. These studies on lost talent are significant because during current policy discussions, community colleges are often described as the bridge between high school and university for lower socioeconomic groups and minority students. Both groups attend community colleges in larger percentages than universities. This suggests that community college choice has a role to play in reducing lost talent (NATN, 2008).

One national survey that looked specifically at the perception of community colleges from the viewpoint of the general population is called the “National Survey of Community Colleges”. It was administered in 2004 to 1,055 adults living in the US. The survey was conducted via phone and measured perceptions about community colleges (Gould, 2004). The results indicated “Americans hold very positive impressions of community colleges and express appreciation for the contributions they make as affordable, convenient, educational providers in their communities” (Gould, 2004 p. 15). On the other hand, “Three quarters say it is true at least some of the time that students who go to community colleges do not have high enough grades or test scores to get into a four-year college” (Gould, 2004 p. 15). Also, “Seven in ten believe it is true at least some of the time that the students who go to community colleges do not have the commitment to attend a four-year college” (Gould, 2004 p. 16) and three quarters say, “The college level courses at community colleges are easier than the same courses taught in four-year colleges” (Gould, 2004 p. 16).

A Michigan survey mirrored Gould’s results, (*Attitudes and Opinions of Voters About Higher Education Services in Livingston County*, 1993). A significant number of participants gave community colleges high marks for their contributions to the community, particularly for their occupational training. However, a large number of respondents indicated that they would be unlikely to attend, or have their children attend a community college for those same courses (p.35).

Negative attributes associated with community colleges are everywhere in the culture, particularly in the media (Bers, 2009). LaPaglia analyzed fifteen-years of

community college in the media and fiction and found that the media messages about community colleges were overwhelmingly negative.

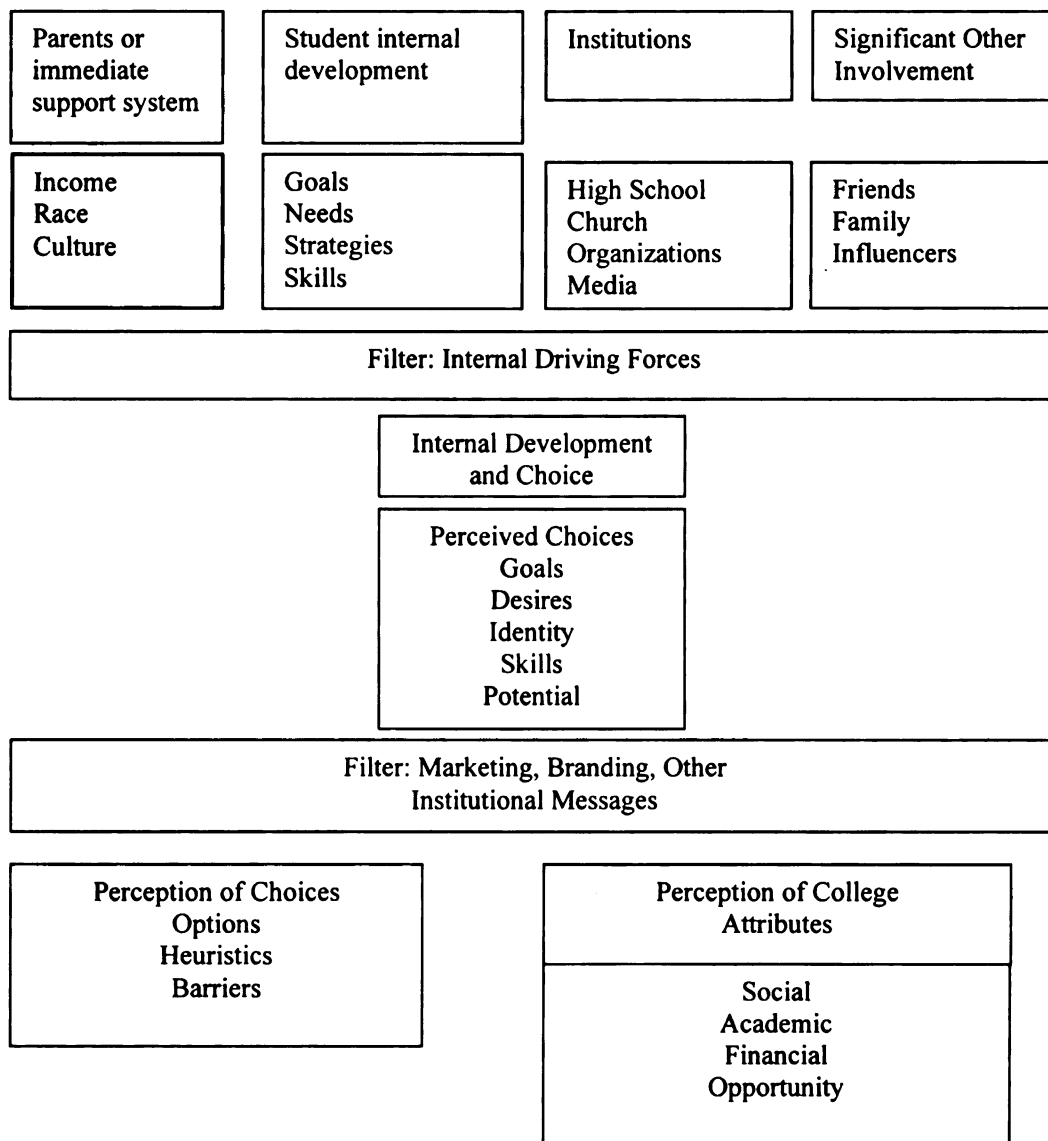
The student's fictional stereotype is a re-entry woman who is white, working-class and of 'non-traditional' age. Unenlightened and passive, life just sort of happens to her. The formulaic teacher is a white male in the English Department. He rarely thinks his job is important, and he may expend much of his energy on sexual liaisons with his students. The typical intent in both cases is ridicule, and 'community college' and 'junior college' have become shorthand terms for 'loser' and 'not worth taking seriously.' (LaPaglia, 1993, p.32)

LaPaglia goes on to note, "Fiction's negative definition of the millions of two-year college students and faculty in the United States does them unwarranted violence" (LaPaglia, 1993, p. 35). These stereotypes and media portrayals surrounding community colleges influence the lens through which would-be students see the community college and may contribute to the use of heuristics and weak choice in the college choice process.

The College Choice Filters

The college choice process can be seen as a series of filters involving the background and readiness of the chooser, the impact of his or her environment, institutional messages, perceived attributes, mental short-cuts in the decision making process, influences from the institutions and the public, and the lens through which institutions are seen. As portrayed in Figure 1, college choice involves a series of filters that help define the attributes associated with an institution.

Figure 1 Influences on Community College Choice



As the Figure 1 indicates, a student's background and environment act as a filter through which college choice is seen.

Shortcuts in decision-making add further lenses.

Gaps in Literature

In a nation that has supported a policy of creating an educated workforce for the general populace, college choice and lost talent should be a major concern

(McPhee, 2006). In addition, little has been studied about community colleges in the choice, persistence and completion of education stages. Five percent (Bers, 2008) of approximately 2,600 studies reviewed in *How College Affects Students*, focused on community college students (Pascarella, 1997). Only 10% of the nearly 2000 publications on college persistence found in ERIC included two-year students (Cofers & Somers, 2000). Only 8% of five major higher education journals articles mentioned community colleges (Bers, 2008).

While there is much literature about the college choice process, studies about how community colleges are viewed in the college choice process seem to be a by-product of university-focused studies. Little is known about what happens to student motivation when potential students do not see a community college as a first choice yet end up attending one.

Summary

While the college choice process can be deconstructed into phases, these phases do not entirely explain some of the hidden influencers in the choice process. This is important because a weak choice process is associated with retention, success rates, and lower performance. Literature about the college choice process includes several conceptual frameworks that explain choice behavior: social capital, consumer, human development, and social network frameworks. The choice process is influenced by higher education branding and marketing activities that create an expected experience. Mental short cuts, sometimes irrational, may shape the choice process and impact how an institution's attributes are understood. Community colleges are viewed uniquely in the college choice process and often in a negative way.

CHAPTER 3

METHODOLOGY

Research and Design

This study used a mixed method, three-phase approach with the end goal of associating demographic and psychographic segments with their perceptions about community colleges, and is modeled after the branding segmentation process (Davis, 1997). This approach is useful because it allows for both the collection and analysis of a national sample (quantitative) and a more in-depth (qualitative) analysis of perceptions (Creswell, 2008). The data were collected concurrently in the same instrument (Becker, 2007) but were analyzed sequentially. The initial closed questions were analyzed with SPSS (Statistical Package for the Social Sciences) and the open-ended questions were analyzed using MAXQDA—a professional software tool for qualitative data analysis. The analysis took place in three phases: Phase I consisted of the analysis of sixteen questions; Phase II the segmentation and coding of groups based on the statistical analysis; Phase III consisted of the retrieval and exemplification of an additional open-ended question using qualitative software. The Student Insights survey was selected as a tool because it had questions pertaining to both universities and community colleges.

First, sixteen questions from the Student Insights survey were analyzed. The instrument used was a large-scale, national survey that identifies socioeconomic and demographic characteristics and poses questions about college choice. Sixteen of forty-six questions were considered in this analysis and selected because they address

issues related to community colleges. Appendix A contains a list of all questions selected for this research.

Survey Design

The company provided the following description of its survey design:

The survey asked students to rate their awareness and the overall favorability each college and university in their state. The list of institutions presented to students is developed by Student Insights using US News and World Report and Department of Education database. In some cases, students from one state were asked to rate their awareness and perception of selected institutions in adjoining states. Student Insights classifies institutions into two broad groups – core institutions and super-regional institutions. Core institutions are public- and private institutions, which draw approximately 75% or more of their enrollment from in-state students and have third quartile, average SAT score of 1200 or higher and/or ACT score of 27 or higher. All survey respondent's rate core institutions. Students with higher test scores (i.e. SAT – 1200 + and/or ACT 27+) rate all super-regional institutions from around the United States. Respondents are instructed to not rate any institution of which they have never heard. Students also rate a smaller set of institutions on specific attributes such as academic strength, tuition cost, residence facilities, campus safety, and others (Becker, 2007).

The answers to the survey questions were analyzed for correlations and other relationships using Statistical Package for the Social Sciences (SPSS).

Next, the results of the analysis is used to identify themes. Themes can be developed based on demographics or psychographics, such as attributes, values, motivation, lifestyle, and brand perceptions (Davis, 1997). The segmentation process was used to further define and refine the survey results into groups of respondents who share demographics, perceptions, values, or attributes (Li, Daugherty, & Biocca, 2001).

The next phase of the research was qualitative in nature. The population groups are used in the exploration of an open-ended question about local community colleges in order to identify common themes. The open-ended question was analyzed using MAXQDA. First, a lexical analysis was performed considering frequency using content analysis and a tag cloud. Next, themes were developed based on the lexical analysis. Then responses of each population segment were reviewed and coded. Finally, responses from each segment and shared attributes were reviewed for emotionality, frequency, uniqueness, and representation (Davis, 1997). These results were collected and used for the final phase of the research. The final phase involved taking the set of themes, retrieving responses that were representative or significant, and then providing descriptions and examples of the themes (Davis, 1997, p.445).

Phase I used statistical analysis to address Research Questions 1-5:

Research Question 1. Are there any significant socio-economic or demographic factors that help explain how community colleges are perceived during the choice process?

Research Question 2. What do prospective students hold of value when choosing a higher education institution? Is it different for a community college?

Research Question 3. How important is familiarity in the community college choice process?

Research Question 4. What attributes are associated with the community college?

Research Question 5. What constitutes a barrier to the selection of a community college?

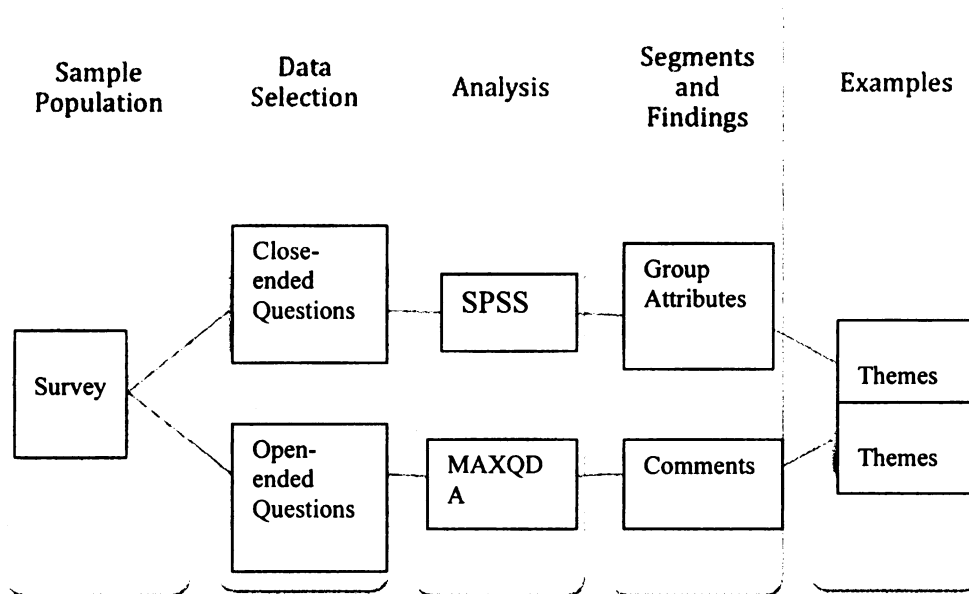
The analysis of the survey questions was used to create themes to be used in the next phase of the research.

During Phase II of the research, the answers to an open-ended question were coded using the themes identified in Phase I. Research Questions 1-5 were addressed again, and because the sample size was over 36,000 responses, MAXQDA software was used to assist with the coding.

Phase III of the research involved retrieving examples of the coded comments that best represented the population and themes, and also addressed **Research Question 6**. Is there any evidence that heuristics take place when prospective students consider community colleges as an option?

The overall research plan is described in Figure 2.

Figure 2 Research Plan



These three phases and six research questions together answered the overarching question: *What attributes, values, and influences can help explain*

perceptions about expected experiences at community colleges within the context of the college choice process?

Population and Background Information for the Study

Respondent Population

The population consisted of college-bound high school seniors from across the United States who were over eighteen years old. The population was referred to the survey's web site through high school counselors, web advertising, and promotional materials.

Sample bias. Because students were notified about the opportunity to participate primarily through advising, counseling, and websites that offer the chance of winning a scholarship, the following biases are identified:

- Participants perceived themselves as college-bound.
- Participants saw the value of a scholarship to help pay for college.
- Participants were able to take the survey through a web-based medium.
- Participants had to be over eighteen to be eligible, so younger seniors could not participate.

While these biases may have limited the scope of the study, they were useful and appropriate for the research questions posed here for several reasons. First, it was not the focus of this research to examine the intentions of all high school students, only those who are considering college. Second, it would not have been useful to examine only students who have strong positive reasons for attending a community college because this would tell little about the reasons for not selecting a community college. Third, the fact that these students were far enough along in the college choice process that they saw the value of a scholarship indicates they had given some thought

about paying for college so the timing of the survey was appropriate. Fourth, the medium was appropriate for the target population as demonstrated by the large numbers that responded to the survey.

Survey Design

The company provided the following description of its survey design:

The survey asked students to rate their awareness and the overall favorability each college and university in their state. The list of institutions presented to students is developed by Student Insights using US News and World Report and Department of Education database ...Respondents are instructed to not rate any institution of which they have never heard. Students also rate a smaller set of institutions on specific attributes such as academic strength, tuition cost, residence facilities, campus safety, and others (Becker, 2007).

Rationale for Mixed Framework for the Study

The reason for using this concurrent mixed method was to better identify and explain perceptions held by college-bound high school students about community colleges. In the study, a statistical analysis of 36,000 survey results using SPSS measured the relationship between demographics, values, attributes, familiarity, and barriers, and serious consideration of the community college option, as well as overall favorability of the local community college. During the same instrument administration, open-ended survey questions were addressed to the same 36,000 respondents and analyzed using MAXQDA in order to learn more about the perceptions held by respondents. The reason for using both quantitative and qualitative data was to “better understand a research problem by converging both quantitative (broad numeric trends) and qualitative (detailed views) data” (Davis, 1997, p. 443).

Quantitative Procedures

Phase I

Phase I included the analysis of the first five research questions related by hypothesis, variables, and statistical analysis. Each question and its subsequent quantitative analysis follows:

Research Question 1. Are there any significant socio-economic or demographic factors that help explain how community colleges are perceived in the choice process?
Purpose: Identify demographic groups and their intention to attend a community college.

Variables: Gender, ethnicity, income, G.P.A., and test scores

Statistical tools: Correlation

Survey Questions: How seriously did you consider the community college option?

How favorably would you describe your local community college? What is your race, gender, income, G.P.A., test score?

Null Hypothesis: There is no difference between geographic, demographic, and socio-graphic groups and their serious consideration of community colleges or perception favorability of community colleges.

Variables: Race, location, gender, academic preparation

Statistical test: Correlation

Research Question 2. What do students hold of value when they are choosing a higher education institution and are those values different for students considering a community college?

Survey Question: How important are the following factors in your college choice?

Null Hypothesis: There is no difference in serious consideration of community college between students who value attributes associated with a community college and those who do not.

Variables: Job opportunities for grads, academic strength, tuition cost, academic facilities, residential, campus safety, religious affiliation, distance from home, size, public vs. private, social life on campus, small class sizes. Compare specific attributes to additional survey question: How seriously did you consider the community college option?

Statistical tool: Correlation.

Survey Question: What best describes your immediate college objective?

The results of this analysis reflects the factors respondents value most (relevance), then showed factors that those who seriously considered the community college option value most, in order to determine if there were a difference.

Research Question 3. How important is familiarity in the choice process? This question will be addressed by looking at the relationship between the familiarity question and the serious consideration question using a correlation analysis. The null hypothesis: There is no difference in serious consideration or favorability between those who are very familiar and those who are unfamiliar with community colleges.

Survey Questions: How seriously did you consider a community college, and how familiar are you with community college?

Null Hypothesis: There is no relationship between familiarity and serious consideration.

Variables: 1. Not at all, 2. Not very seriously, 3. Somewhat seriously, 4. Very seriously

Statistical tools: Correlation co-efficient

Research Question 4. When considering community colleges as a college choice, what attributes are connected to the community college? What are the lowest ranked and highest ranked attributes associated with a community college?

Purpose: Identify attributes associated with community colleges

Variables: Attributes

Statistical test: Means

Survey Question: How favorably do you feel about community college?

Purpose: Identify profile of students most likely to find community colleges favorable and least likely to find community colleges favorable.

Variables: Attributes and favorability ranking

Statistical tools: Re-code questions and regression

The analysis of the results of these questions reflected whether there was a relationship between favorability and perceived attributes.

Research Question 5. What constitutes a barrier to the selection of a community college?

Statistical Method: This question was addressed by identifying the mean score of answers related to options about barriers to attending a community college.

Research Question 6. Is there any evidence of heuristics related to community colleges during the search process?

This question was addressed by looking at the results of the analysis of questions one, two, three, and the survey question that addressed high favorability, then comparing them to see if there is a connection between relevance, salience, and favorability. It is also addressed in the qualitative section with answers showing heuristics during the choice process.

These questions and their analyses were used to identify groups of participants with common characteristics. Those common characteristics were then used to create

possible market segments or groups that have shared views. The viewpoints of the market segments were examined in greater detail throughout the open-ended question.

Qualitative Procedures

Phase II: Segmentation

In order to properly interpret the survey results, this researcher took the analysis a step further and organized the survey outcomes according to themes showing shared characteristics. The process allowed for the identification of small groups with unique shared characteristics for the purpose of better understanding the viewpoints of the participants (Davis, 1997). The segmentation process helped identify the differences in opinions about community colleges. Typically, themes can be based on demographics, geography, psychographics (personal attitudes, values, motivations, and lifestyle), and/or brand/category-related attitudes and behaviors (Davis, p. 43). The survey results were used here to identify groups that have shared views about community colleges or similar backgrounds.

The first part of the study identified groups based on categories such as demographics, shared views, or shared attributes. During Phase II the groups were described and categorized by their attributes, and participants with similarities were grouped together.

Phase III-Qualitative Analysis

After the statistical analysis in Phase I and the identification of themes and coding in Phase II, the Phase III involved retrieving comments by population segments and selecting those most representative or in some way characterizing, explaining, or exemplifying the segment's attitudes. The significant groups, themes, and segments identified using SPSS in Phase I and II were used to code comments from the open-ended question using MAXQDA. The process involved searching, organizing, coding,

and looking for relationships within the data. MAXQDA was selected as a tool after comparing several computer aided qualitative data analysis programs for appropriateness, ease of use, and ability to manage content (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). The lexical analysis tool and matrix coding were particularly useful tools for looking for relationships within the data.

The next phase of the research was qualitative and involved examining an open-ended question, “What is the name of your local community college and how would you describe it?” Survey participants were limited to 25 word responses. The results were used for identifying respondent shared themes or perceptions. Themes were suggested by the preceding analysis of the closed survey questions, particularly those that showed statistical or demographic significance in the analysis.

The process of segmentation involved identifying groups of like-minded individuals who shared values, perceptions, or feelings about a subject (Davis, 1997). There does not need to be a large number of respondents who share the view (Penn & Zalesne, 2007). In this case, any relationship that showed statistical significance, positive or negative, was considered as a possible segment. Groups that slightly differed from this means were also considered. Overall responses were considered as well, in relation to attributes, values, and overall consideration of the community college option. In order to continue answering the research sub-questions, the respondents’ answers were examined through multiple lenses: all races as subgroups; races in relation to income levels and G.P.A.s; respondents who mentioned values, such as proximity and low tuition; respondents who mentioned faculty; respondents who mentioned specific attributes, such as size, facility, social life, faculty or

academic strength; respondents categorized by serious consideration; respondents who did not consider community colleges at all; respondents who were very familiar with community colleges; and respondents who were not at all familiar with community colleges. Table 3 shows the relationship between the themes, population groupings and research questions.

Table 3 Groupings and Themes Explored in Relation to Research Sub-Questions

	RQ3 Attributed Perceptions	RQ1 Demographics			RQ2 Objectives		RQ4 Familiarity		RQ5 Barrier	RQ6 Heuristics
		Race	Income	GPA	Ser. Com	Not at all	Very	None		
Attributes	Academic Strength	X	X	X	X	X	X	X	X	X
	Facilities	X			X	X				
	Proximity	X								X
	Offerings	X			X	X				
	Faculty	X			X	X				X
Values	Cost	X	X	X	X	X				
	Size				X	X				
	Diversity	X	X		X					
	Favorability	X	X	X	X		X	X		

These themes were also explored in the qualitative analysis. The responses to the open ended questions were then evaluated using the following steps.

Steps in Qualitative Analysis

MAXQDA is a qualitative data analysis software package that is used to analyze language and was used here to examine the answer to the survey's open-ended question. First, a content or lexical analysis was performed using MAXQDA Dictio and Tag Crowd to identify word frequency and order. This lexical analysis was

performed on individual population segments and on all respondents. Figure 3 shows an example of an initial lexical analysis.

Figure 3. Terms Used by Population Group “No Consideration at All”, Listed Alphabetically with Frequency of Response

*academic (552)affordable (658)alot (145)area (234)around (118)atmosphere (126)att
end (649)bad (183)basic (140)best (332)better (194)campus (720)career (212)challen
ging (119)cheap (287)choice (231)classes (1179)college (6443)community (2141)conv
enient (166)cost (337)courses (276)credits (236)decent (173)degree (333)describe (21
5)dont (167)easy (358)education (941)enough (143)environment (194)everyone (116)
excellent (230)experience (145)facilities (329)familiar (123)favorable (189)feel (149)f
riendly (184)future (130)general (200)gives (148)going (259)heard (266)help (232)ho
me (1124)inexpensive (119)interested (133)junior (284)kids (168)known (178)learnin
g (140)life (357)live (112)local (167)location (294)looking (220)lot (339)major (345)
money (297)needs (127)nice (947)nursing (157)offers (391)opportunities (224)option
(142)overall (141)people (1042)prepare (131)pretty (173)price (136)professors (143)
program (674)provides (281)ready (166)really (414)reputation (419)safe (175)save (1
27)school (2908)seems (335)social (190)start (724)state (139)stay (136)stepping (168
)stone (119)strong (194)students (1843)study (116)sure (124)teachers (242)think (344
)town (117)transfer (547)tuition (310)university (745)variety (141)work (158)year (66
5)*

This list in Figure 3 was then purged of words that were inconsequential, such as “lot” by using a “stop list”.

Next, words were ordered by frequency, and a list of the most commonly observed words was created and used to develop a lexicon. This initial lexicon was grouped into themes then supplemented with words from the thesaurus. The frequently observed words that were connected to themes that came out of the original quantitative analysis were considered first. For example, “academic reputation” emerged as barrier in the quantitative analysis; the words “academic” and “reputation” were also frequent words in the lexical analysis. A review of all words potentially connected to “academic reputation” was conducted and the final lexicon for “academic

reputation” was created. Next, the lexicon was reviewed for common themes and the lexicon items (words) were sorted and grouped together by common themes. Each theme was then given a code name and a code color. Figure 4 shows the lexical set developed for “academic reputation”.

Figure 4 Lexical Terms Used to Code Academic Reputation

easy|challenging|hard|poor|academic|thirteenth grade|grade thirteen|high school|not college|not prepared|not ready|strong|reputation|learning|bad|decent|nice|excellence|

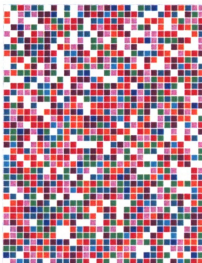
The lexical terms as in Figure 4 became a part of the lexicon for the theme “academic reputation”.

Next each theme was given was assigned a color. A list of the most often referenced themes and assigned colors follows.

Academic Reputation (Orange)	
Proximity (Grey/Green)	
Offerings (Blue)	
Size (Aqua)	
Facilities (Brown)	
Cost (Red)	
Nursing (Purple)	
Faculty (Bright Green)	
Diversity (Pink)	
Missing (White)	

Using MAXQDA software, this color-coding was applied to all responses. The color-coded answers were analyzed by the total population and by population segments. This analysis provided two things. First, a visual overview of all responses, called a matrix, displaying all answers for specific populations as shown in Figure 6.

Figure 5. Matrix Showing Lexical Coding of all Respondents who Seriously Considered a Community College



The matrix provides a visual overview showing which themes were most referenced by the respondents. Next, the actual comments about community colleges were highlighted using the color-coding.

Finally, individual were retrieved by population segments and reviewed. An example of items retrieved by coding for “academic reputation” is shown in Figure 6.

Figure 6 Sample Responses from Respondents Who Were Very Familiar with but Chose not to Attend Community College, Code: academic reputation

Position: 8 - 8

Demonstrates goals geared for academic excellence

Position: 20 - 20

Its very easy it helps you to get ready for the act and a university.

Position: 24 - 24

A good, reputable small-town campus with decent academic strength.

Where position refers to the order the comments appear in. These comments were then used to explain and provide examples of how different population segments described their local community college based on selected themes.

After the answers were categorized and coded, each population segment was reviewed by theme or topic. Connections between the statements and population segments were identified and selected as examples based on frequency, emotionality, and representation. In some cases, new emergent themes were identified.

Data Collection

Survey Instrument

The purpose of this study was to understand the perceptions that high school senior students hold about community colleges. Data from an existing national survey created by Student Insights were analyzed. Student Insights provided a data set with responses to all 2007 survey responses, with answers from over 36,000 respondents. Looking at populations from across the country allowed for an examination of differences in socio-demographic and geographic factors.

Instrumentation

This phase of the study was secondary research in that it used the data from an intact survey instrument developed and administered by Student Insights, a proprietary company that normally provides the results of the survey questions about universities to universities. The permission to use the instrument is included in Appendix B. All results were provided in the form of raw data.

The total number of responses in 2007 was approximately 36,000 nationwide.

The survey sample is generally reflective of each state's population distribution and demographic characteristics. The margin of error varies according to the number of respondents, the consistency of responses to each survey question, and level of confidence. In general, the margin of error for overall awareness and perception is approximately +/- 2 - 6% at a 90% confidence level (Becker, 2007).

The survey was a cross-sectional study collected at a set point in time. Since the survey was administered electronically, it allowed for a quick turnaround time while being an appropriate and comfortable medium for the target population. The survey used a single stage process and in order to participate, students self-identified as being over 18 and planning to attend college. Therefore, this was not a random sample of high school seniors' future intentions but was a sample of the population who had some desire to attend college. For the purpose of this research, this was a useful population because it positions and the community college as a choice among several other educational opportunities.

Survey Administration

Student Insights' online survey of high school seniors is conducted annually. The 2007 survey was conducted from January 1 to April 20, 2007. Students participated in the survey as part of the Student-View Scholarship program. All students who completed the survey were entered into a random drawing for nine scholarships worth \$8,000 each. Students were asked to provide geographic and demographic information including ZIP code, county, high school name, high school size (i.e. senior class), gender, race, family income, SAT and/or ACT scores, grade point average, and intended major.

The scholarship opportunity was promoted primarily through mailings to high school guidance counselors across the country and website advertisements. In addition, the Student-View Scholarship was listed by most online scholarship sites and published in scholarship directories. The scholarship was available in all 50 states.

The survey used a single stage process, and students self-identified as being over 18 and planning to attend college in order to participate. Therefore, this was not a random sample of high school seniors' future intentions but was a sample of the population who has some desire to attend college. For the purpose of this research, this was a useful population because it positioned the community college as a choice among several other educational opportunities.

Survey takers chose to participate because they were introduced to or came across the survey, so this is considered a convenience sample (Creswell, 1994). The sample is stratified by gender, economics, locale, and academic preparedness as defined by national standardized test scores and grade point average. The number of respondents in the sample was over 36,000. The data were collected through an electronic process. Respondents filled out the survey on a website and were entered into a drawing because to win a college scholarship.

Data Analyses

Data were collected from January to April of 2007. The analysis of the data occurred between 2008-2009. Over 36,000 surveys were considered. Scaled questions about college plans, barriers, demographic information, and one open-ended question were included in the analysis.

The survey sample is generally reflective of each state's population distribution and demographic characteristics. The margin of error varies according to the number of respondents, the consistency of responses to each survey question, and level of confidence. In general, the margin of error for overall awareness and perception is approximately +/- 2 - 6% at a 90% confidence level (Becker, 2007).

Two separate tools were used in the analysis of the data: SPSS for the statistical and demographic analysis and MAXQDA for the analysis of language in the qualitative section.

Summary

This study looked at college choice using a mixed methods approach using a large population of college-bound students participating in a national survey. The survey results were analyzed by student background, student values, attributes associated with community colleges, familiarity with community colleges, serious consideration of the community college option, and overall favorability related to community colleges. The themes and populations that emerged included small, unique groups of respondents. The open-ended question was used to explore the meaning and shared values associated within each population segment. The survey analysis, segmentation, open-ended question analysis, and the resulting discussion helped to explain student perceptions about the community college within the college choice process. This mixed methods approach included both the general population survey results and the in-depth analysis of the open-ended question.

CHAPTER 4

RESEARCH FINDINGS

Introduction

The purpose of this study was to provide insight into the college choice process. Community colleges were of particular interest because they enroll a large number of first time freshmen. The college choice process has been shown to impact student success. In order to create some understanding about college choice and community colleges, this research looks at college-bound high school students and their perceptions about community colleges on a national basis. Using a mixed methods approach, a quantitative analysis of survey results and a qualitative analysis of an open-ended question about community colleges were employed.

Organization of Data Analysis

The research findings are based on 17 questions selected from a national proprietary survey, the 2007 Student Insights Survey of High School Seniors, in order to explore perceptions held about community colleges. Six research sub-questions about community college perceptions are addressed in the analysis. Sixteen survey questions were analyzed for relationships using SPSS. Next an open-ended question from the same respondents was analyzed using text analysis software, MAXQDA. The results of both analyses were used to develop thematic groupings. Finally, comments representing each segment were retrieved for a more in-depth exploration of the subject matter using MAXQDA. Not every theme within every question was analyzed qualitatively. Only those that surfaced as major themes in the lexical analysis of the open-ended question were included in the qualitative analysis. This process mirrored

the research process used in brand analysis and brand segmentation. The results were used to answer the question: What attributes, values, and influences can help explain perceptions about expected experiences at community colleges within the context of the college choice process? The following sub-questions are addressed:

Research Question 1. Are there any significant socio-economic or demographic factors that help explain how community colleges are perceived during the choice process?

Research Question 2. What do prospective students hold of value when choosing a higher education institution? Is it different for a community college?

Research Question 3. How important is familiarity in the community college choice process?

Research Question 4. What attributes are associated with the community college?

Research Question 5. What constitutes a barrier to the selection of a community college?

Research Question 6. Is there any evidence that heuristics take place when prospective students consider community colleges as an option?

Background

Surveys were made available online in April of 2007. The entire survey questionnaire consisted of 44 questions, several with multiple options; the majority were closed questions. The results are owned by the proprietary company Student Insights and are used primarily with universities to help implement branding strategies. The survey asked respondents to rate perceptions about nearby universities. Some respondents scoring higher on college entrance tests are asked to score other national major universities. One set of questions was designed specifically to address community colleges. Seventeen questions were used for this analysis; the list of those

questions is located in Appendix A. Responses were received by the end of May 2007 and came from all regions of the country. There were over 36,000 responses to the survey.

Respondents were asked whether they intended to enroll at a community college, and if not, were asked a series of follow-up questions. While there were many respondents who intended to enroll at a community college this analysis looks at the answers of the population not intending to enroll at a community college. The study looked at the independent variables of demographics, values, familiarity, institutional attributes, and institutional barriers compared to two dependent variables, “serious consideration” and “overall favorability”. Questions about serious consideration and favorability were asked of the respondents only if they were not planning to attend a community college.

Descriptive Characteristics of Respondents

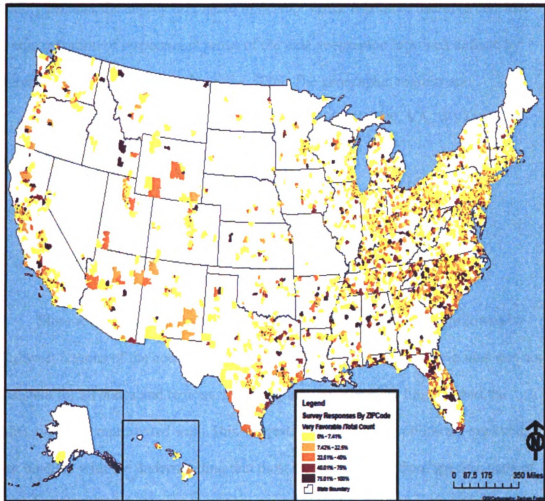
In order to understand the context of respondents’ answers, it is important to understand who responded to the survey. The following information is provided to explain selected socio-economic and demographic characteristics of the respondents.

Geography of Respondents

While responses were collected from across the country, it is useful to look at responses based on regions. Those established by the National Center for Education Statistics (NCES) are useful because regions are connected by cultural and social constructs ("National Center for Educational Statistics," 2008). There are survey responses from each NCES region. A complete breakdown of respondents by state can

be found in Appendix D. Figure 7 shows responses by zip code while Figure 9 shows responses by NCES regions.

Figure 7 Map Showing all Survey Responses by Zip Code



Legend

Survey Responses By ZIPCode

Very Favorable /Total Count

	0% - 7.41%
	7.42% - 22.5%
	22.51% - 40%
	40.01% - 75%
	75.01% - 100%
	State Boundary

0 87.5 175 350 Miles

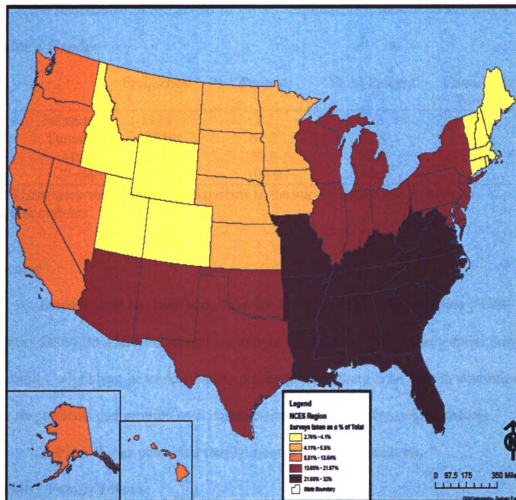
GIS Cartography: Zachary Foster

Zip code responses are heavily concentrated in the eastern part of the country, possibly because the survey originated in Pennsylvania. It is more useful to consider the concentration of responses in terms of the nine geographic locations defined by National Center for Education Statistics, 2009. The geographic regions are:

Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)
Far West (AK, CA, HI, NV, OR, WA)
Great Lakes (IL, IN, MI, OH, WI)
Plains (IA, KS, MN, MO, NE, ND, SD)
Southwest (AZ, NM, OK, TX)
Mid East (DE, DC, MD, NJ, NY, PA)
New England (CT, ME, MA, NH, RI, VT)
Rocky Mountains (CO, ID, MT, UT, WY)
Outlying Areas (AS, FM, GU, MH, MP, PR, PW, VI)

More responses were received from the Southeast and Mideast, followed by Southwest regions of the country, suggesting survey distribution and response was not consistent for all states and regions. Some regions, such as New England and the Plains, were not represented well. This suggests that when perceptions are explored, it must be done with the understanding that most responses come from specific parts of the country (see Figure 8).

Figure 8 Map Showing Survey Responses by NCES Region of Country



Legend

NCES Region

Surveys taken as a % of Total

	2.76% - 4.1%
	4.11% - 5.5%
	5.51% - 13.64%
	13.65% - 21.67%
	21.68% - 32%
	State Boundary

0 87.5 175 350 Miles

GIS Cartography: Zachary Foster

Gender

A breakdown of the gender of survey respondents is described in Table 4.

Table 4 Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Missing	1174	3.2	3.2	3.2
Female	24779	67.8	67.8	71.0
Male	10618	29.0	29.0	100.0
Total	36571	100.0	100.0	

There were more female respondents to the survey than there were male respondents.

Income

Income level has long been examined in relation to college choice ("Fast Facts," 2009). In addition, several answers in this survey—particularly about family income—might best be understood as perceptions, as there is no way to determine that the respondents can provide an accurate estimation of their household income.

Table 5 shows perceived family income for all respondents.

Table 5 Family Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Missing	1199	3.3	3.3	3.3
\$0–25,000	4245	11.6	11.6	14.9
\$25,000–\$50,000	3330	9.1	9.1	24.0
\$50,000–\$75,000	1265	3.5	3.5	27.5
\$75,000–\$100,000	6917	18.9	18.9	46.4
\$100,000–\$150,000	5965	16.3	16.3	62.7
\$150,000+	4946	13.5	13.5	76.2
I don't know or prefer not to disclose	8704	23.8	23.8	100.0
TOTAL	36571	100.0	100.0	

The table indicates that the largest number of respondents (N=8,704, 23.8%) either do not know or prefer not to disclose their family income. Of those who believe they know their family income, the largest group (N=6,917, 18.9%) believe their family income to be between \$75,000 and \$100,000. Twenty percent believed their family income to be below \$50,000 (N=7,575) and of those, many believe their income to be below \$25,000 (N=4,245, 11.6%), near the federal poverty guidelines for a family of four as established by the United States Department of Health and Human Services (Bronfenbrenner, 1979). The 11.6% number is also similar to the number of students overall who indicated the community college option as a college objective. Almost a third of the respondents believed their family income to be above \$100,000. Likewise, ranking high overall favorability of a local community college option does not strictly follow income ascendance.

Race/Ethnicity

Another question asked respondents to indicate their race or ethnicity. The table that follows shows the overall distribution of race/ethnicity of respondents.

This racial distribution differs slightly from the race distribution of students who actually enrolled in a college or university during fall of 2007:

Table 6 Race/Ethnicity of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Missing	1115	3.0	3.0	3.0
Asian	2998	8.2	8.2	11.2
American/Pacific Islander				
African American	4739	13.3	13.3	24.2
Hispanic	3530	9.7	9.7	33.9
Other	1189	3.3	3.3	39.8
White	21999	60.2	60.2	100.0
TOTAL	36571	100.0	100.0	

African American 13.1%, Hispanic 11.4%, Asian American or Pacific Islander 6.7%, American Indian/Alaskan or Native 1.0%, White 64.4%, Nonresident alien 3.4%, with total minority 32.2. IPEDS ("Encarta," 2009). There were slightly fewer Hispanic survey respondents (9.7% compared to 11.4%) and slightly more Asian American/Pacific Islanders (8.2% compared to 6.7%) than the numbers who eventually enroll in college the fall of 2007 subsequent to this survey being administered.

Academic Preparation

The SAT scores (Table 7) and G.P.A. (Table 8) of the respondents are included because they speak to the students' college readiness and ability to compete for slots at selective institutions. If most respondents could not compete for slots at selective institutions, it is expected that their view of open access institutions might be different and open access institutions might be more appealing.

Over one third of the respondents had not taken the SAT; but of those who had taken it, the majority scored between 1000 and 1299 suggesting the ability to be

considered for top tier institutions. Likewise, most respondents were within the top half of their class.

Table 7 SAT Scores

	Frequency	Percent	Valid Percent	Cumulative Percent
Missing	1212	3.3	3.3	3.3
1000-1099	3931	10.7	10.7	14.1
1100-1199	5166	14.1	14.1	28.2
1200-1299	4640	12.7	12.7	40.9
1300-1399	3157	8.6	8.6	49.5
1400-1499	1708	4.7	4.7	54.2
1500-1600	817	2.2	2.2	56.4
699 or less	344	.9	.9	57.4
700-799	407	1.1	1.1	58.5
800-899	1165	3.2	3.2	61.7
900-999	2494	6.8	6.8	68.5
I haven't taken the SAT test	11530	31.5	31.5	100.0
TOTAL	36571	100.0	100.0	

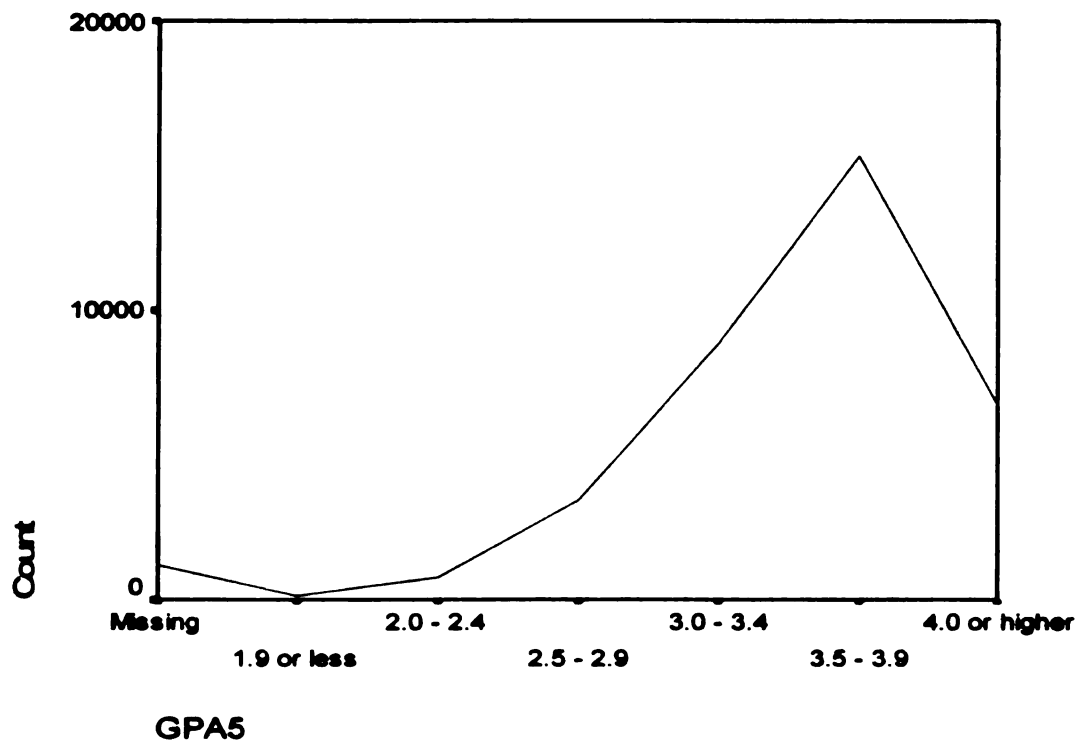
The largest group of respondents who reported taking SATs listed a score between 1200-1299. This suggests that most respondents could compete for selective admission institutions. Another indication of college competitiveness is overall G.P.A, as reported in Table 8.

Table 8 Reported Grade Point Average of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
1.9 or less	111	.3	.3	.3
2.0 – 2.4	807	2.2	2.3	2.6
2.5 – 2.9	3472	9.5	9.8	12.4
3.0 – 3.4	8884	24.3	25.1	37.5
3.5 – 3.9	15329	41.9	43.3	80.9
4.0 or higher	6764	18.5	19.1	100.0
Total	35367	96.7	100.0	
Missing	1204	3.3		
TOTAL	36571	100.0		

As the table indicates, the largest number of respondents reported a 3.0 grade point average or higher. This is also demonstrated in Figure 9 that follows.

Figure 9 Respondent G.P.A.s



These two items suggest and university competitiveness.

Summary of Respondent Characteristics

The location, gender, family income, racial identity, SAT scores, and G.P.A. information are provided as background information in order to better understand respondents and whether they are reflective of the general college-bound population.

The largest group of respondents came from the Southeast and Southwest. Only one tenth of the respondents indicated family income to be near the poverty guidelines. The majority of respondents believe their family income to be above

\$75,000. There were slightly more Asian Americans and slightly fewer Hispanics responding to the survey than the actual number who subsequently enrolled in college. Respondents appeared to have G.P.A.s and SAT scores that would allow them consideration at many selective admission institutions.

Analysis of Data by Factors and Research Questions

This study looked at environmental, personal, and institutional factors. The factors were explored by six research sub-questions, and analyzed first using quantitative methods then qualitatively. Based on themes that emerged from the quantitative analysis, some topics were explored and examined qualitatively by looking at the responses to an open-ended question.

Environmental and Demographic Factors

There are several environmental factors that are considered under research sub-question 1, including geographic location, gender, race, income, and academic preparedness. These factors help to explain the macrosystems of the respondents.

Research Question 1

Research question 1 addresses this issue by asking: Are there any significant socio-economic or demographic factors that help explain how community colleges are perceived during the choice process? The results are shown first through quantitative analysis in which themes are identified the explained more fully in the qualitative analysis.

Quantitative Analysis

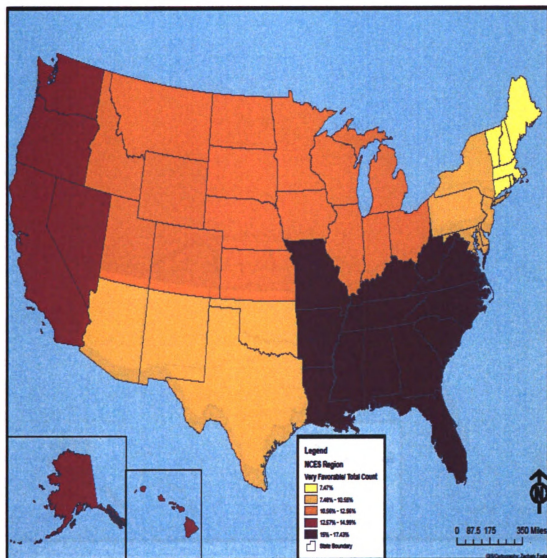
Two dependent variables are examined by geographic region: serious consideration and overall favorability. The two survey questions used to examine

these variables are: How seriously did you consider the community college option?

What is the overall favorability of your local community college?

The Southeast and Mideast regions, in addition to having the highest concentration of respondents, have the highest concentration of respondents who had a very favorable (highest possible response) perception of community colleges. In addition to having a low number of responses, New England also had a low concentration of high favorability. The map in Figure 10 shows high consideration of the community college option.

Figure 10 Map Showing Regions with High Favorability of Community Colleges



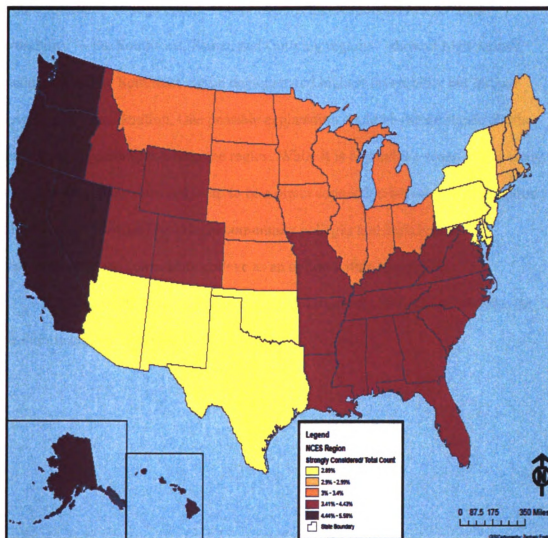
Legend
NCES Region
Very Favorable/Total Count

7.47%
7.48% - 10.55%
10.56% - 12.56%
12.57% - 14.99%
15% - 17.43%
State Boundary

0 87.5 175 350 Miles

GIS Cartography: Zachary Foster

Figure 11 Map Showing Regions with Highest Serious Consideration



Legend

NCES Region

Strongly Considered/Total Count

2.89%	
2.9% - 2.99%	
3% - 3.4%	
3.41% - 4.43%	
4.44% - 5.58%	
State Boundary	

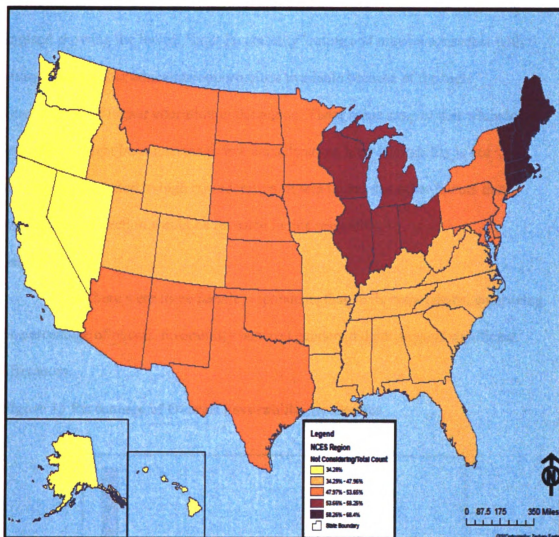
0 87.5 175 350 Miles

GIS Cartography: Zachary Foster

This map (Figure 11) suggests several anomalies about serious consideration of the community college option. Three regions that responded low to “high favorability”—the Southwest, Plains, and Outlying regions—showed high serious consideration. The Southeast region demonstrated highest favorability but did not show highest consideration. One possible explanation could be the existence of other educational opportunities within the region. While it is beyond the scope of this study to explain why, there does not seem to be a direct connection between the perception of high overall favorability of local community colleges and high serious consideration of the community college as an option within geographic.

It is also worth looking at the regions of the country that did not consider the community college option at all (Figure 12).

Figure 12 Map Showing No Consideration at All



Legend
NCES Region
Not Considering/Total Count

	34.28%
	34.29% - 47.96%
	47.97% - 53.65%
	53.66% - 58.25%
	58.26% - 68.4%
	State Boundary

0 87.5 175 350 Miles

GIS Cartography: Zachary Foster

The New England region showed the largest concentration of respondents who did not consider the community college option at all. This is consistent with New England showing the lowest “high favorability” rating and may be consistent with having many higher education opportunities available because of the high concentration of higher education in the region. These maps suggest that while low favorability might be connected to low consideration, high favorability is not necessarily connected to high consideration. It was hoped that other factors that mediate the connection would be revealed in this research.

Gender

While there were more female respondents than male respondents, comparing the percentage of overall favorability between genders did not suggest significant differences.

Figure 13 Percentage of Overall Favorability by Gender

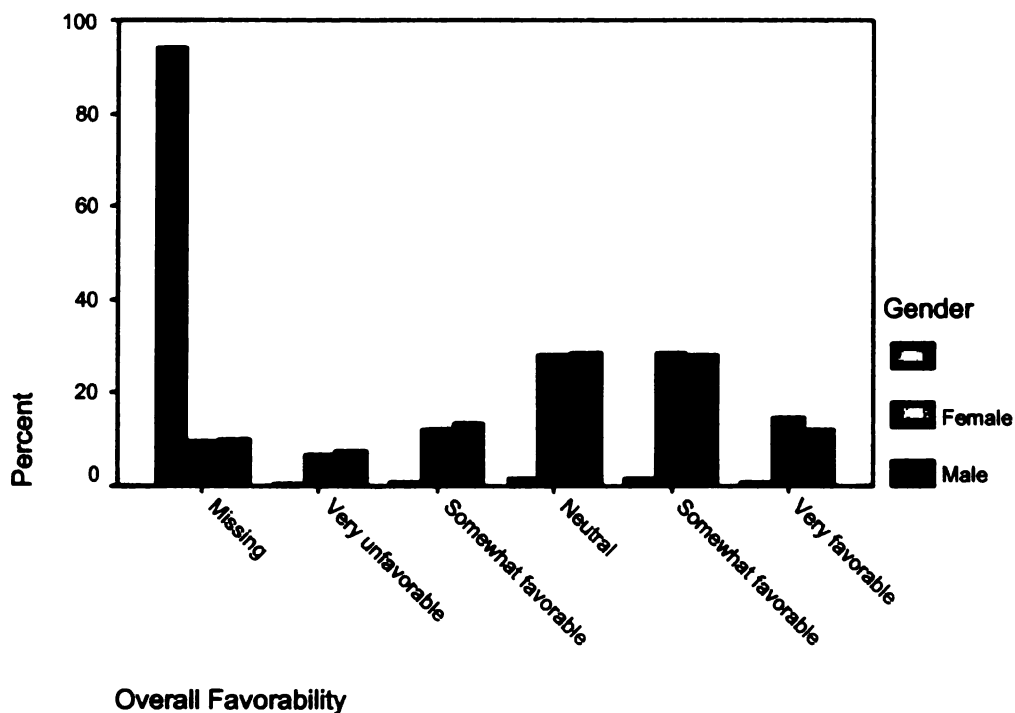


Figure 13 indicates that female respondents are only slightly more likely to think very favorably about community colleges and slightly less likely to be neutral or think unfavorably than male respondents. This suggests that even though more females responded to the survey, there were not major differences between male and female responses.

Income

The majority of respondents believed their family income to be above \$75,000. It is of value to understand if there were any connection between perceived income levels and community college within the choice context. By examining serious consideration and family income level helped to explain the role of income.

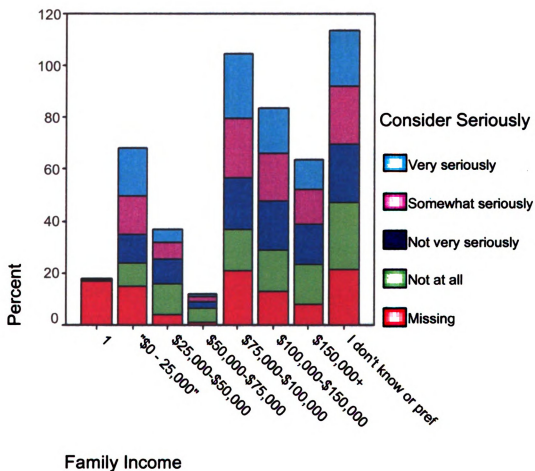
Table 9 Correlation between Serious Consideration and Income

		SERIOUS	INCOME
SERIOUS	Pearson	1	-.038**
	Correlation		
	Sig. (2-tailed)	.	.000
	N		
INCOME	Pearson	-.038**	1
	Correlation		
	Sig. (2-tailed)	.000	.
	N		

In Table 9 the null hypothesis—there is no difference between income and serious consideration of the community college—is rejected. There was a negative correlation between income and serious consideration of the community college option. However, there were some anomalies in relation to income and serious consideration.

Figure 14 suggests that the least serious consideration occurred in working and lower class categories and not in the highest income ranges. Another factor may have been at work between income and serious consideration. While it was true that the lowest income category had the highest serious consideration and the highest income category had the lowest serious consideration, the income levels in the middle did not follow the same pattern. Lower-middle class respondents expressed very low serious consideration of community colleges while middle to middle-upper class respondents indicated a higher serious consideration of the community college option.

Figure 14 Income Levels and Serious Consideration of the Community College Option

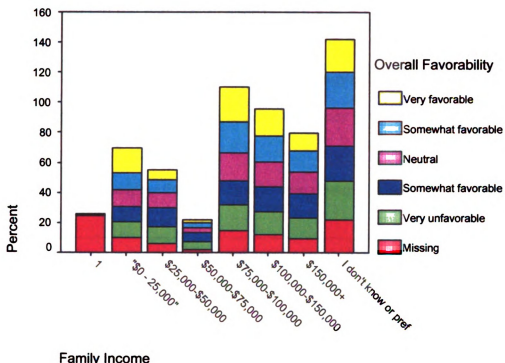


Income and overall favorability

Respondents were asked to rank Overall Favorability of the Community College Option on a score from 0-4, with 0 being the lowest and 4 having the highest overall favorability of the community college as a college choice. Stratifying responses by income level showed that income did make a significant difference in perceptions of favorability. While the highest ranking came from the lowest income category, the next lowest income category did not rank the community colleges as highly as those in the upper income categories. The lowest ranking of overall favorability of community colleges came from the middle-income category.

Figure 15 also shows that lower and middle class income categories had lower overall favorability toward the community college option than did higher income categories.

Figure 15 Family Income and Overall Favorability



It is clear that middle and middle lower income students gave community colleges the lowest overall favorability rankings of all income categories.

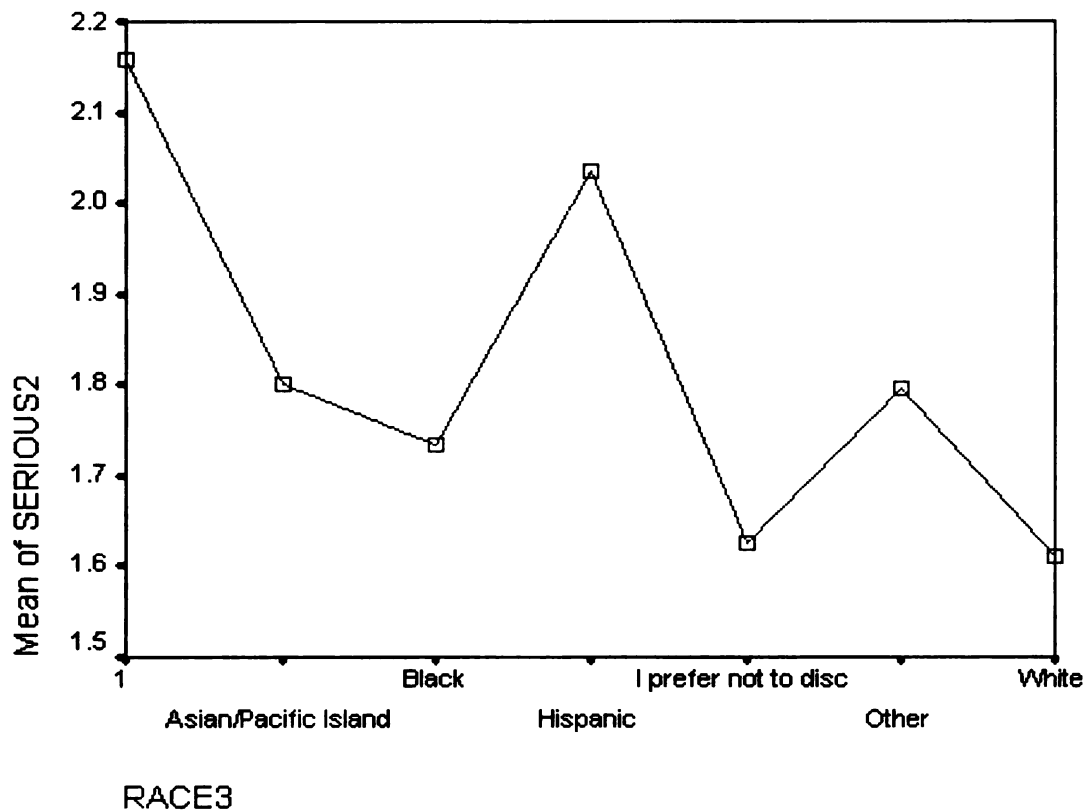
Race

The role of race in relation to serious consideration of community colleges is was addressed by stratifying by racial group the answer to the question “How seriously did you consider the community college option?” Rank 0-4 with 0 being the lowest. Figure 16 shows the average of serious consideration of different racial/ethnic groups.

Figure 16 shows that of those who disclosed their racial/ethnic status, the most serious consideration given to community colleges was on the part of Hispanics, followed by African Americans. Minorities in general considered community colleges

more seriously than Caucasian Americans. However, it should be noted that the group with highest serious consideration of community college choice was the group that simply did not answer the question about race while the group that selected “I prefer not to disclose” had the lowest consideration of community colleges, suggesting that the politics of choosing to answer questions about race may have some implications for future studies.

Figure 16 Serious Consideration by Racial/Ethnic Groups



The other variable of overall favorability is compared by race. Table 10 shows the mean of favorability by race when respondents were asked: “How favorably do you consider the community college option?” Answers were ranked on a scale of 0-4 with 0 being the least favorable.

Table 10 Overall Favorability by Race

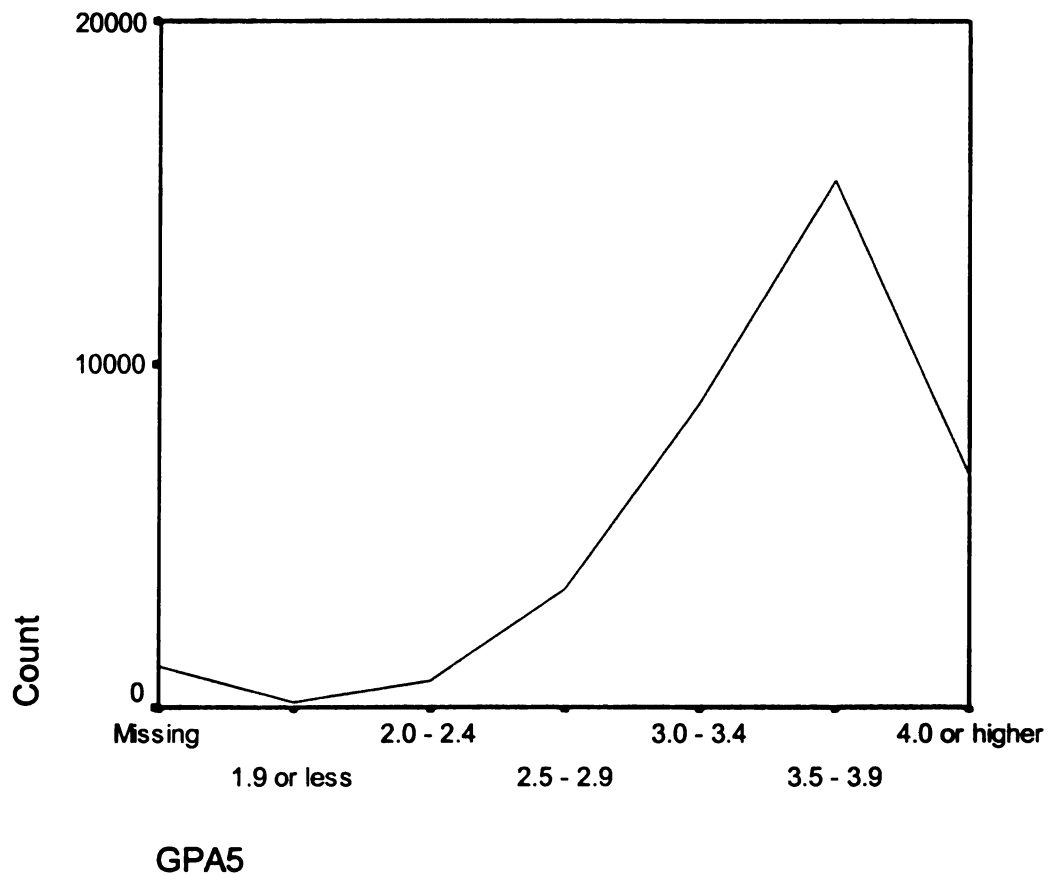
Race	MEAN	N	Std. Deviation
Missing	2.11	8	1.410
Asian-American/Pacific Islander	2.15	2732	1.094
African American	2.48	4091	1.167
Hispanic	2.58	3157	1.081
I prefer not to disclose	2.02	881	1.192
Other	2.37	1068	1.159
White	2.30	20033	1.113
TOTAL	2.33	31980	1.126

As other literature has shown, Hispanic survey respondents indicated the highest overall favorability perception of community colleges. White and “prefer not to disclose” had the lowest favorability. While the overall rating of a 2.33 on a 4.0 is low, it should be remembered that this group of respondents did not intend to attend a community college. While Asian Americans seriously considered the community college option, their overall favorability ranking of community colleges was lower than any other racial group.

Academic preparation

Considering the Grade Point Average (G.P.A.) of the respondents is useful for understanding whether the population should consider the community college as an option because the respondent would be unlikely to be accepted by a more selective institution. Figure 17 shows the G.P.A. levels of all respondents.

Figure 17 Respondent G.P.A.s



G.P.A. levels were self-reported and appeared to suggest a population that had G.P.A. levels appropriate for entering some selective admissions institutions. Both the self-identified SAT scores and G.P.A. scores indicate college readiness and ability to compete for most institutions on the part of the respondents. Since community colleges typically do not require G.P.A. or SAT scores for admittance, but instead rely on internal assessment measures; it useful to know that respondents had a range of rankings. The G.P.A is compared to serious consideration in the Table 11.

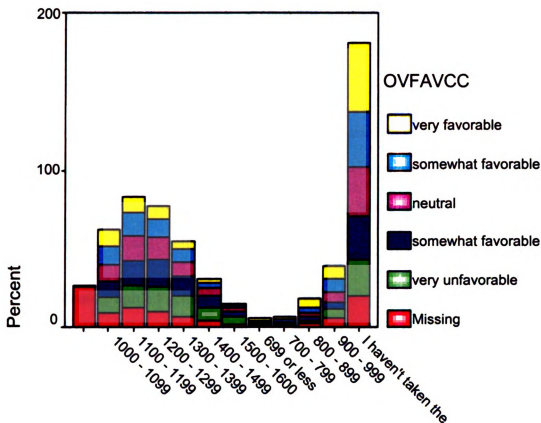
Table 11 Serious Consideration and G.P.A.

		SERIOUS	INCOME
SERIOUS	Pearson	1	-.212**
	Correlation		
	Sig. (2-tailed)	.	.000
GPA	N	29890	29872
	Pearson	-.212**	1
	Correlation		
	Sig. (2-tailed)	.000	.
	N	29872	35367

In Table 11 the null hypothesis is rejected. As is the case with income, there is a negative correlation between the serious consideration of the community college option and higher G.P.A.s. The highest G.P.A. scores had the least serious consideration of the community college option. Favorability rating of the local community college option, on the other hand, does not seem to be closely connected to academic preparedness.

Lower SAT scores actually suggest lower favorability than do higher SAT scores. The largest group for favorability had not yet taken the test, even though this survey took place late in the choice process. This might suggest that the community college option seems more favorable when one is uncertain about college choice (see Figure 18).

Figure 18 Overall Favorability and SAT Scores



SAT

Another academic preparation characteristic worth considering is whether the respondents had already selected a college. Some highly competitive universities have an early selection process, and many college choices are made by spring of the junior year or fall of the senior year rather than during the spring of the senior year. Since the survey was administered in the spring of the senior year, it is worth considering whether most respondents have already made their college choice, as described in Table 12.

Table 12 Already Selected a College

	Freq	Percent	Valid Percent	Cumulative Percent
Missing	1533	4.2	4.2	4.2
No	13093	35.8	35.8	40.0
Yes	21945	60.0	60.0	100.0
Total	36571	100.0	100.0	

As Table 12 indicates, 60% of the respondents had selected a college at the time of the survey. Since many highly selective colleges have early admissions processes, there might be a relationship between not having selected a college and consideration of a community college.

Summary of Demographic Factors

In general, Hispanics, African Americans, and Asian Americans considered the community college option more seriously than did Caucasian Americans, and Hispanics show the greatest interest in community colleges. However, Asian Americans viewed the community college option least favorably. Most respondents had G.P.A.s and SAT scores that suggested college readiness. Those with the lowest income and lowest G.P.A. were most likely to give the community college serious consideration. The higher the G.P.A. and the higher the income, the less likely the serious consideration of the community college option. However, middle lower and middle income respondents had the least consideration and favorability for community colleges. At the same time, middle income and G.P.A. were linked to higher overall favorability ratings for community college choice. The majority of respondents (60%) had not selected a college at the time of the survey. The quantitative analysis suggested several themes to consider for the qualitative analysis. Since family income

and race were of significance, the open-ended question was examined for responses related to those themes.

Qualitative Analysis

Besides geographic location, two themes emerged as being very significant from the quantitative analysis of demographic factors: race and income. In order to understand more about the respondent perspective on those two issues, a search was done of all open-ended responses to find terms related to race and income. Next, a lexical analysis of all terms related to race, ethnic groups and diversity, as well as income and costs was performed. Examples of responses reflecting frequency, urgency and representation were examined and exemplified in the sections that follow.

Diversity

Since race played a significant role in the perception of community colleges and encouraging diversity is sometimes mentioned as one of the missions of the community college, the concept of diversity was looked as a possible theme. A search of all respondents' comments about diversity turned up very little. Comments were predominantly neutral or positive.

Source: All Respondents

- *It is a very diverse college.*
- *One of the most unique and diverse community college in the bay area.*
- *A mixture of ages and intellects combined on one very large campus*
- *CC is characterized by a diverse range of students in terms of ethnicities, age and socioeconomic class.*

These comments suggest recognition of the theme without it having any value or

relevance to the respondent. Those who expressed positive comments had the following to say:

- *It is very affordable, good access for minorities, it provides AA classes which it can be transferred to an University.*
- *This community college is a well-round establishment. It is very nice college because of its diversity.*
- *It's very diverse which is, I think, a very important quality.*
- *Very diverse and good atmosphere.*
- *Very diverse and has a great urban feeling.*

Connecting diversity with an urban setting was a common positive theme; however, diversity by itself did not surface as a significant motivator. There were a few negative comments about diversity, as well:

- *Too diverse*
- *Too many of the Armenian Race, not enough racial integration*
- *It's located in a predominately African American neighborhood.*

By examining a coded map of comments about diversity, African America and Hispanic respondents mention diversity more than other groups. However, few expressed an intention to enroll based on diversity as a value. Diversity seems to be recognized but not necessarily a motivator.

Tuition and cost

Income was an important factor in relation to favorability and serious consideration of the community college option. Responses that reflected valuing lower tuition costs were examined. Also, low tuition is one of the selling points that community colleges use. However, low cost was not necessarily a good thing. Valuing low tuition depended on the respondent perspective of other qualities of the community college option.

- *It is very easy on your wallet but harder on your social life.*

- *You get what you pay for: High quality instruction; personal attention; affordable tuition rates.*
- *An easy and cheap way to get out there and start without ruining my financial assets.*

The word cheap occurs frequently in comments about cost.

- *Close cheap affordable well-known*
- *cheap, basic, efficient, and friendly*
- *a cheap and wise way to begin your college career*
- *Close to home, cheap, and easy*

While the word “cheap” suggests low costs, it may also have connotations of poor quality, little worth, and undeserving of respect (Hurtado, Inkelas, Briggs, & Rhee, 1997).

Personal Factors Influencing Choice

There were several personal factors that may influence whether to consider a community college. The survey asked questions related to personal values, objectives, and familiarity. The results follow under research sub-questions 2 and 3.

Research Question 2

Research question 2 asks: What do students hold of value when they are choosing a higher education institution, and are those values different for students considering a community college?

Quantitative Analysis of Personal Factors Influencing Choice

Two survey questions addressed this research question, the first asked about respondent objectives for college and the second asked what students value most in the choice process.

College objectives

Respondents were asked about their primary objective in attending college and how community colleges fitted in their deliberations. As Table 13 indicates, most respondents intended to attend a university and to earn a bachelors degree from a university.

Table 13 also indicates that 11.8% (N=4,317) of respondents planned to attend a community college. When respondents were asked how seriously they considered the community college as an option, most did not consider the community college.

In fact, the largest number of students (N=17,183, 47%), nearly half, did not consider the community college as an option at all and only 5% (N=1,837) considered the community college seriously.

Table 13 College Objective

	Freq	Percent	Valid Percent	Cumulative Percent
Missing	1423	3.9	3.9	3.9
First enroll in a two-year community/Junior College-transfer	3073	8.4	8.4	12.3
Enroll in a four year Bachelor's degree program	30107	82.3	82.3	94.6
Enroll in a two-year community/junior college to earn an associate's degree	1244	3.4	3.4	98.0
Other	724	2.0	2.0	100.0
Total	36571	100.0	100.0	

Values

It is useful to look at what prospective students value when making their college choice and whether these values align with attributes associated with a community college.

When respondents were asked about values, mean scores identified academic strength and job opportunities as the highest values and religious affiliation as the lowest. Several categories most closely associated with community colleges are useful for the purpose of this research: the distance expected to drive; the tuition expected to pay; the importance of social life, on and off-campus; and the importance of facility, class size, campus size, and academic strength. The values most often described as being related to community colleges are averaged in the table that follows, with 0= not at all important and 4= very important.

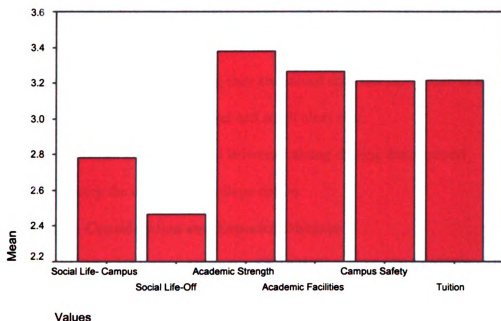
Table 14 shows that respondents ranked academic strength, job opportunities, and tuition as their highest values; size and distance had the least value.

Table 14 Mean of scores for values for all respondents

	N	Minimum	Maximum	Mean	Std Deviation
Academic Strength	35201	0	4	3.38	1.124
Tuition	35201	0	4	3.21	1.154
Residential Facility	35059	0	4	2.84	1.072
Distance	35200	0	4	2.47	1.151
Size	35201	0	4	2.51	1.047
Social Life on Campus	35201	0	4	2.78	1.053
Small class size	35201	0	4	2.60	1.074
Job Opportunity	35135	0	4	3.32	1.157
Valid N	34994				

Figure 19 shows that when selected values were examined, particularly those associated with community colleges, the mean scores of answers is first, academic strength, second, campus safety and tuition, and of least importance is social life, on and off campus. Table 15 looks at a selected value in relation to serious consideration of the community college option.

Figure 19 Means of Scores of Values Most Relevant to Community Colleges



The ranked values in Figure 19 are closely associated with community colleges, such as distance from home, (community colleges are chartered by local communities) so it is useful to see if respondents who valued highly those attributes associated with community colleges also considered the community college option more seriously.

Table 15 shows the relationship between tuition and serious consideration of the community college choice.

Table 15 Serious Consideration and Expected Tuition Expense

		SERIOUS	TUITION
SERIOUS	Pearson	1	.050**
	Correlation		
	Sig. (2-tailed)	.	.000
TUITION	N	29890	29872
	Pearson	.050**	1
	Correlation		
	Sig. (2-tailed)	.000	.
	N	29872	35367

In Table 15 the null hypothesis is rejected. This table shows there is a significant relationship between serious consideration and high valuing of tuition.

There are two other attributes associated with community colleges that are worth looking at in terms of how highly they are valued and how they relate to serious consideration: distance expected to travel and small class size.

Table 16 shows the relationship between valuing driving distance and seriously considering the community college option.

Table 16 Serious Consideration and Expected Distance

		SERIOUS	DISTANCE
SERIOUS	Pearson	1	.045**
	Correlation		
	Sig. (2-tailed)	.	.000
	N	29890	29872
DISTANCE	Pearson	.045**	1
	Correlation		
	Sig. (2-tailed)	.000	.
	N	29872	35200

In Table 16 the null hypothesis is rejected. This table shows there is significant correlation between those who value driving distance and serious consideration of the community college option.

Likewise, small classes are often marketed by community colleges as a counterpoint to large lecture classes. Valuing small class size may suggest serious consideration of community college. Table 17 shows the relationship between valuing small class size and serious consideration of the community college option.

Table 17 Serious Consideration and Small Class Size

		SERIOUS	SMALL CLASS SIZE
SERIOUS	Pearson	1	-.011 **
	Correlation		
	Sig. (2-tailed)	.	.064
	N	29890	29872
SMALLCLASS SIZE	Pearson	-.011**	1
	Correlation		
	Sig. (2-tailed)	.064	.
	N	29872	35201

In Table 17 the null hypothesis is rejected. This table shows there is a negative correlation between small class size as a value and serious consideration. Those who valued small class size clearly did not tend to seriously consider the community college option, possibly because small class size may be associated with personal assistance not believed to be available at large commuter institutions.

Of all the values ranked by respondents, “social life” was the least important value and “academic strength” was the most important value. Strongly valuing “tuition” and “distance expected to drive” were two factors that also suggested serious consideration of the community college option.

Qualitative Analysis of Personal Factors Influencing Choice

The significant themes suggested by the quantitative analysis, Phase I, include size of institution, distance from home, academic reputation, and facilities. During Phase II, the open-ended question asking respondents to describe their local community college was analyzed and a set of lexical themes were established. In Phase III, these themes are considered more in depth by providing examples of respondent comments followed by a discussion about the meaning behind the comments. Personal values, such as academic reputation size, distance from home, and facilities are addressed in the section on attributes, research question 4.

Values

One of the significant values mentioned was academic reputation. The meaning behind the phrase academic reputation is explored further through identifying and examining answers to the open-ended question that address academic reputation.

Academic reputation

The concepts of academic strength and academic reputation were mentioned regularly but seem to represent several different concepts. Academic strength was not mentioned in conjunction with rigorous coursework, challenging faculty, or a demanding field of study. The comments about academic strength were more closely connected to making a transition away from an existing macrosystem. Themes about academic strength included a continuation of high school, underachieving, multiple offerings, nursing, and stepping-stones. All student comments are italicized.

Comment Source: Did not consider attending at all

Theme: Continuation of High School

- *13th grade”- The local community college is seen as an extension of high school, or not like being in high school, but taking college courses, because you live at home.*
- *It is called "My High School Part 2"*
- *This college: everyone in my high school attends after high school*
- *High school all over again*
- *A second high school close to home*
- *College of CC is like a second High School to anyone that has just graduated around the Valley*
- *It seems as if it were high school all over again and I am ready to step into college.*

These comments suggest that while “13th grade” might be a next step after 12th grade, it does not equate to going to college. Going to college suggested some type of change from the way things were done in high school: leaving home; leaving classmates, leaving the safety or confinement of a community, and/or learning differently. The local community college was not seen as accomplishing this change.

Some respondents felt community college classes do not provide courses that are challenging:

- *bland and boring just like high school*
- *desolate, dull, providing no opportunity*

Another theme about academic strength has to do with attitudes about others who might attend community college. This was felt that community colleges are for those who did not prepare adequately, who did not work hard, or who do not deserve to go to the next level:

- *An outlet for unsuccessful high school students*
- *A hole in the wall college where you go if you had extremely low grades in high school and did not work to get any scholarships.*
- *People go here because they want to go to an easy college.*
- *A place for those who slacked off in High School, or for parents who desire degrees.*
- *A well known Jr college with classes easier than those in high*

- school, where all of the underachievers go.*
- CC is referred to as somewhat of a joke, many students end up attending there after high school, they do offer a lot of activities.*
- A last ditch effort for people that didn't try hard in high school and have no future plans.*

These comments suggest that there was a perception dichotomy between those who saw themselves as prepared for college and how they saw those who they thought slacked off, and that the community college was the place for those who either did not learn or did not deserve access to transition into the next life stage: college. The vehemence of some answers suggested that respondents felt it unfair that those who did not work hard should be in college; and that, by extension, based on who was accepted, the college would not or could not have quality programs.

There were those who felt positively about a community college's academic strength: (Source: Both Seriously Considered and Did Not Consider at All):

- I would describe this community college a very educational place to be, they make learning easy to learn.*
- I would describe CC Community College as a great place to get started for an academic future.*
- Small but still very academic*
- CC Community College is a very good community college as it has great academic classes, a great environment, and the teachers are welcoming*
- A great place to start your academic career.*
- A great stepping stone from high school to a four year university.*

For those who have a positive regard for the academics of a community college, "getting started", "stepping stone", "and place to begin" were common themes.

The group who had a G.P.A. over 3.0 and gave community colleges serious consideration had the most positive comments about academic 'reputation':

- *This community college has great academic strength and many students appreciate attending this college.*
- *It has very strong academic programs, and offers many scholarships.*
- *It is a great college great academic and great education good tuition cost.*
- *Demonstrates goals geared for academic excellence.*
- *CC is a great academic college and it is rated very high in the nation.*
- *CC has excellence academic performance, community service, affordable, great environment and great facilities.*
- *It does have a rigorous academic curriculum.*

The positive attitude and level of specificity present in the Serious Consideration and over 3.0 G.P.A. suggested a departure from the notion that high G.P.A. students have a low regard for the community college option. While earlier it was shown that high G.P.A. students were not likely to consider or select the community college option, it may not be because of low favorability.

Research Question 3

Research question 3 asks: How important is familiarity in the community college choice process?

Quantitative Analysis

Familiarity

This section considers the role of familiarity and asked the whether respondents familiarity plays a role in the selection of a community college. In other words, does being more familiar with the local community college suggest a higher positive regard or serious consideration, or does familiarity minimize serious consideration? (see Table 18).

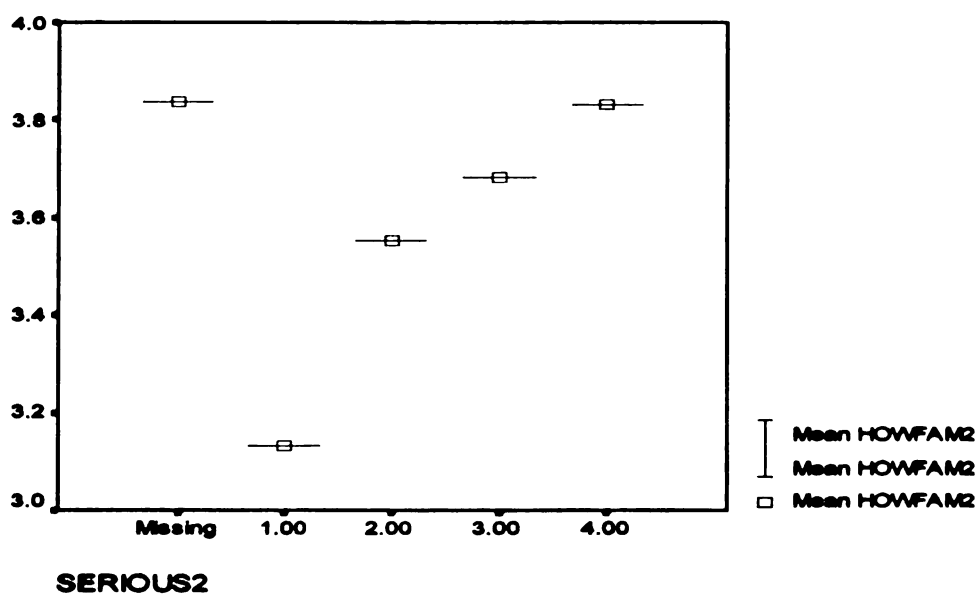
Most participants (Table 18), 55%, indicated they were somewhat familiar or very familiar with their local community college.

Table 18 How Familiar are You with the Local Community College?

FREQUENCY OF FAMILIARITY	Frequency	Percent	Valid Percent	Cumulative Percent
Very Unfamiliar	5110	14.0	15.1	15.1
Somewhat Unfamiliar	4860	13.3	14.3	29.4
Neutral	3763	10.3	11.1	40.5
Somewhat Familiar	11407	31.2	33.6	74.1
Very Familiar	8778	24.0	25.9	100.0
Total	33918	92.7	100.0	
Missing	2653	7.3		
Total	36571	100.0	100.0	

Figure 20 shows that the higher the familiarity, the more serious the consideration of the community college option.

Figure 20 Relationship Between Serious Consideration and Familiarity



In Table 19 the null hypothesis is rejected. This table shows there is a correlation between familiarity and serious consideration.

Table 19 Familiarity and Serious Consideration

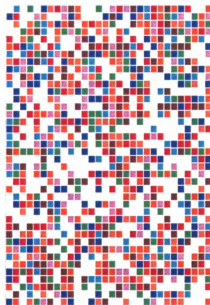
		HOWFAM	SERIOUS
HOWFAM	Pearson	1	.178 **
	Correlation		
	Sig. (2-tailed)	.	.000
SERIOUS	N	33918	29621
	Pearson	.178**	1
	Correlation		
	Sig. (2-tailed)	.000	.
	N	29621	29890

The quantitative analysis of familiarity suggested several themes that bear further analysis. Themes for further exploration include familiarity with offerings, programs, facilities, and faculty.

Qualitative Analysis

In this matrix (Figure 21) facilities and diversity played a major role.

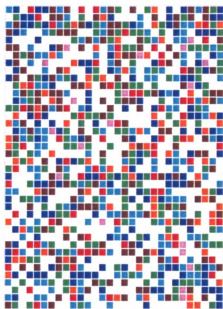
Figure 21 Comments of Respondents Who Were Not at All Familiar with Community Colleges, All Codes



In this matrix (Figure 22) diversity was rarely mentioned and the variety of offerings and faculty are the dominant themes. These matrices show that familiarity

played a significant role in the way that respondents thought about the attributes and values associated with a community college.

Figure 22 Comments of Respondents Who Are Very Familiar with Community Colleges, All Codes



Institutional Factors

This section examines factors that may be influenced by institutions. By examining attributes and barriers associated with a local community college, those attributes may be made more understandable. It is beyond the scope of this study to measure whether the associations are accurate or whether they are constructed by the respondents. It is only possible to examine the constructs and try to understand the meaning behind them.

Research Question 4

Research question 4 asks: What attributes are associated with the community

college? It is important to understand what attributes are associated with the community college and how favorably they are rated.

Quantitative Analysis

Attributes associated with community colleges. Respondents ranked community college attributes as follows in Figure 22.

Figure 23 Mean of Scores of Common Attributes Associated with Community Colleges

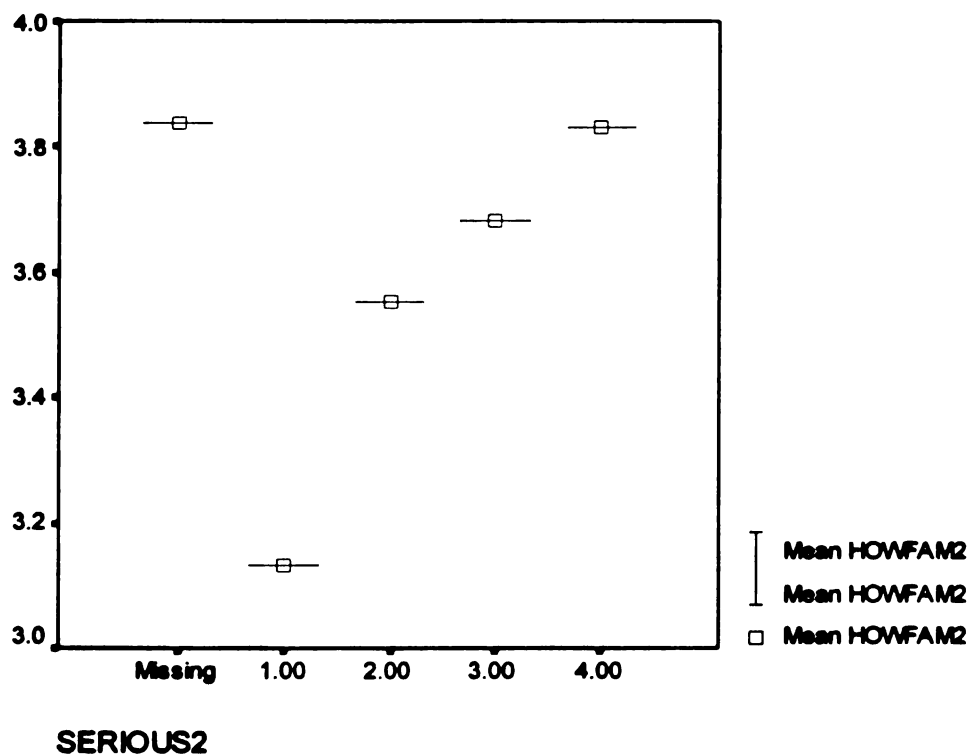


Table 20 Characteristics Valued During College Choice How important are the following when choosing a college?

	N	Minimum	Maximum	Mean	Std. Deviation
Job Opportunity	35135	0	4	3.32	1.157
Academic Strength	35201	0	4	3.38	1.124
Tuition	35201	0	4	3.21	1.154
Academic Facilities	35201	0	4	3.26	1.113
Residential Facilities	35059	0	4	2.84	1.072
Campus Safety	35201	0	4	3.21	1.158
Religious Affiliation	35201	0	4	1.73	1.138
Setting	35200	0	4	2.61	1.048
Distance	35200	0	4	2.47	1.151
Size	35201	0	4	2.51	1.047
Public/Private	35200	0	4	2.13	1.066
Social Life-campus	35201	0	4	2.78	1.053
Social Life-off	35087	0	4	2.46	1.029
Small class size	35201	0	4	2.60	1.074
Valid N	34884				

In line with other studies, respondents characterized their local community college as favorable for tuition and least favorable for social life. Facilities received the highest ratings. When compared to Table 20, the description of values is very closely aligned with the attribute ranking, except for the category of academic strength. Although low academic strength was an issue, almost half of the respondents (N=18,011, 49.2%) were either neutral or somewhat favorable about community colleges and academic strength, suggesting a contradiction.

Qualitative Analysis

Facility

Many comments addressed facility and location, suggesting it is a fairly important value:

- *Clean campus with wonderful security and teachers!*

- *Very open, spacious and colorful campus.*
- *It is not generally known due to its location.*
- *Metropolitan, and New.*
- *CC College is a small junior college with descent facilities and great professors.*
- *Big, slightly old, not very interesting to me*

All comments suggested that facilities are important. The issue of facility seemed to be about whether there is a “college” look and feel and whether the facilities are new or old.

Faculty

- *A small but good sized college where your teachers know your name.*
- *Very good quality of teachers.*
- *CC is a small school that has small classes and teachers who are dedicated to their students.*
- *Where the faculty is very good; they help you if needed.*
- *Somewhat large college with kind teachers and wide variety of campuses to choose to attend high quality instruction, personal attention, affordable tuition rate.*

Comments about community college faculty were for the most part positive, and comments about caring, knowing students’ names and helping students succeed were common. There were few comments that reinforced negative stereotypes about community college faculty.

Offerings.

Academic reputation also includes the specific understanding of the range of courses, programs, majors, and offerings of the local community college.

Source: All Respondents:

- *It offers a wide variety of courses meets the needs of the local area.*
- *It has many challenging courses and majors to offer.*
- *Lots of different majors and minors to choose from.*
- *Offering a variety programs.*

- *A lot of majors; a lot of classes that can transfer to major universities; high school students can get credit*

A “wide variety” surfaces as a theme in many comments. This suggests some recognition of the community college’s mixed mission. There were no concerns about too many offerings or that the mixed mission created role conflict, sometimes of concern to college administrators and policy makers.

Proximity and size.

Distance did matter and it meant different things to different people.

- *A place way too close to home*
- *A decent school, just way too close to home.*
- *Too close to home and I know too many people that are going there.*
- *Close, but it's in a bad neighborhood and lazy people go there.*
- *I am going to move out of state.*

To some, the college experience required moving away from home or the local community, something the community college by its nature cannot fulfill. On the other hand, those who spoke positively about the proximity of the community college often expressed the value of being close to home.

- *It feels like home.*
- *Affordable close to home community college*
- *Local Community College is very close to my home and it has the major i(sic) want to do*
- *There is a very at home feeling.*

Home was often mentioned as a feeling of safeness at college. In this regard, community colleges seemed to represent safety and caring, two things that can make a transition to a new institution easier ("National Center for Educational Statistics," 2008).

Like proximity, size had multiple values. A large school was important to some people and a small school was preferred by others. Small was seen as good:

- *Small, friendly college.*
- *Small but roomy; education is revered by staff not necessarily "enforced";*
- *small, student-oriented*
- *Small, friendly junior college*
- *Small hometown community college*

But small was also seen as bad:

- *It's really small and there is basically no campus life*
- *Small and dirty*
- *Small, undesirable*
- *It's a little crowded.*
- *Very small and closed campus.*

Small seemed to be most positive when smallness supports connections that help students. It seemed to be bad when smallness is connected to other negative attributes like facility issues or when it suggests no transition to a larger world. On the other hand, large was seen as a positive attribute:

- *The school has a big campus and good academic reputation.*
- *A large campus somewhat safe and has a good coffee shop.*
- *Its kinda big and has a lot of students*
- *It is a big college that can provide alot.*
- *Large and Affordable*
- *Big campus with a wide range of academic choices*

There was little evidence of large being associated with a negative value. Large seems to represent a college's ability to connect with the larger world.

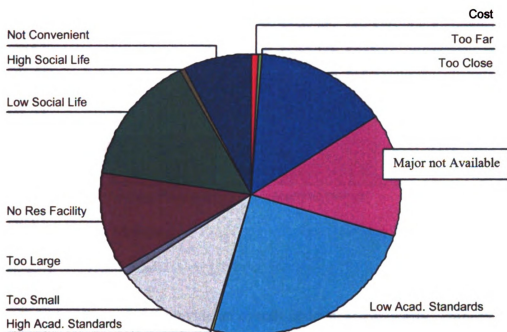
Research Question 5

The research question 5 looks at what respondents considered barriers to attending a community college by asking: What constitutes a barrier to the selection of a community college? The upcoming figure shows the major barriers to selecting a community college.

The largest barriers of low academic strength and low social life were

consistent with value and attribute statements discussed earlier. Being “too close to home” was seen as a barrier that was connected to not having residential facilities. Being “too small” also constituted a barrier (Figure 24).

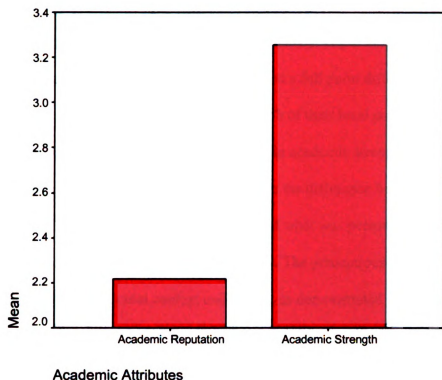
Figure 24 Barrier Analysis



As Figure 24 shows, a college seen as being “too small” is connected to the idea that a desired major is not available.

Figure 25 suggests there is a significant difference between academic strength and academic reputation. There was some recognition that the poor academic reputation of the community college may not be reflective of the actual academic strength of the institution.

Figure 25 Difference between Academic Strength and Academic Reputation



Source: Becker, 2007

Together these tables provide an overall understanding of what barriers were associated with community colleges and explain some significant factors in the perception of the community college as a college choice by the respondents.

Research Question 6

The final research sub-question asks: Is there any evidence of heuristics related to community colleges during the search process? If a logic-based search process can be said to include examining values, goals, and resources and comparing them to the attributes of an institution, then there are findings that suggest heuristics or mental shortcuts take place during the search process related to community colleges. For the most part they surfaced as inconsistencies in the survey results.

One example of an inconsistency relates to the perception of academic reputation of the community college. It is noticeable in the difference between perceived academic reputation and actual academic strength of the institutions. This is shown in Figure 25 where respondents indicated a full point difference between what they perceived was the actual academic strength of their local community college and the reputation of the institution. Inconsistency in academic strength was also demonstrated in the open-ended answers where the difference between what “everyone says” about community colleges and what was personally known about community colleges was mentioned frequently. The perceptions of academic strength are also mediated by social context and values, as demonstrated by the difference between Asian American males and African American males who mention academic reputation at different rates. Finally, the community college academic reputation was cited as the major selection barrier at the same time that academic reputation was low on the value scale.

Another inconsistency is that serious consideration and high favorability were not linked to each other. Of the sub-set of respondents who did not seriously consider the community college as an option, nearly a half felt somewhat or very favorable about community colleges (Figure 25). One explanation is that community colleges are “*okay, but not for me*”. Another explanation is that community colleges were seen as simply the lowest on a hierarchical list of options. Something besides “overall favorability” created priorities in the choice process.

Furthermore, survey respondents of different races and socio-economic groups viewed community colleges differently. Different observations and comments

surfaced depending upon the environment, demographic or macrosystem to which a respondent belonged. Bronfenbrenner's observation that the macrosystem that one is a member of influences how one sees an institution, "It is as if within each society or subculture there existed a blueprint for the organization of every type of setting. Homes, day care centers, neighborhoods, work settings, are not the same for well-to-do families as for the poor" (Bronfenbrenner, 1979).

Additional inconsistencies surfaced in values and attribution. Valuing low tuition cost did not make one more likely to consider a community college, even though community college's low tuition was one of the recognized attributes. The highest income respondents and the lowest income respondents showed consistent low and high regard for the community college choice respectively; but in the middle, the opposite was true. The working and lower-middle classes indicated the worst consideration and lowest favorability of community colleges (Figure 14). Nor did not caring about social life make one more interested in attending a community college. Respondents seemed to equate the facilities with the learning that was going on inside of the facility.

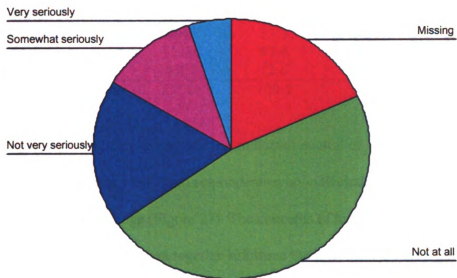
These inconsistencies suggest that the college choice process was based on mental constructs created within a macrosystem (Bronfenbrenner, 1979), rather than the "adolescent econometrician" (Beattie, 2002) model of logical decision-making. Favorability and serious consideration were both improved by familiarity.

Total of favorability and serious consideration rankings.

The largest number of respondents did not consider the community college option at all, and the smallest percentage considered the community college option

seriously. Overall favorability ratings, however, reflect something very different (Figure 26).

Figure 26 Percentage of Respondents Considering the Community College Option



The figures in Table 21 show the overall favorability rating of local community colleges. Only 15 % of respondents considered the community college very favorable.

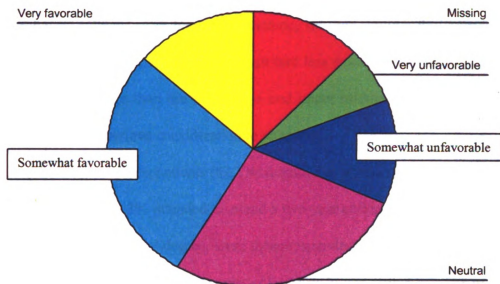
More graphically, the distribution of answers is demonstrated in Figure 27.

Table 21 Overall Favorability Ratings

OVERALL FAVORABILITY RATINGS	Frequency	Percent	Valid Percent	Cumulative Percent
Very Unfavorable	2438	6.7	7.6	7.6
Somewhat Unfavorable	4450	12.2	13.9	21.5
Neutral	10003	27.4	31.3	52.8
Somewhat Favorable	10142	27.7	31.7	84.5
Very Favorable	4947	13.5	15.5	100.0
Total	31980	87.4	100.0	
Missing	4591	12.6		
Total	36571	100.0	100.0	

While the majority of respondents indicated neutral or somewhat favorable responses, all responses were from respondents who indicated they did not intend to attend a community college (Figure 27). The concepts of high overall favorability and low serious consideration taken together reinforce the idea that there is a gap between valuing a community college, perhaps as beneficial to the community, and one's personal interest in attending one.

Figure 27 Overall Favorability



Summary of Analysis of Questions

In summary, respondents' geographic locations were fairly well distributed with the largest population coming from eastern and southeastern part of the country and fewer responses from the middle of the country. The race/ethnicity of the sample was slightly different than the average college-bound population with sixty percent white, thirteen percent African American, ten percent Hispanic and eight percent Asian American. All minorities considered community colleges more seriously than did whites, and Hispanics gave community colleges the most serious consideration. Asian Americans gave the community college option serious consideration but ranked community colleges most poorly for overall favorability.

Twenty three percent of the participants did not know their family income. Of those who did, the majority believed their family income to be between \$50,000-\$100,000. There was a negative correlation between income and serious consideration of community colleges—the higher the income, the less serious the consideration. However, lower-middle class income groups had less overall favorable ratings about the community college than did the middle and upper middle class respondents and similar views about serious consideration to attendance.

The majority of respondents (82.3%) intended to attend a university for a four-year degree and only 8.3% intended to attend a two-year college and then transfer in order to receive a bachelors' degree. Even those respondents who indicated social life was not a major value, viewed community colleges as low in tuition and low in social life. The worst attribute and the largest barrier to attending a community college was academic reputation. There was somewhat of an understanding that the low academic reputation of community colleges is undeserved and that the academic strength of community colleges may actually be higher. Additional barriers seen to selecting a community college included a lack of residential facilities, low social life, and proximity to home.

Familiarity did encourage serious consideration of attending a community college while both high G.P.A. and high income were negatively reflected in serious consideration of the community college option. Even if respondents expressed a high value of concern about tuition, small classrooms, or expecting to take courses closer to home—all attributes associated with community colleges—these values did not

suggest a stronger likelihood of serious consideration of the community college option.

These comments suggested that there is a dichotomy in perception between those who saw themselves as prepared for college and how they saw those who they think were not prepared, and that the community college is the place for those who either did not learn or did not deserve access to the transition to the next life stage: college. The vehemence of some answers suggests that respondents felt it unfair that those who did not work hard should be in college, and that some colleges, by extension of who they accepted, cannot have quality programs or academic strength.

The positive attitude and level of specificity present in the Serious Consideration and over 3.0 G.P.A. group was a departure from the notion that high G.P.A. students have a low regard for the community college option. Earlier in this study it was shown that high G.P.A. students were not likely to consider or select the community college option; this result suggests it may not be because of low regard.

The survey results and comments made by respondents about the values and attributes associated with community colleges reinforce some stereotypes connected with community colleges. However, they also offer new insights into the meaning behind those stereotypes. Academic reputation of community college was by far the most often mentioned issue; however, the reputation issue seems to be tied more to transition than to an actual consideration of scholarly activities. For high school students, the choice of a community college can be tied to not working hard, not taking high school seriously, and/or not “earning” the rite of passage into the next phase of life. Thirteenth grade is not the same thing as going to college. According to

these survey respondents, academic reputation isn't so much about how much one will learn, but rather how much one has demonstrated the adult-required willingness to work hard to learn.

The role of race, income, academic preparation and familiarity all contributed to the consideration of community colleges but not in a direct correlation. Lower and middle-income respondents had less favorable opinions than middle higher income respondents. Asian Americans and Caucasian Americans showed lower considerations of community colleges unless income was considered as a factor.

Attributes connected with community colleges also had different meanings when examined more thoroughly. Concerns about proximity were more about making a transition—moving away from home or high school—than actual distance. Likewise, size seem to be more about looking for either a place where one is comfortable, or a place where new experiences can take place. Both examples are about the transitional and developmental needs of the respondent as opposed to the actual attributes of a college. Likewise, concerns about facilities are about going someplace that is backward, not forward.

The most negative and emotion laden comments came from lower income respondents, while the most positive comments come from high G.P.A. students. This finding was in direct contrast to the low serious consideration of high G.P.A.s and high serious consideration of the low income respondents in the quantitative section of the analysis.

Community college faculty members were often mentioned in a positive light, contrary to many of the stereotypes in the media (LaPaglia, 1994). The teaching

mission of community colleges seemed to be recognized, although that did not seem to be enough to encourage the serious consideration of a community college or to make up for the perceived deficit in academic reputation.

Diversity was an interesting issue because community colleges often promote diversity as a part of their mission, and they enroll the most diverse populations of all higher education entities. However, diversity, although recognized as an attribute of the community college when mentioned by the high school students, is most often mentioned in a neutral manner.

CHAPTER 5

SUMMARY, CONCLUSIONS, LIMITATIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

For me, the decision was easy. I was a few weeks old when my cousin bought me a red Bucky Badger sleeper. Red was obviously my color, because since then, I never thought about going to another school. (Schmidman, 2005).

Every year millions of high school students in the United States make decisions about the college or university they plan to attend upon graduation from high school (Ingels & Dalton, 2008). Because the college decision process is a major life decision that has an impact not only on an individual level, but also on an institutional and a national policy level, it has been studied extensively (Svenson & Salo, 2007). College choice has been de-constructed into phases (Hossler & Gallagher, 1987), has been considered socio-economically, studied longitudinally and been examined from multiple frameworks (Cabrera, 2000). However, college choice is still complex and to some degree may be based on emotional and social factors, as the Schmidman comment above suggests.

Since almost half of first time college freshmen choose to enroll in a community college each year (Provasnik & Planty, 2008), one might expect community colleges to have a strong influence during the college choice process of high school students, but the opposite seems to be true. Much of the research has shown that the majority of college-bound high school students do not consider the community college option seriously when making a college choice (Zahs et al., 2005).

Perhaps as a result, little research has been done about the how community colleges are viewed during the college choice process. This study seeks to explain how college-bound high school students see the community college option during the college decision-making process, particularly from the point of view of those who are not seriously considering attending a community college.

Of the multiple frameworks used for considering college decision-making, there was evidence supporting four conceptual frameworks found in the study: the social capital framework, where college decision is based on economic and societal rewards (Beattie, 2002); the consumer framework, where college choice is based on an underlying emotional attachment (Kirp, 2003); the social network framework, where college choice is heavily influenced by demographic, economic and social networks (Bronfenbrenner, 1979); and the developmental framework, where college choice is based on the need of the individual to transition to another stage or role in life (Chickering & Reisser, 1993).

This study used survey data, collected on a national level, to explore and explain how community colleges are positioned in the college choice process, as perceived by college-bound high school students. Many of the questions were addressed only to students who were not seriously considering enrolling in a community college and therefore, the study does not generally explain the viewpoints of students who were planning to attend a community college.

These data were collected in 2007 and since then an economic downturn in the United States has resulted in increased community college enrollments across the country (AACC, 2010). This makes the study more relevant because of the increased

number of students who in the past might not have considered a community college. This study should help students, community college practitioners, and policy makers understand what is perceived about community colleges during the choice process by those college-bound high school students not planning to attend one. Starting in one place—university-bound—and ending up in another—at a community college—may be more common today than it was in the past.

This chapter provides a summary of the study, an overview of the findings, a discussion of the study results, limitations of the study, implications for practitioners, and recommendations for future research.

Summary of the Study

This study examined the responses to a national survey of over 36,000 college-bound high school students and employed a three-phased approach to identify respondents' attitudes and perceptions. In Phase I, sixteen questions were analyzed using SPSS as a statistical tool to identify significant values, perceptions, and attributes. In Phase II, respondents, concepts, perceptions, and themes were grouped together in segments based on the content identified in Phase I. Finally, in Phase III, MAXQDA qualitative data analysis software was used to further explain the results based on an open-ended question about local community colleges addressed to the same respondent group. This mixed methods approach was similar to the market segmentation process used to evaluate brand effectiveness (Davis, 1997). While no single college brand was measured during this process, this research did expose the expected experience and multiplicity of views and perceptions held about community colleges across socio-economic and geographic groups.

Summary of Findings

In a few areas the results of this study upheld some long-time stereotypes about community colleges. For example, poor academic reputation and lack of social life were consistent themes throughout the literature about community colleges and throughout the comments in the survey. However, the deeper significance behind these stereotypes and comments became clearer through the respondent explanation. Other perceptions that are less-often connected to community colleges also surfaced.

Environmental Factors

The first major research question considers the environmental, social, and demographic factors that impact college choice and reflects the social network framework addressing, : Are there any significant socio-economic or demographic factors that help explain how community colleges are perceived during the choice process?

Overall favorability and serious consideration of the community college option. The lowest income groups and respondents with the lowest G.P.A.s considered the community college option most favorably and most seriously; however, the community college was also considered highly favorable by high-income groups and unfavorable by lower-middle and middle class groups. While high G.P.A. respondents were the least likely to seriously consider the community college option, they also ranked community colleges high in terms of favorability. Lower-middle-income respondents often expressed vehement, negative comments about the community college option.

Geography, serious consideration, and overall favorability. Respondents in regions of the country that demonstrate the highest favorable perceptions of community colleges are not the same regions that have the highest percentage of respondents who express serious consideration of the community college option. This suggests that the community college option is nested in the context of options and consideration depends upon the position of the community college within those options.

Race/ethnicity and serious consideration. Overall, Hispanics and African Americans rated community colleges highest, and Asian Americans and Caucasian Americans reported a lower regard for the community college. However, when sorted by income, the differences were not supported. While some Hispanics valued closeness to home, upper income Hispanics did not. Diversity is mentioned in dissimilar ways by different racial/ethnic groups. Each racial/ethnic group described the community college with different attributes and values.

Academic reputation. Survey respondents chose academic reputation as the most important value and community colleges are consistently ranked poorly in this area. However, during the open-ended question analysis, the issue of academic reputation is not tied to challenging or rigorous academic work. Instead, academic reputation is connected to those who lack the mental and moral commitment needed to become an adult by doing the work that is expected. According to respondent comments, students who did not prepare “stayed behind” and went to community college. Academic reputation is most closely connected to underprepared peers in the social network and the experiencing the consequences of their behavior.

Macrosystem/Social network framework. These results reflect Bronfenbrenner's (1979) notion that each person belongs to a macrosystem that impacts how one views the choices available (Bronfenbrenner, 1979). . That the community college option is seen least favorably by lower-middle and lower income groups suggests a specific message in the macrosystem about relegation and staying behind. Geography and race impact how seriously the community college option is considered.

Personal Factors

There are two research sub-questions that address personal factors—one that considers personal values and another that considers personal familiarity, with the local community college.. The first research question, research question 2, asks: What do prospective students hold of value when choosing a higher education institution? Is it the same for a community college?

Transition. Transition and transformation appear to be critical concepts to the respondents. Those who do not consider the community college option also do not like staying home or going to a college with their high school classmates. They indicate they are ready for a change... Those that seriously consider the community college option favor going someplace where a faculty member know one's name or where it feels like home. Attendance at a community college represents a beginning. Going to college is a life transition that for some cannot be accomplished at a community college, because it represents staying in the place one came from. There is a significant distinction between the community college academic reputation and its

academic strength, and respondents identified that the academic reputation of community colleges may be undeserved, but based on “what others say”.

Values. Academic reputation and low tuition costs are the most highly expressed values. However, valuing low tuition does not suggest serious consideration of the community college option, nor does small class, nor does not caring about social life, all attributes associated with community colleges. Valuing a shorter driving distance does show a correlation to serious consideration of a community college.

Another personal factor that contributes to choice is familiarity, which research question 3 addresses by asking: How important is familiarity in the community college choice process?

Familiarity, salience, and relevance. Familiarity, or salience, creates a significant increase in serious consideration and overall favorability of community colleges. Familiarity was connected to taking classes while in high school and was connected to perceptions about facilities. Relevance, on the other hand, is much more complicated. For example, there was no correlation between valuing low tuition and serious consideration of the community college option. Likewise, respondents who placed a low value on social life are not more likely to seriously consider a community college.

Developmental framework. The developmental framework is supported by the theme of transition, change, growth, and movement that runs through respondent comments. Like the character of Will Hunting (1998) mentioned earlier in the literature review, respondents seem to be seeking a life change that will take them

away from their current role in high school and help them become a new, differentiated person.

Social capital framework. The social capital framework appears less prevalent because there is little evidence supporting the notion that respondents were “adolescent econometricians” (Beattie, 2002). While tuition was valued, low tuition did not influence serious consideration. The reputation of the local community college presents a risk that offsets the advantage of low tuition.

Institutional Factors

There are two sub-questions that address factors that are connected to specific local institutions, one about attributes and the other about barriers. The first considered what attributes are associated with the community college. The second asks what barriers prevented respondents from considering the community college option seriously.

Attributes

Location, size and proximity have meanings that are reported differently by different groups. While community colleges sometimes report convenient location as an asset, closeness to home may represent not making the transition to adulthood. Size is both positive and negative. When positive, it is often closely linked to facility and proximity. Likewise, small sometimes means more personal attention and other times means not being exposed to a larger world. Some respondents associate small classrooms with poor teaching, others associate small classrooms with more individual attention.

Facilities. Facilities do matter a great deal. Dilapidated, old, crowded facilities are mentioned negatively, and new, modern, comfortable facilities are mentioned positively. Respondents seem to sometimes equate learning with the building in which it would occur. As Boyer noted, “When High School Students were asked how they chose their college, 62% said that it was mainly by the appearance of the buildings and grounds” (Boyer, 1987, p.1). In today’s environment, web pages may play a similar role in representing the institutional experience.

Mission and brand. The complicated community college mission is understood surprisingly well. Many respondents describe community colleges as being local, affordable, a good place to start, and a place to acquire job training. The shadow side is that the same attributes are seen as too close to home, cheap, easy, and a good place if you want to become a nurse but not if you want to become a doctor.

Faculty. There is an overall positive perception that community college faculty are available and caring. While popular media sometimes portray community college faculty negatively, most respondents feel that community college faculty would help them to succeed.

Connections. Several of the perceptions about community colleges are linked together. Low costs are linked to academic reputation. Size and distance from home are connected. Facilities are linked with offerings. Diversity is mentioned in conjunction with low costs.

Barriers

The most often mentioned barrier to community college attendance is academic reputation. However, academic reputation appears to have little connection

with academic rigor. It is associated with those who do not mature, or move on from high school. Social life is also mentioned as a barrier, even though respondents do not rank social life as a major value, suggesting a discrepancy between what respondents actually value and what they think they should value.

The final research question draws upon all categories of factors—institutional, environmental, and personal. It most reflects the consumer framework, where decisions are made based on emotions and attachments.

Heuristics, Heuristics or mental shortcuts

There is evidence of mental shortcuts and rules about perceptions of community colleges during the choice process. Many respondents identified a significant difference between actual academic strength and perceived academic reputation. Some respondents commented that “others” say things about community colleges just because they are community colleges. Other respondents indicated tuition costs were one of their highest values and ranked community colleges highly for tuition costs yet did not consider the community college option. There were respondents who considered access or lack of selectivity in the application process to be equivalent to low quality.

Consumer framework. An example of the consumer framework is the “Bucky Badger” story mentioned earlier. In this model, the student chooses a college based on something other than logic. Often it is based on identity or an emotional

appeal. The mental shortcuts and examples of emotional reactions to the community college option provide examples of how the consumer framework works.

Summary

In summary, there was evidence that environmental and personal factors influenced consideration of the community college option during the college choice experience. Four conceptual frameworks identified in the literature review- social capital, socioeconomic/macrosystem, consumer, and developmental- were revealed in the survey results. A synthesis of the findings follows, connecting the factors and research question results to conceptual frameworks.

An important aspect of the study is that respondents were first asked their college objective and then asked “If you did not consider the community college option, answer questions about attributes, values, familiarity, etc.” Therefore, the results do not reflect the beliefs and attitudes of the eight percent of the respondent population who had already chosen the community college option. For the purpose of this study, it was important to understand why the community college was not considered seriously so many questions were examined from the perspective of only those who did not expect to attend a community college.

There were several findings that helped explain the community college image. Geographic location and the availability of other opportunities make a difference in how community colleges were viewed. Different racial and ethnic groups reported that they viewed community colleges differently. Income level impacted the favorability and serious consideration of a community college. Academic preparedness and familiarity with community colleges also influenced how seriously one considers the

community college option. Attributes associated with community colleges, such as size, lack of residential facilities, diversity, or social life did not seem to influence choice as much as poor academic reputation, a term with multiple and sometimes conflicting meanings.

Distinct groups constructed college attributes and their meanings differently. Respondents recognized that community colleges had many roles, such as training, transfer, and developmental education; some saw this as positive and others saw this as negative. Affordability, diversity, and access are all things that community college leaders typically promote. However, some respondents equated these concepts with cheap, easy, scattered, and poor quality.

Conclusions and Discussion

The research brought to light some interesting constructs about perceptions of college choice in relation to community colleges and the factors that influence perceptions about them. First, college options are impacted by the macrosystem, or social and demographic influences of the individual. Geography, race, income, and how many other options are available in the environment all make a difference about how seriously to consider the community college option.

Second, it is not uncommon to think favorably of a community college and still not consider attending one. The long-range social capital benefit loss associated with a community college may be too risky, particularly for the lower-middle class. This helps to explain why so many community surveys give community colleges high rankings while traditional age student surveys rank them poorly.

Third, even though a potential student indicates high attention to specific values, such as low tuition, it does not mean a decision will be made based on those values. Those who valued low tuition did not consider a community college; other factors mediated its relevance.

Fourth, the academic strength, or reputation of community colleges are filled with inconsistencies and contradictions, including some recognition of the difference between academic strength and academic reputation. Academic reputation appears to be based on staying behind, not preparing, and not making a solid life transition. Transition is the most vital and operative force in the college decision process for many students.

Fifth, many of the concepts marketed most by community colleges—access, affordability, and location-- can have a negative side that equates them to easy, cheap, and poor quality. Respondents exhibited some understanding of the complex community college mission, however, the complexity of the mission was perceived as either a negative attribute, when too diffuse, or as a positive attribute that suggested a broad array of course offerings. Community colleges, positioned as the least expensive, least selective, and most easily accessible institutions may be at a disadvantage during the choice process because these very same characteristics suggest low value or quality (Brafman & Brafman, 2008). Following these heuristics, a tough, selective admissions process at an expensive institution would suggest a higher quality and more rewarding experience than a community college, whether the academic coursework is the same or not. Furthermore, students would be expected to

report greater satisfaction at the costlier institutions and might actually perform better as a result of believing the education is superior.

Finally, there were barriers and advantages associated with attending a community college. Perceptions about low social life position the community college poorly. Also, it was not clear to many respondents how community colleges help one transition into adulthood. Advantages of attending a community college included faculty, who were viewed as being caring and helpful, certain programs, such as Nursing, and for some respondents, proximity and facilities were seen as major advantages.

The most significant barrier to serious consideration of the community college option is poor academic reputation. However, academic reputation was not equated with rigorous coursework and strong academic programs. Rather, it referred to staying behind with those who did not take serious the preparation needed for adult life. It meant not transitioning to the next step of adulthood. Academic reputation was high on the priority list for some groups of respondents, but other groups did not consider it. Prospective students tended to equate the academic activities of an institution with the facilities that housed them.

High favorable opinion and serious consideration of the community college option did not go hand-in-hand. High income and high G.P.A. respondents have the most favorable opinions of their local community colleges but do not consider them at all. Lower income students did not prefer community colleges. While the lowest income students indicated a high likelihood of attending a community college, lower-middle-class and middle class students did not consider the community college option

favorably. Familiarity served as a mediating factor and improves overall favorability of the community college option.

The perceptions and misperceptions held by respondents about communityabout community colleges are not just marketing problems that branding or messaging can solve. They reflect a national policy ambiguity about whether higher education should be available for all, particularly those with limited financial resources. If core competencies exist, then it makes no difference in the long run whether the competencies are learned in ivory towers, in large urban campuses, or in a black box. If, on the other hand, the college going population believes that the education is not taught at an institution, but in fact *is* the institution, then the size and shape of the black box environment matters for the learning outcomes. No amount of social marketing can then correct for the different expectations of the two- and four-year student. Academic credentialing through hard work (and eventually, economic equity) is not likely to occur if students do not believe they are getting an equivalent education at a community college.

Some respondents expressed an almost violent opposition to community colleges, particularly lower-middle income minority students. As Chickering (1993) observed, there may be two different agendas for going to college. The first is to learn how to be an obedient worker: to listen, to follow directions, and to be useful to employers by being available and on time. The second is to learn mastery of others, to become part of the upper class, to lead, to innovate and to be in charge (Chickering & Reisser, 1993). Community colleges may represent being relegated to the first group.

Confusion about community college academic standards creates problems for both students and institutions alike. Almost twenty-eight percent of community college students come unprepared for college level work and are diverted to developmental courses (A. Russell, 2008). This may mean that although the message of access is clear, the message that there is a distinction between open admission and admission to college level coursework work is not.

There is a possible structural and communication problem with other educational institutions. If community college offerings are not aligned properly with local high schools and universities, community college courses will be deemed too easy, a repetition of high school, or too challenging, resulting in many students failing. This could significantly contribute to one of the problems community colleges face about their success rates. If the college search process is weak or if the student attends as a default when they did not originally seriously consider the community college option, they may be less likely to succeed.

Limitations

This research beganwithbegan with a descriptive and constructivist analysis of survey results. It then used the results to develop themes, followed by an analysis of an open-ended question about community colleges. The survey was administered to college-bound high school students. Since the survey was administered via the Internet, it is assumed that the participants had access to and felt comfortable with electronically mediated communications and therefore, might be biased toward the technologically literate respondent, possibly slightly different than the general population of college-bound students. Students had to be 18 years of age to participate

in the study so respondents might be slightly older than the typical college-bound high school student. While the survey was originally developed for use with universities, the focus of this research is on community colleges. The respondents may have been pre-disposed to express more interest in the university rather than the two-year college option.

While there may be many reasons for selecting or not selecting a community college, this research focused on how social context and shared attribute perceptions influenced expected experience and contributed to decision-making. It does not address whether institutions deserve their reputations. Nor is one specific community college, one part of the country, or one district isolated. Since the survey also asked about universities, respondents may have only seen community colleges in comparison to universities. Furthermore, the researcher is a full-time community college administrator and community college graduate whose view about community colleges may have been influenced by being an advocate for the community college system.

Recommendations for Practice

Community college administrators, trustees, faculty members, and other educators who are concerned that students make good choices about college can employ several strategies to address these issues.

Recommendations Based on Environmental Factors

Understand local social networks, particularly high schools. The study indicated that context is very important. The available options and social, ethnic, and income groups impact how community colleges are viewed. For high school students involved in the college choice process, the macrosystem, social network or personal

environment may not include positive discussions of community colleges.

Partnerships and open and honest communications about achievements with area high school personnel are good methods for reaching students in their environment.

Do not confuse high favorability with serious consideration. The study indicated that some groups rate community colleges high for overall favorability, but low for serious consideration. Some community members will identify the strengths and assets of the community college; however, when asked if they would attend or send their children, the answer is no. When measuring public commitment to the institution, it is important to not confuse these two opinions, one often held by the general public. A separate set of tools should be used for communicating with would-be students than the general public.

Be aware that racial differences are mediated by class differences. The study indicated that there are differences in perceptions held by different racial groups, however, when income is added to the equation, answers align more closely along income levels. Despite advice to the contrary and current practice, it does not seem to make sense to categorize messages to minority groups along racial terms, because respondents' perceptions were mediated by income differences. Consider income, G.P.A., majors, and other factors as critical points in message making to racial minorities. Likewise, valuing diversity does by itself does not seem to be sufficient. Institutions would be better served showing it rather than talking about it.

Showcase community college graduates' long-term success. Respondents showed an interest in long-term success. Many community college transfer students become professionals who transition to the upper middle class; do not suggest

relegation to lower classes by emphasizing occupational training. It is the lower socio-economic classes that have the sharpest criticism and the least interest in community colleges. Upper and upper-middle class respondents had a positive view of community colleges; however, they felt they had other options.

Personal Factors

Focus on the transformational nature of community college. Respondents clearly cared more about their transition away from home and current roles to new roles more than any other factor. Institutions can highlight events that suggest such transformations: study abroad, work-study, service learning, and immersion learning, for example. Point out the advantages of going to school in an adult environment where connections to the local community afford unique opportunities. Transition and transformation very often occur at the community college level where there is more interaction with the adult population.

Understand that familiarity helps. One barrier that surfaced in the study is lack of familiarity. Potential students could connect to the community college campus by getting involved in youth programs. Focus on gifted and talented education and leadership opportunities that offer community education and community involvement opportunities.

Make others aware that community college students do have social lives. For some respondents, social life was equated with “people like me”. For young adults who have worked, purchased cars, and helped to support families, moving into a dorm is a family, moving into a dorm residence hall is going backwards. Social interactions of community college students offer more opportunities to act as an adult and to

interact with adults. Community college students often rent homes, own vehicles, pay bills, and have an opportunity for interesting local employment, giving them a leg up on future employment opportunities. Off-campus communities are often hip, urban, and trend setting. Show relationships and lifetime friendships that begin at community colleges. Visual images of students having fun together, whatever the venue, help potential students understand the growth can happen in many different environments. The social life of community college students has been hidden but should be brought into the light.

Institutional Factors

Identify alignment issues with secondary institutions and universities to address issues related to academic strength. Many survey respondents used the phrase “thirteenth grade” to suggest that freshmen community college courses do not equate to first year university courses. The explanation was often an extension or a repetition of high school classes. This could be attributed to a misalignment of coursework standards, particularly where there is no P-16 system in place. If K-12 and community college course content are the same, college courses will indeed be a repetition of high school. If the content is too far removed, there is a gap that creates a need for more developmental education. It is also important that students’ outcomes align successfully to university transfer options. Regionally aligned curricula may reduce concerns about the community college academic reputation.

Do not mix the mission with the brand. Respondents recognized many roles of the community college. However, while affordability and access may be a part of the mission, respondents are more interested in their expected experience at the institution,

which should be represented by the brand, not the mission. Students expect to experience fun, growth, transformation, and a better life, not access or affordability. The community college's mixed mission makes most sense to the institution, not the student.

Be cautious about the language of affordability. While tuition was an expressed value of most respondents, the low tuition associated with community colleges was not always viewed positively. Instead, the heuristic or mental short cut equating low cost to a low quality educational product diminished the value of the community college experience.

Promote the institution's high quality academic offerings. Respondents made a distinction between academic strength and academic reputation, and a low academic reputation of a local community college served as a barrier to selecting a community college. Make sure that high school students are aware of honors programs and accelerated programs. There should be as much positive press about an Astronomy program as there is about Nursing. Likewise, students need to understand the importance of preparing for college level work or the likelihood of ending up in developmental classes. Highlight contributions to the community, faculty achievements, and rigorous academic activities such as honors programs. Create some special admittance, selective admissions programs of interest to the highest achieving population.

Realize that facilities matter to would-be students. Respondents mentioned facilities quite often, and seemed to equate the facility with the expected experience at the institution. During economic downturns, facility improvements are sometimes

delayed. Facilities are often represented by websites, and these can have the same pitfalls.

Highlight faculty members and their accomplishments. There was a high positive regard for the reputation of community college faculty on the part of most respondents. Faculty members at community colleges often create life-changing relationships with students. They are regarded as having time for student concerns. In an era where large institutions can lose young adults, a caring faculty member is a golden asset.

When communicating to prospective students stress the values of community colleges. Being welcomed into a more adult world or doing something meaningful in the community such as service learning are excellent transformation messages. Highlight some of the activities that community colleges participate in even if they are not a part of the institution. Rather than competing with the dorm/football scene, focus on the community partnership assets, such as starting a business, playing in a local band, cleaning up the river, or volunteering at the local zoo. Highlight the life of the community college student which is often rich, varied, challenging, and meaningful. The struggle should be a badge of honor.

The complex mission of the community college sometimes requires complex messages. According to one community college president, Brent Knight (2009), the mission and the messages are so complex they must be “zig-zagged” or layered so that each message adds to the whole. This adds to the branding complexity of an institution, although it is still possible best to have a few good things that represent an institution exceptionally well and to stand behind them. These suggestions serve not

only to send clear and realistic messages about the community college experience but also help to create expectations that will in the end lead to student success.

Recommendations for Future Research

Much of the existing research on college choice focuses on university-bound students. Studies that focus on community colleges have often focused on perceptions of the community. Community members tend to rate community colleges highly however, their viewpoints do not necessarily reflect the perceptions of potential students. More longitudinal research on the student seriously considering the community college is needed, in part to answer whether the community college standing in selection process should be improved.

Since community colleges enroll a significant number of minority and economically disadvantaged students (Adelman, 2003), those concerned with equity issues in higher education should find it worthwhile to extend this analysis about how different racial, ethnic, and economically diverse groups view their college options. Of particular interest were the negative perceptions of community colleges held by lower-middle income students.

This study suggests that geography and demographics clearly have an impact on the selection of a community college. This suggests more research is needed on why different regions of the country view community colleges differently, and what the impact of rural, suburban, and urban settings is on college choice.

The academic reputation of the community college is perceived negatively by many college-bound high school students. It would be useful to know if community colleges' academic reputations are really deserved. What

impact does inappropriate institutional alignment play in the perceptions of community college academic reputation?

One of the most important questions needing further study has to do with student success. Since some students begin the search process not intending to attend a community college yet eventually attend one, it would be useful to know at how this change in direction occurs, where its antecedents lay, and what, if any, lasting impact the change has on a student's ability to succeed. How closely is a weak search or a poor search connected to student failure when a student who does not intend to enroll at a community college "ends up" there?

Final Thoughts, Reflections

Perhaps community colleges do not become involved in branding efforts because they do not want for students. With the recent economic slowdown, most community colleges are experiencing double-digit growth. However, completion, graduation, and transfer rates are critical to community colleges, and those are dependent upon students having a clear understanding of what to expect at a community college. Knowing that expected experience and perceived quality affects performance, community college educators who want to improve student performance in completion, graduation, and transfer rates need to pay close attention to how students understand expected academic demands and quality at their college.

Community colleges have a mission based on affordability, diversity, and access. However, these attributes may have a negative connotation cheap connotations such as cheap, easy, diffuse, or poor quality institutions. Whether those negative reputations become the foreground is critical to institutional success. Community

college administrators need to safeguard the messages about their institutions and become more careful about how they promote their institutions. While some high school students may have not prepared well for college, they might also misunderstand the academic standards required to enter college level work at a community college. This might in turn contribute to the national rate of community college students starting in developmental classes. It is not that community colleges should not serve under-prepared students; that is their mission. What is important is that students not be surprised when they come to a community college and encounter the same academic rigor and standards for academic courses as at a four-year college.

Graduating high school students are at a critical juncture in their lives and are concerned about their choices. According to this study, they are worried about more than just social life and the cost of tuition. They are concerned that they will or will not disconnect from home. They are concerned about their ability to transition to adult roles and responsibilities. They often believe the world is a competitive place and selective institutions are a part of that competition. High school seniors are struggling with issues involving identity, values, mastery, and separation. In the end, a realistic understanding of college options, including clarity about the expected experience at a community college, will help make their decisions more robust and contribute to their future success.

APPENDICIES

APPENDIX A Survey Instrument Questions Used

Seventeen Questions that will be used from the Student Insights Survey:

23) Which best describes your immediate college objective?

- ☐ Enroll in a four-year bachelors degree program
- ☐ Enroll in a two year community/junior college to earn an associate's degree
- ☐ First enroll in a two year community/junior college, then transfer to a four year institution
- ☐ Other (please specify)

If you selected other, please specify.

41) How seriously did you consider first attending a two year community/junior college then transferring to four year college?

- ☐ Very seriously
- ☐ Somewhat seriously
- ☐ Not very seriously
- ☐ Not at all

37) Which community/junior college is nearest to your home? _____

38) How familiar are you with this community college?

- ☐ Very unfamiliar
- ☐ Somewhat unfamiliar
- ☐ Neutral
- ☐ Somewhat familiar
- ☐ Very familiar

39) How would you rate this community college on the following attributes?

	Very Unfavorable	Somewhat Unfavorable	Neutral	Somewhat Favorable	Very Favorable
Actual Academic strength	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perceived academic reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuition cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall favorability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

40) How would you describe this community/junior college? (25 words or less)

22) What do you expect to pay for college tuition? Consider only the published tuition rate not including any form of financial aid that you may receive.

- \$0 – 5,000
- \$5,000 – 10,000
- \$10,000 – 15,000
- \$15,000 – 20,000
- \$20,000 – 25,000
- \$25,000 – 30,000
- \$30,000 – 35,000
- \$35,000 or more
- I have no expectation.

17) What distance from home do you prefer a college to be?

- 30 minutes or less (1/2 hour or less)
- 30 – 60 minutes (1/2 – 1 hour)
- 60 – 120 minutes (1 – 2 hours)
- 120 – 180 minutes (2 – 3 hours)
- 180 minutes or more (3 hours or more)
- I have no preference.

18) What size college do you prefer?

- 0 – 999 students
- 1,000 – 2,500 students
- 2,500 – 5,000 students
- 5,000 – 10,000 students
- 10,000 students or more
- I have no preference.

19) What college setting you do prefer?

- Urban
- Suburban
- Rural
- I have no preference.

16) How important are the following factors when choosing a college?

	Very Unimportant	Somewhat Unimportant	Neutral	Somewhat Important	Very Important
Job opportunities for graduates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic strength	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuition cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilities – Academic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilities – Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College religious affiliation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus setting (Urban /Suburban /Rural)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College size (number of students)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public vs. Private	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social life – on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social life – off campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small class size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14) What was your best SAT score (out of 1600)?

If you took the new version of the test, do not include your score in the new “writing” section. Only include the total of your Math and Verbal scores.

- ☐ 699 or less
- ☐ 700 – 799
- ☐ 800 – 899
- ☐ 900 – 999
- ☐ 1000 – 1099
- ☐ 1100 – 1199
- ☐ 1200 – 1299
- ☐ 1300 – 1399
- ☐ 1400 – 1499
- ☐ 1500 – 1600
- ☐ I haven’t taken the SAT test.

13) What is your cumulative grade point average? (4.0 scale)

- ☐ 1.9 or less
- ☐ 2.0 – 2.4
- ☐ 2.5 – 2.9
- ☐ 3.0 – 3.4
- ☐ 3.5 – 3.9
- ☐ 4.0 or higher

12) What is your family's approximate annual income?

- ☐ I don't know or prefer not to disclose.
- ☐ \$0 – 25,000
- ☐ \$25,000 – 50,000
- ☐ \$50,000 – 75,000
- ☐ \$75,000 – 100,000
- ☐ \$100,000 – 150,000
- ☐ \$150,000 or more

11) What is your race?

- ☐ White
- ☐ Black
- ☐ Hispanic
- ☐ Asian/Pacific Islander
- ☐ I prefer not to disclose.
- ☐ Other (please specify)

If you selected other, please specify _____

10) What is your gender?

- ☐ Male
- ☐ Female

9) Approximately how many students are in your senior class?

- ☐ 99 or fewer
- ☐ 100 – 199
- ☐ 200 – 299
- ☐ 300 – 399
- ☐ 400 – 499
- ☐ 500 or more
- ☐ Don't know.

APPENDIX B Permission to use survey results

Dear John,

Thank you for allowing me to use your Student Insight data set for research related to my dissertation. This is my understanding of the limitations of usage of the data pursuant to your note and our telephone conversations of the past few months. I agree to the following:

I will be able to use the entire data set for academic research purposes only.

I will not share or sell the raw data set.

I will not sell the resulting analysis without your permission.

I agree not to use any of the data you are providing in any commercial or entrepreneurial endeavor, or research with a for-profit entity, nor use it to compete commercially with Student Insights.

The purpose of this agreement is to support and promote Student Insights and its educational research function in a positive way.

Sincerely,

Jean Morciglio

APPENDIX C – Table 22 Survey Respondents by State

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	.0	.0	.0
AL	250	.7	.7	.7
AR	299	.8	.8	1.5
AZ	438	1.2	1.2	2.7
CA	3066	8.4	8.4	11.1
CO	416	1.1	1.1	12.2
CT	381	1.0	1.0	13.3
DE	97	.3	.3	13.5
FL	2042	5.6	5.6	19.1
GA	997	2.7	2.7	21.8
HI	154	.4	.4	22.3
IA	195	.5	.5	22.8
ID	55	.2	.2	22.9
IL	1580	4.3	4.3	27.3
IN	1000	2.7	2.7	30.0
KS	240	.7	.7	30.7
KY	735	2.0	2.0	32.7
LA	231	.6	.6	33.3
MA	588	1.6	1.6	34.9
MD	614	1.7	1.7	36.6
ME	47	.1	.1	36.7
MO	962	2.6	2.6	39.3
MN	804	2.2	2.2	41.5
MS	284	.8	.8	42.3
MT	74	.2	.2	42.5
NC	2057	5.6	5.6	48.1
ND	110	.3	.3	48.4
NE	207	.6	.6	49.0
NH	121	.3	.3	49.3
NJ	1573	4.3	4.3	53.6
NM	156	.4	.4	54.1
NV	68	.2	.2	54.3
NY	3039	8.3	8.3	62.6
OH	1885	5.2	5.2	67.7
OK	195	.5	.5	68.3
OR	290	.8	.8	69.0
PA	1957	5.4	5.4	74.4
RI	124	.3	.3	74.7
SC	993	2.7	2.7	77.5
SD	86	.2	.2	77.7
TN	867	2.4	2.4	80.1
TX	3771	10.3	10.3	90.4
UT	349	1.0	1.0	91.3
VA	1295	3.5	3.5	94.9
VT	11	.0	.0	94.9
WA	700	1.9	1.9	96.8
WI	870	2.4	2.4	99.2
WV	245	.7	.7	99.9
WY	52	.1	.1	100.0
TOTAL	36571	100.0	100.	

APPENDIX D Lexical Searches

Figure 28 NO CONSIDERATION AT ALL

Academic (552) affordable (658) a lot (145) area (234) around (118) atmosphere (126) attend (649) bad (183) basic (140) best (332) better (194) campus (720) career (212) challenging (119) cheap (287) choice (231) classes (1179) college (6443) community (2141) convenient (166) cost (337) courses (276) credits (236) decent (173) degree (333) describe (215) dont (167) easy (358) education (941) enough (143) environment (194) everyone (116) excellent (230) experience (145) facilities (329) familiar (123) favorable (189) feel (149) friendly (184) future (130) general (200) gives (148) going (259) heard (266) help (232) home (1124) inexpensive (119) interested (133) junior (284) kids (168) known (178) learning (140) life (357) live (112) local (167) location (294) looking (220) lot (339) major (345) money (297) needs (127) nice (947) nursing (157) offers (391) opportunities (224) option (142) overall (141) people (1042) prepare (131) pretty (173) price (136) professors (143) program (674) provides (281) ready (166) really (414) reputation (419) safe (175) save (127) school (2908) seems (335) social (190) start (724) state (139) stay (136) stepping (168) stone (119) strong (194) students (1843) study (116) sure (124) teachers (242) think (344) town (117) transfer (547) tuition (310) university (745) variety (141) work (158) year (665)

Figure 29 SERIOUS CONSIDERATION

Academic (43) affordable (47) a lot (13) anything (14) area (24) atmosphere (11) attend (68) bad (14) basics (39) best (18) campus (48) career (20) challenging (13) cheap (22) choice (15) classes (81) college (535) community (128) convenient (25) cost (30) courses (26) credit (32) degree (50) describe (14) dont (14) dual (15) earn (10) easy (39) education (75) enough (10) environment (15) everyone (20) excellent (18) expensive (10) experience (14) facilities (27) familiar (17) far (14) feel (15) friendly (11) future (12) getting (15) gives (15) going (29) heard (30) help (46) higher (13) home (122) inexpensive (13) interested (12) junior (24) larger (10) learning (14) life (29) local (18) location (19) looking (31) lot (34) major (30) money (18) needs (14) nice (107) nursing (20) offers (44) opportunities (16) people (91) pretty (12) price (13) professors (22) program (32) provides (15) ready (14) real (12) really (50) reputation (32) safe (14) school (281) seems (32) size (18) social (14) someone (15) start (78) state (23) stepping (12) strong (14) students (100) study (12) sure (14) teachers (29) tech (13) technical (14) things (13) think (38) town (14) transfer (29) tuition (25) university (58) wants (15) work (13) year (79)

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