

## ABSTRACT

Title of Document: AN EXAMINATION OF HIGH SCHOOL GRADUATES WHO IDENTIFY TEACHERS AS INFLUENTIAL IN THEIR CHOICE OF COLLEGE.

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This exploratory study contributes to what is known about the college choice process by providing a quantitative comparative analysis to determine how high school graduates who identify teachers as influential in their choice of college differ from graduates who do not. Specifically, this study answers the following research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes?

Perna's college choice model served as the conceptual framework for this study. The model posits that college choice is ultimately based on students'

comparison of the benefits and costs of enrolling. Assessments of the benefits and costs are shaped by four contextual layers: 1) habitus, 2) school and community, 3) higher education and 4) social economic and policy.

Data for this exploratory study were drawn from 17,734 high school graduates' responses to the College Board's 2006 Admitted Student Questionnaire (ASQ).

Cross-tabulation and descriptive and inferential analyses were used to characterize and compare student respondents who indicated the opinions of high school teachers as "very important" in their choice of college, and those who do not, in terms of the core and contextual college choice variables identified in Perna's conceptual model. Pearson's Chi-square was used to test the independence of the variables while Cramer's V correlation served as a post-estimation test to assess the relative strength of the association of the variables. A z-test analysis was also performed to compare the differences in proportion for the two populations under consideration.

The study concluded that high school graduates who identified teachers as influential in their choice of college differed from those who did not in terms of academic background, demographic background and college choice outcomes. Specifically, in terms of academic and demographic background, the study found that high school teachers are most influential among students who are 1) non-White, 2) less competitive academically (i.e. grade average and admissions test scores), and 3) come from lower socio-economic backgrounds. No differences were found in gender and type of high school attended. In terms of college choice outcomes, the study concluded that teachers were most influential among students who 1) attend schools in their home state, 2) attend less competitive institutions (i.e. "masters college and

university” or “specialty school” Carnegie Classifications), and 3) attend schools where the perceived emphasis is on quality of students’ academic experience, opportunities for involvement outside the classroom and campus aesthetics. No differences were found in institutional control (public versus private). The findings have implications for future research and future practice including institutional marketing and recruitment strategies and teacher preparation programs.

AN EXAMINATION OF HIGH SCHOOL GRADUATES WHO IDENTIFY  
TEACHERS AS INFLUENTIAL IN THEIR CHOICE OF COLLEGE

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## Dedication

This dissertation is dedicated to a few very special people in my life; for without their unwavering support and encouragement, this dissertation would not have been possible. Namely, this dissertation is dedicated to:

- My parents, Bettie J. Mozie-Mozon and Robert A. Mozie, who instilled in me the importance of education and the belief that I could achieve whatever I desired.
- My husband, Willie J. Ross, Jr. for his love, support, and patience and for being my personal IT helpdesk, always coming to my aid (no matter the time of day or night!).
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# Chapter 1 : Introduction

## Statement of the Problem

Limited ability of parents (Cabrera & LaNasa, 2001; MacDermott & et al., 1987; Smith, 2001) and secondary school counselors (McDonough, 1997; McDonough, 2005; Sanoff, 1999) to assist all students through the college choice process have led many students to rely on other sources of support during this process, such as peers (Fletcher, 2010; Hossler, Braxton & Coopersmith, 1989), high school coaches (Loudermilk, 1983) and even high school teachers (Ad Council, 2006; Ceja, 2000; Loudermilk, 1983; McDonough & Antonio, 1996; McDonough & et al., 1997). Further, increased costs, at the post secondary level, associated with marketing and recruitment efforts designed to influence students' perceptions about the institution and their decision to apply and enroll (Clinedinst & Hawkins, 2009) have led to an increased need for a better understanding of the role of significant others in the college choice process, particularly high school teachers.

## The College Choice Process

The study of college choice behavior of individual students examines the ways in which environmental, institutional, and student characteristics affect a student's choices about whether or not to attend college and which college to attend (Hossler, 1984). Research on college choice behavior is abundant, particularly research on what influences students' aspirations to pursue postsecondary education (Bergerson, 2009; Cabrera & La Nasa, 2000; Ceja, 2006; Espinoza, Bradshaw & Hausman, 2002; Freeman, 2005; Govan, Patrick & Yen, 2006; Hoxby, 2004; Kinzie & Lumina

Foundation for Education, 2004; Pitre, 2006; Pope & Fermin, 2003; Reay, David & Ball, 2005; Rubinoff & Tavares, 2008; Whitehead, Raffan & Deaney, 2006).

Hossler, et al (1989) define college choice as a complex, multistage process during which an individual develops aspirations to continue formal education beyond high school, gets ready for college, and then decides, at a later point, to attend a specific college, university or institution of advanced vocational training.

Building on the work of Jackson (1982), Litten (1982) and others, Hossler and Gallagher (1987) created a three-stage model to describe the college decision-making process. The model proposes that there are three distinct stages during which students make their college choice: a predisposition stage, a search stage and a choice stage.

During the predisposition stage, students determine whether they will continue their formal education beyond high school. The Hossler and Gallagher (1987) model suggests that the predisposition to attend college is influenced by student characteristics, the attitudes of significant others and a student's educational activities. During the search stage of the college decision-making process, students begin to consider their various options in terms of particular colleges and universities, as well as vocational and non-traditional college options. According to the model, students enter the choice stage when they submit applications to a small set of colleges. During the choice stage, students consider many factors such as academic reputation, costs, and location, and ultimately decide what college they will attend (Hossler & Gallagher, 1987).



For the purpose of this study, college choice will refer to the three-stage process outlined by Hossler and Gallagher (1987) while choice of college or college selection will refer to the decision to attend a specific college or university. Given the goal of this study - to develop an understanding of high school graduates who identify teachers as significant influences in their choice of college – the primary focus of this study will be on the final stage of the college choice process, the decision regarding which institution to attend, referred to from this point on as choice of college or college selection.

### *Description of the Problem*

Long gone are the days when admissions officers served primarily as gatekeepers to the university. With higher education's declining share in state and federal funding, institutions have recognized the growing importance of a solid and sustained student enrollment (Callan, 2001). With 4,409 two- and four-year degree-granting institutions reported in the US alone in 2010 (up from 4,216 in 2005), (US Department of Education, 2011), institutions have become far more aggressive and strategic in identifying, attracting and recruiting prospective students (Kalsbeek & Hossler, 2009). In addition, in its recent report "Knocking at the College Door" (2008), the Western Interstate Commission for Higher Education suggests that the marked decline in the growth of high school graduates by 2014-15, will create an increasingly more competitive higher education environment. University enrollment management officials, marketing teams, institutional research and information technology staffs are collaborating to invest in and develop sophisticated market

analysis tools, such as predictive modeling tools, that forecast enrollments (Roach, 1999).

Institutions are purchasing prospective student data supplied by various national college testing and student search services such as The College Board and American College Testing (ACT) to identify prospective students as early as their sophomore year in high school (Hossler et al., 1989). Institutions are also hiring marketing consultants to assess the institution's marketing position and to develop elaborate marketing and communication plans (Gose, 1999). In its *2009 State of College Admissions Report*, the National Association for College Admissions Counseling (Clinedinst & Hawkins, 2009) noted that for the Fall 2008 admission cycle, on average, institutional undergraduate recruitment costs amounted to \$506 per applicant, \$865 per admitted student (up from \$836 in 2007) and \$2,383 per enrolled student (up from \$2,366 in 2007).

Underlying these marketing, recruitment and outreach efforts is the continual desire on the part of higher education administrators to influence student's choice of college, that is, to influence high school students' decisions regarding which institutions to apply to and, ultimately, to attend. Research conducted by educational and market researchers (Hossler & Gallagher, 1987; Hossler, Schmit & Vesper, 1999; Jackson, 1982; Lewis & Morrison, 1975; Litten, 1982) has led to an increased understanding of student college choice and the factors that influence students' decision to attend one institution over another.

Among those factors considered by researchers to be most influential in students' choice of college is the influence of significant persons (Chapman, 1981).

In particular, parents, school counselors and peers have been long recognized by college choice researchers as having significant influence on student's choice of college (Cabrera & LaNasa, 2001; Perna & Titus, 2005; Stage & Hossler, 1989). However, recent research (Johnson, Duffett & Ott, 2005; Johnson, Rockkind, Ott & DuPont, 2010; McDonough, 2004; McDonough & Antonio, 1996) suggests that high school teachers may also play an influential role in the college selection process. If this is the case, a better understanding of high school graduates who identify teachers as significant influences in their choice of college would serve in contributing to the college choice literature. The following section provides additional insight on the role of key individuals in the college choice process.

### *The Role of Significant Persons*

Studies on student college choice examine the role of significant persons from two major perspectives: 1) their influence on students' decisions to attend college, that is, the decision to continue their studies at the post-secondary level i.e. predisposition (Cabrera & La Nasa, 2000; Ceja, 2000; Hossler & Stage, 1992; Lee & Ekstrom, 1987; McDonough, 2005; Tierney, Corwin & Colyar, 2005), and 2) their influence on students' decisions regarding which post-secondary institution to attend, i.e. choice of college (Delaney, 1998; Espinoza, 2000; Lillard & Gerner, 1999; MacDermott & et al., 1987; McDonough, 2004; Perna & Titus, 2005; Ray, 1992).

As noted earlier, parents, school counselors and peers are frequently cited by educational and market researchers as influential persons in the college choice process. Tierney, Corwin and Colyar (2005) specifically note the importance of including parents, peers and counselors in the development and design of an effective

college preparation program. Research (Carpenter & Fleishman, 1987; Hossler et al., 1989; Murphy, 1981; Sanoff, 1999), however, indicates that while parents, school counselors and peers may play a significant role in getting students through the first stage of the process (i.e., aspire to attend college) and perhaps even assisting them through the second stage of searching for and acquiring information about college, their role in students' final choice of college may be minimal.

A review of prior research (Applied Educational Research, 2000; Johnson et al., 2005; Kealy & Rockel, 1987; Leon, 1983; Tillery, 1973) suggests that students may be turning to teachers as a source for guidance and assistance through the college choice process. Past studies further reveal that high school teachers are instrumental not only in students' decisions to go to college but also in deciding which college to attend. Specifically, the research suggests that 1) gender may play a role in students' use of teachers in the college choice process (Loudermilk, 1983) and 2) teachers play a more influential role for students of color in formulating students' preference for a predominately white institution or more selective institution (McDonough, 2004; McDonough & Antonio, 1996).

Although results from studies of students who indicate that teachers were a significant influence in their choice of college still remains small relative to the number of students who report parents or counselors to be most significant (Ray, 1992), three trends suggest that teachers' roles in the college choice process may be evolving and increasing. First, studies (Ewing, 2006; 2008) report that college preparatory program offerings at the secondary level such as magnet, honors, Advanced Placement (AP) and International Baccalaureate (IB) are increasing

significantly in number. Teachers are central to the delivery of these college prep programs and often assist students in related college planning activities such as auditions, portfolio reviews, and AP and IB exams. Second, discipline-specific scholars programs, honors programs and living-learning communities continue to emerge at colleges and universities, particularly at large public institutions (Inkelas, Johnson, Lee, Daver, Longerbeam, Vogt & Leonard, 2006). Program directors generally seek the recommendations and opinions of high school teachers in identifying potential students for these programs and in evaluating their ability to contribute to a community of scholars. Third, state and federal educational systems have imposed mandates for increased K-16 initiatives to improve the preparedness of secondary students for postsecondary collegiate and career opportunities (e.g., 2+2+2 Programs and School to Work Programs) (Tafel & Eberhart, 1999). High school teachers and college faculty often work collaboratively to explore ways to create a seamless transition for students.

These increased initiatives and collaborative efforts present opportunities for high school teachers to become more familiar with program offerings at individual colleges and universities. As such, teachers may be better able and more inclined to advise students about their choice of college.

### *Purpose of Study*

Prior research and literature on the role and influence of teachers on the college choice process is limited for two reasons. First, researchers have not viewed teachers as having an active role in the college choice process. Consequently, prior studies on student college choice (Hossler et al., 1989; Hossler & Stage, 1992; Maryland State

Higher Education Commission Annapolis, 1977) were not designed to capture students' opinions about the specific role of teachers in their choice of college. Often the impact of teachers on students' choice of college is blurred by the aggregation of "teachers and counselors" or "teachers and coaches" in the analyses. Second, the research does not identify the nature of the student-teacher interaction during the college choice process. For example, some studies (Cookson & Persell, 1985) suggest that the role of teachers in the college choice process is a passive yet supportive one in which teachers simply encourage and support their students' educational goals by serving as character references or submitting letters of recommendation on students' behalf. Other studies (McDonough, 2004; McDonough & Antonio, 1996) suggest that the role of teachers is a more active one in which teachers offer suggestions and advice about students' college options and, in some cases, even direct what those options ought to be.

The purpose of this exploratory study was to provide a quantitative comparative analysis to determine how high school graduates who specifically identify "teachers" as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes. The following section discusses the significance of the study.

### Significance of Study

The Survey of College Marketing Programs, which details the findings of types and costs of advertising within marketing programs at 55 American colleges and universities, reported that the mean annual spending on advertising agencies was \$28,800 with a median spending of \$5,000 (Primary Research Group, 2007). In

addition, as noted earlier, the National Association for College Admissions Counseling (Clinedinst & Hawkins, 2009) reported an increase (3 percent in some cases) in average institutional spending on institutional undergraduate recruitment costs for applicants, admits, and enrolled students. As campus resources become increasingly scarce because of budget constraints, marketing strategies and campaigns grounded in empirical research will become increasingly important.

Further, in many secondary schools the school counselor is tasked as the “official” resource person for college information and college counseling. However, there is a growing concern among educators and parents that high school counselors are overburdened with administrative tasks and may not be able to adequately counsel and advise all students during their college search (McDonough, 1991; McDonough, 2005; Murphy, 1981; Sanoff, 1999). While the American School Counselor Association (2008) recommends a student-counselor ratio of 250 to 1, nationwide the average is approximately 460 to 1. In a national survey of 614 young adults ages 22-30, Public Agenda, a non-profit and non-partisan public opinion research organization, reported that six in ten of those students who went on to further their education gave high school counselors poor grades for their college advise (Johnson et al., 2010). A better understanding of students who indicate teachers as significant influences in their college choice offers enrollment managers opportunities to more strategically and effectively engage and utilize teachers in the college choice process.

By enhancing our understanding of students in the college choice process that give serious consideration to the opinions and perspectives of high school teachers in deciding which college to attend, this research presents opportunities to better inform

current marketing and recruitment practices and suggests ways to more formally engage teachers in the college choice process to maximize use of scarce school resources.

The following section provides a summary of the methods. It begins with the research question and continues with an overview of the methods employed to address the research question.

### Summary of Methods

This study sought to understand high school graduates who identify teachers as influential in their choice of college. Specifically, the study addressed the following research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes?

Perna's (2006) college choice model (Appendix 1) served as the conceptual framework for this study. The model posits that college choice is ultimately based on students' comparison of the benefits and costs of enrolling; however, those assessments of the benefits and costs are shaped by four contextual layers: 1) habitus, 2) school and community, 3) higher education and 4) social, economic and policy.

Data for this study are drawn from high school graduates' responses to the College Board's 2006 Admitted Student Questionnaire (ASQ). The Admitted Student Questionnaire (ASQ) is a survey voluntarily administered by participating colleges and universities to admitted students to gain insight into students' college choice decisions, that is, their decision to apply to and/or enroll in an institution. The analytic sample includes admitted students, both enrolling and non-enrolling. The 41



institutions surveyed 59,250 admitted students with an overall 30% response rate, yielding 17,734 respondents. The survey response rate for enrolling students is 51% (n = 11,011) and 18% (n = 6,723) for non-enrolling students. The 41 participating institutions included 9 (22%) four-year public and 32 (78%) four-year private, not-for-profit institutions.

Cross-tabulation, descriptive and inferential analyses were used to describe and compare 1) student respondents who indicated “the opinions of high school teachers” as “very important” in their choice of college, and those who do not, in terms of the core and contextual college choice variables identified in Perna’s conceptual model, and 2) student respondents who indicated “the opinions of high school teachers” as “very important” in their choice of college, and those who do not, in terms of college choice outcomes. Pearson’s Chi-square was used to test the independence (statistical significance) of the variables while Cramer’s V served as a post-estimation test to assess the relative strength of the association of the variables. Finally, a z-test analysis was also performed to compare the differences in proportion for the two populations under consideration.

### Summary

Parents, school counselors and peers are frequently cited by educational and market researchers as influential persons in the college choice process (Stage & Hossler, 1989). Though prior research is limited, there is some evidence that suggests that students may also be turning to high school teachers for guidance in the college choice process (Johnson et al., 2010; Loudermilk, 1983; McDonough, 2004; McDonough & Antonio, 1996). This exploratory study contributes to what is known

about the college choice process by providing a comparative quantitative analysis of high school graduates who identify teachers as influential in their choice of college with graduates who do not. Specifically, the study seeks to understand how students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes. The study used data from the College Board's 2006 Admitted Student Questionnaire.

The following section provides a comprehensive review of the literature on college choice and the role of teachers in students' choice of college. The literature review is then followed by a detailed overview of the research methodology.

## Chapter 2 : Literature Review

### Introduction

This study examined high school graduates who indicate teachers as significant influences in their choice of college. This chapter begins with a brief definition of college choice. Using Perna's (2006) synopsis of the college choice literature as a guide, this chapter continues with a review of the college choice literature, including descriptions of the various theoretical approaches and conceptual models to understanding college choice behavior. The chapter includes a review of what is known about teachers' role in influencing and shaping students' educational aspirations and specifically their influence in students' choice of college. The chapter concludes that Perna's (2006) proposed conceptual model for student college choice is most useful for examining and understanding students who identify teachers as influential in the choice of college.

### College Choice – A Definition

The study of college choice behavior of individual students examines the ways in which environmental, institutional, and student characteristics affect a student's choices about whether or not to attend college and which college to attend (Hossler, 1984). Hossler, et al (1989) define college choice as a complex, multistage process during which an individual develops aspirations to continue formal education beyond high school, and then decides, at a later point, to attend a specific college, university or institution of advanced vocational training.

Building on the work of Jackson (1982), Litten (1982) and others, Hossler and Gallagher (1987) created a three-stage model to describe the college decision-making process. The model proposes that there are three distinct stages during which students make their college choice: a predisposition stage, a search stage and a choice stage.

During the predisposition stage, students determine whether they will continue their formal education beyond high school (Hossler & Gallagher, 1987). The Hossler and Gallagher (1987) model suggests that the predisposition to attend college is influenced by student characteristics, the attitudes of significant others and a student's educational activities. During their search stage of the college decision-making process, students begin to consider their various options in terms of particular colleges and universities, as well as vocational and non-traditional college options. According to the model (Hossler & Gallagher, 1987), students enter the choice stage when they submit applications to a small set of colleges. During their choice stage, students consider many factors such as academic reputation, costs, and location, and ultimately decide what college they will attend (Hossler & Gallagher, 1987).

For the purpose of this proposed study, college choice will refer to the three-stage process outlined by Hossler and Gallagher (1987) while choice of college will refer to the final stage of the college choice process, the decision to attend a specific college or university namely, Hossler and Gallagher's choice stage. Given the goal of this study – to examine high school graduates who identify teachers as significant influences in their decision - this study focused primarily on the final stage of the

college choice process - choice of college. The following section reviews the theoretical and conceptual approaches to understanding college choice.

### *Theoretical/Conceptual Approaches to Understanding College Choice*

According to Paulsen (1990), educational researchers with disciplinary backgrounds in economics, sociology, and psychology have conducted much of the research on college choice. Each disciplinary base offers a different conceptual approach to understanding the variables that influence a student's choice of college. Conceptual approaches include economic models, sociological models and social psychological or combined models. These perspectives provide the theoretical underpinnings for the college choice literature.

In her review of college choice research published since 1990, Perna (2006) identified two theoretical perspectives most useful for guiding research on college choice: an economic model of human capital investment and a sociological model of status attainment. The following sections take a closer look at these approaches.

#### *Economic Model of Human Capital Investments*

Economists (Kohn, 1976; Manski & Wise, 1983; Nolfi, 1978) view college attendance decisions as a form of investment-like decision-making behavior. In their review of the college choice literature, Hossler, Braxton and Coopersmith (1989) explain that there are two types of choices in econometric models. One type of choice is the decision to attend a postsecondary institution or a non-postsecondary institution. The second choice is the decision of one postsecondary institution over another. Econometric models identify costs and benefits as significant factors that

influence the choice of one institution over other institutions. Critics (Hossler et al., 1989) of the econometric models argue that the models are flawed in that they assume 1) students maximize perceived cost-benefits in their college choices, 2) students have perfect information and 3) students are engaged in a process of rational choice. In addition, Hossler, Braxton and Cooper (1989) note that “while the econometric models offer the notion of maximum utility of the perceived benefits of one choice alternative over another, assumptions and linking concepts among variables are lacking.”

Underlying econometric models of college choice is human capital theory. The basis of human capital theory lies in the theories of Theodore Schultz, an economist at the University of Chicago (Schultz, 1961). Schultz, an agricultural economist, produced his ideas of human capital in the early 1960s as a way of explaining the advantages of investing in education to improve agricultural output. Similarly, Becker (1996) suggests that human capital, in its simplest form, refers to the composite amount of schooling and credentialing that a person acquires. According to Musial (1999), there exists a very strong relationship between years of schooling and later attainment of occupational prestige and income, particularly for males. In human capital theory, education is considered an investment of time plus the direct costs of schooling in exchange for enhanced future earnings (Becker, 1975).

In her summary of human capital literature, Musial (1999) suggests that the relationship between years of schooling and occupational attainment manifest as either credentialism or human-capital formation. Credentialism explains that relationships arise primarily because schools award certificates that employers are

willing to accept while the human-capital theory explanation for the relationship is that schooling endows individuals with cognitive and motivational resources needed for a productive life on the job and elsewhere (Collins, 1979). Musial (1999) further explains that there is a general and an individual aspect to human-capital theory. Society invests in human capital to increase economic growth. The individual invests in education to increase personal income.

In her review of the research, Perna (2006) identified a few studies (DesJardins, 1997; Kane, 1999; Manski & Wise, 1983) that have examined the role of human capital investment theory on choice of college. For example, DesJardins (1997) developed an empirical model of the college application decision-making process based on human capital theory which states that a student's college choice decision is based on the expected net benefits of attending a particular institution. In addition, Ellwood and Kane (2003) used a human capital investment model to guide multivariate analyses of the relationship between family income and enrollment in college within 20 months of graduating from high school after controlling for measures of academic ability and achievement, tuition and financial aid, and tastes (measured by parental education). The results indicated that students' test scores and high school rank percentile, age, proximity to the institution, whether the student postponed their initial college enrollment date, congruence between the student's preferred institution type and size and that of the study institution, and family income were all important variables in students' application decisions. Similarly, DesJardins et. al., (2006) propose an integrated model of college enrollment that considers application, admission, enrollment as well as financial aid. The researchers argue that

these processes are sequential and correlated and that students make decisions based on expectations – for admission and for financial aid. The researchers profess to improve upon prior college choice research by jointly modeling the application, admission, financial aid and enrollment processes thereby correcting for possible selection bias when these processes are not considered in the enrollment decision process. DesJardines et. al. (2006) suggest their most important finding is that financial aid expectations have powerful and asymmetric effects on enrollment propensities and that disappointing students with regard to their aid expectations can have serious negative effects on enrollment.

Perna (2006) concluded that although traditional human capital and econometric approaches are useful for conceptualizing the criteria that individuals consider and the effects of costs and benefits on students' college-choice behavior, they are insufficient for understanding all sources of observed differences in college choice across family income and racial/ethnic groups.

#### *Sociological Model of Status Attainment*

Sociologists (Hanson, 1994; Hearn, 1985; Sewell, Haller & A, 1969; Sewell & Hauser, 1980; Sewell, 1986) view the formation of college –going aspirations as part of a general status attainment process. In their study of the status attainment process, these sociologists have mostly focused on the earliest stages of the college choice process, namely the decision of whether to attend college. In their synthesis of the literature that focus on the inequalities that manifest in college matriculation, McDonough and Fann (2007) note that researchers have examined these inequalities at three levels: individual, organizational and field level. The individual level



primarily uses traditional status attainment models, while the organizational level focuses on the role of organizations in structuring opportunity and shaping aspiration for college attendance and finally the field level examines the reciprocal influences of the individual and organization.

### *Cultural Capital*

A few sociologists (Bourdieu, 1986; McDonough & Antonio, 1996) have given attention to the choice stage of the process. For example, a Bourdieuan approach to college choice situates high school students' college choices in their social, organizational, and cultural contexts (Bourdieu, 1977). The approach demonstrates the influence of cultural capital and the essential use of values that are embedded in a student's habitus in decisions about where to go to college (McDonough & Antonio, 1996). By cultural capital, Bourdieu refers to the non-financial social assets, i.e. educational or intellectual, which might promote social mobility beyond economic means. Bourdieu (1977) explains that cultural capital is a property that middle and upper-middle class families transmit to their offspring which substitutes for or supplements the transmission of economic capital as a means of maintaining class status and privilege across successive generations. Cultural capital is the widely shared attitudes, preferences and credentials used for social and cultural exclusion (Lamont & Annette, 1988).

Bourdieu (1986) identifies three subtypes of cultural capital: embodied cultural capital, objectified cultural capital and institutionalized cultural capital. Embodied cultural capital consists of both the consciously acquired and the passively "inherited" properties of one's self usually from the family through socialization of culture and

traditions over time as it impresses itself upon one's habitus. Habitus is a deeply internalized system of outlooks, experiences, and beliefs that an individual gets from his or her immediate environment (Bourdieu, 1977). Bourdieu (1977) explains that habitus is a common set of subjective perceptions held by all members of the same class which shapes an individual's expectations, attitudes and aspirations. Objectified cultural capital consists of physical objects that are owned, such as scientific instruments or works of art. These cultural goods can be transmitted both for economic profit and for the purpose of "symbolically" conveying the cultural capital whose acquisition they facilitate. Institutionalized cultural capital consists of institutional recognition, most often in the form of academic credentials or qualifications, of the cultural capital held by an individual.

Critics of Bourdieu (De Graaf, De Graaf & Kraaykamp, 2000) argue that his definition of cultural capital is too narrowly defined acknowledging only participation in elite activities such as theatre, classical music, museums, art, etc. Critics argue that this definition of cultural capital is not useful in understanding inequalities in education. A number of critics (Gorder, 1980; Kingston, 2001; Robbins, 2005) argue that Bourdieu's notion that cultural capital is something that only elite or dominate social classes have, and that to succeed in education, lower class people must acquire these types of cultural capital, discounts the notion of working class culture.

In their analysis of elite college students' college choice decision-making behavior, McDonough and Antonio (1996) identified influential cultural capital variables including arts participation, evidence of engaged, non-routine contact with teachers, and valuing education for its liberal and general education qualities. They

explain the importance of the relationship between student and teacher in the accumulation of college-going cultural capital. McDonough and Antonio (1996) speculate that when students have only routine contact with teachers in class they are unable to get the strong, detailed letters of recommendation that are required for highly selective college admissions.

Expanding on Bourdieu's concept of cultural capital, Emmison and Frow (1998) introduced the notion of information technology as a form of cultural capital. The authors state that "a familiarity with, and a positive disposition towards the use of bourgeoisie technologies of the information age can be seen as an additional form of cultural capital bestowing advantage on those families that possess them". Dumais (2002) further examined how gender affects the ability of cultural capital to increase educational achievement while Stanton-Salazar & Dornbusch (1995) examined how people with the desired types of cultural capital in a school transform this capital into instrumental relations or social capital with institutional agents who can transmit valuable resources to the person, furthering their success in the school.

### *Social Capital*

The construct of social capital has also been used to explain college choice behavior (Bourdieu, 1986; Lin, 2001). Bourdieu (1986) defined social capital as the aggregate of actual or potential resources linked to possession of a durable network of institutionalized relationships of mutual acquaintance and recognition. Coleman (1990) explains social capital as the networks that provide information, social norms, and achievement support. Coleman further explains that, like other forms of capital,

social capital is productive and makes possible the achievement of certain ends that in its absence would not be possible.

Using the concept of social capital, Stanton-Salazar and Dornbusch (1995) examined data on the information networks of a select sample of Mexican-origin high school students to assess how students' grades and educational and occupational expectations are related to the formation of instrumental ties to institutional agents such as teachers and school counselors. The researchers found that while there was evidence of a relationship between grades and status expectations and the measures of social capital, the strongest associations were with language measures suggesting that bilinguals may have special advantages in acquiring the institutional support needed for educational and occupational success.

Croninger and Lee (2001) examined the specific role of high school teachers as a source of social capital. The researchers found that students benefit from being able to draw on social capital through their relationships with teachers. While their study focused primarily on the impact of student-teacher relationships on students most at risk of dropping out of high school, Croninger and Lee concluded that, "teacher-based forms of social capital are generally beneficial for all students (2001, p. 558)." To help compensate for the absence of social and academic resources in other parts of students' lives, teachers can provide tutoring, academic counseling, and guidance about educational decisions. Croninger and Lee note that, "these findings are consistent with a growing recognition that the quality of students' relationships with teachers is an important predictor of educational success (2001, p. 548)."

Using multilevel modeling, Perna and Titus (2005) explore the ways in which the structural context, as measured by characteristics of the high school attended, shapes the college enrollment decisions of high school graduates. Focusing specifically on the role of parental involvement as a form of social capital, Perna and Titus operationalize structural characteristics in terms of the extent to which the school encourages parental involvement, the volume of resources that may be accessed via social networks at school, and the homogeneity of the social networks at the school. Their findings indicate that regardless of an individual student's social, economic, cultural, and human capital, the likelihood of enrolling in a two-year or four-year college after graduating from high school is related to the volume of resources that may be accessed through social networks at the school attended.

In her review of the research on sociological approaches, Perna (2006) concluded that sociological approaches are useful for understanding the ways in which context, influenced in part by structural constraints and opportunities, shapes an individual's perspectives about and orientation toward college choice. Sociological approaches are also useful for exploring differences across groups in college choice. Perna (2006) also noted that despite these contributions, sociological approaches do not offer a framework for examining how individuals ultimately decide whether to aspire to postsecondary education, apply for admission to a set of colleges, or enroll in a particular college or university.

Similarly, in their comparison of the conceptual approaches to college choice, Hossler, Braxton and Coopersmith (1989) found that while the sociological model offered the most explanatory power in understanding the development of aspirations

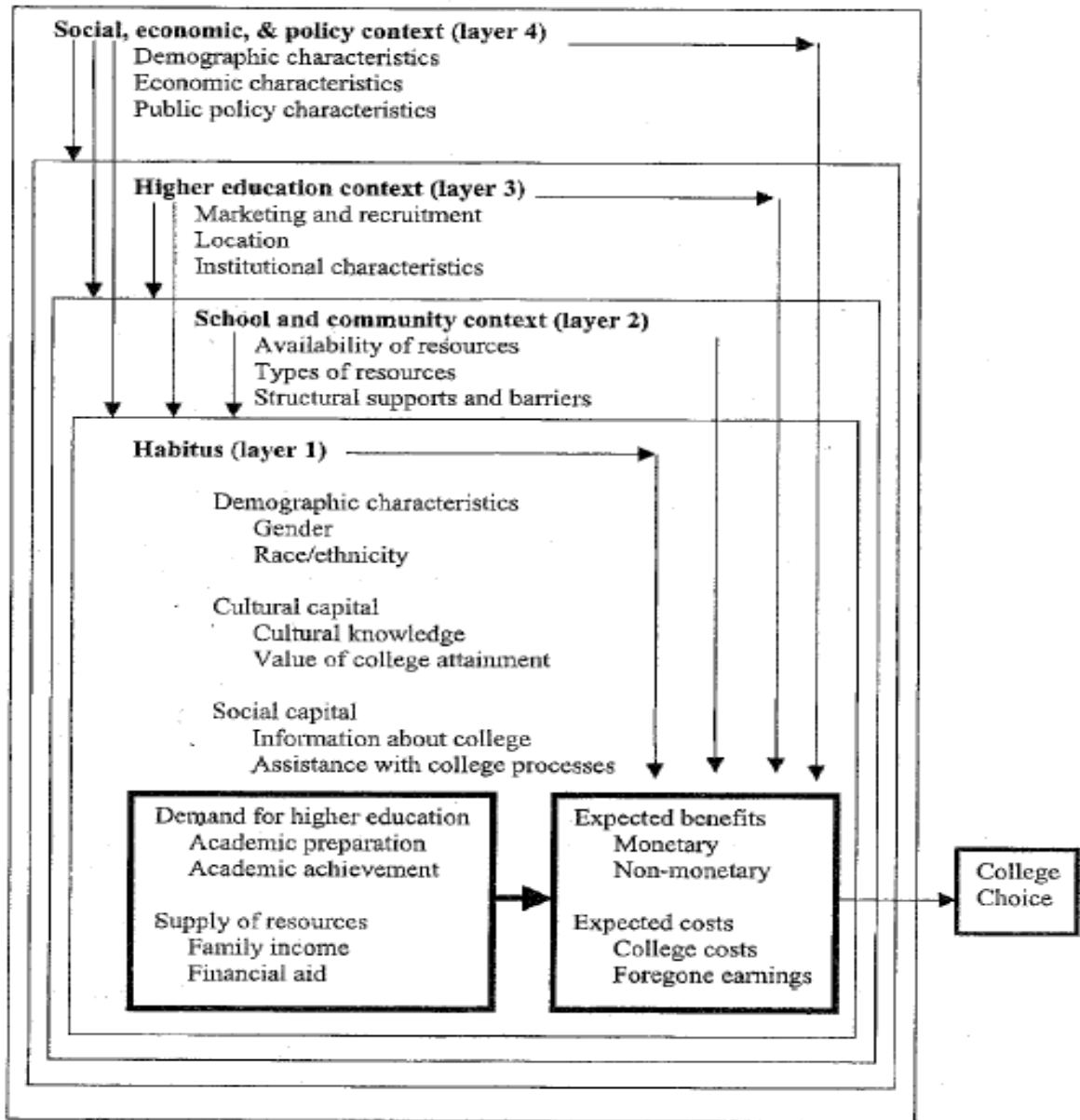
of college, the conceptual approach (sociological) is limited in that its models include few variables and focused primarily on the aspiration stage of the choice process. According to the researchers, sociological approaches are useful in understanding ways in which individuals gather information but do not provide insight on the ways in which individuals make decisions based on the acquired information.

Perna (2006) argues that when considered separately, neither rational human capital investment models nor sociological approaches are sufficient for understanding differences across groups in student college choice. Perna suggests that a model that draws on both economic and sociological perspectives may prove to be more powerful than a single perspective.

#### *Perna's Proposed Conceptual Model*

Perna (2006) proposes a conceptual model that draws on both economic and sociological perspectives (Figure 1). In doing so, Perna (2006) explains that the model assumes that students' educational decisions are determined, in part, by their habitus, or the system of values and beliefs that shapes an individual's views and interpretations. Perna (2006) further explains that a key strength of an integrated conceptual model is the assumption that the pattern of educational attainment is not universal but may vary across racial/ethnic, socioeconomic, and other groups.

Figure 2-1 Perna's Proposed Conceptual Model of Student College Choice



Source: Perna (2006), p. 117.

Perna's (2006) proposed conceptual model posits that while a student's college choice decision is ultimately based on a comparison of the benefits and costs of enrolling, assessments of the benefits and costs are shaped by four contextual layers: 1) the individual's habitus, 2) school and community context, 3) the higher education context, and 4) the broader social, economic, and policy context. Perna (2006)

explains that the individual's habitus (layer 1) reflects an individual's demographic characteristics, particularly gender, race/ethnicity, and socio-economic status, as well as cultural and social capital. The school and community context (layer 2) reflects McDonough's (1997) organizational habitus, recognizing the role social structures and resources play in facilitating or impeding student college choice. Stanton-Salazar (1997) argued that institutional agents such as teachers, counselors, and middle-class peers provide access to resources and opportunities including information about college and help with college admissions requirements but that institutional structures, such as the short-term duration of interactions, limit the ability of working-class minority students to develop trusting relationships with institutional agents. The higher education context (layer 3) recognizes the role that higher education institutions play in shaping student college choice, either directly via targeted marketing and recruitment efforts and admission or indirectly i.e. location and proximity to student's home. The social, economic and policy context (layer 4) recognizes that college choice is also influenced by changes in social forces (e.g. demographic changes), economic conditions (e.g. unemployment rate) and public policies (e.g. need-based grant programs).

In summarizing the proposed conceptual model, Perna (2006) states:

“...the proposed conceptual model assumes that, although college choice is ultimately based on a comparison of the benefits and costs of enrolling, assessments of the benefits and costs are shaped not only by the demand for higher education and supply of resources to pay the costs but also by an individual's habitus and, directly or indirectly, by the family, school, and community context, higher education context,



and social, economic, and policy context. By drawing on constructs from both human capital and sociological approaches, the proposed conceptual model will likely generate a more comprehensive understanding of student college choice. The proposed model will likely be especially useful for understanding differences across groups in college-choice outcomes, because of its explicit recognition of the multiple layers of context that influence an individual's college-related decisions.” (p. 119)

Perna's (2006) proposed model, combining both economic and sociological approaches of college choice, appear to offer the most comprehensive and relevant approach to examining and fully understanding students in the college choice process who identify teachers as significant influences in their choice of college. There are three strong cases for the use of Perna's proposed model as a conceptual framework for understanding students who identify teachers as significant influences in their choice of college. First, in providing a comprehensive definition of a student's habitus (layer 1), Perna acknowledges the role of social capital and agents of social capital in shaping students' college choice decisions. Educational literature and research (Croninger & Lee, 2001) explicitly identify teachers as a source of social capital. Second, the inclusion of demographic characteristics identified in the habitus (layer 1) contextual layer, allows the researcher to test existing research that suggests gender and ethnicity may play a role in which students seek out and heed to the opinions of teachers in the college choice process. Third, Perna's model recognizes the impact of higher education (layer 3) in facilitating or impeding student college choice. Since this study seeks to understand the role of teachers in student college choice for the purpose of providing secondary and post secondary administrators with

useful insight about the college choice process; understanding student college choice in the context of these larger organizational and institutional factors would be most useful to school and college administrators.

The following sections of the literature review examine what is known about the role of significant others in the college choice process. The sections begin with a review of what is known about the role of parents, school counselors and peers in the college choice process and continues with a more detailed review of the role of high school teachers in shaping students' educational aspiration as well as influencing their choice of college.

#### *The Role of Parents, School Counselors and Peers*

A number of studies note that parents are a significant factor in the college choice process (Ad Council, 2006; Bateman & Kennedy, 1999; Bers & Galowich, 2002; Broekemier & Seshadri, 1999; Cabrera & La Nasa, 2000; Cabrera & La Nasa, 2000; Cabrera & LaNasa, 2001; Choy, Horn, Nunez & Chen, 2000; Rowan-Kenyon, Bell & Perna, 2008). Research suggests, however, that parents are most influential during the early stages of the college choice process, that is, in shaping student's aspiration to go to college (Carpenter & Fleishman, 1987; Ceja, 2000; Hossler et al., 1989). Hossler and associates (1999) note that when students are selecting and choosing their schools, other sources such as peers, teachers and counselors, tend to replace parents and family members as the key source of influence. In addition, studies (Hossler et al., 1999; Litten, Sullivan & Brodigan, 1983; Tillery & Kildergaard, 1973) on parental influence on student college choice note that it is parents' perceptions of cost (affordability) of the college that influence the student,

suggesting that outside the framing of students' realistic options, parents may exert little influence on the actual decision about which post-secondary institution to attend. Furthermore, with increasing numbers of first-generation college-bound students, many parents simply do not have the familiarity and experience with the college choice process and do not feel qualified to assist their students through the process (Cabrera & LaNasa, 2001; MacDermott & et al., 1987; Smith, 2001).

Research on student college choice (Fallon, 1997; McDonough, 2005; Perna, Rowan-Kenyon, Thomas, Bell, Anderson & Li, 2008; Plank & Jordan, 2001; Rosenbaum, Miller & Krei, 1996; Venezia, Kirst & Antonio, 2003) generally agrees that school counselors and the presence of a strong guidance program have a degree of influence on students' decisions to go to college as well as their choice of college. The overwhelming and competing demands on school counselors, however, limit the ability of these individuals to effectively advise and counsel all students through the college search process (McDonough, 1997; McDonough, 2005; Sanoff, 1999), leading some students and families to seek external resources such as private college counseling services (McDonough, 1994; McDonough, 2005; McDonough & et al., 1997) while others are forced to find their own way through the college selection process or rely on other sources.

While the use of private college counseling services has increased in recent years, McDonough and colleagues (1997) concluded that the number of students and parents utilizing these services still amounts to only three percent of the college-going population. Moreover, students using these for-hire services are generally from high socio-economic backgrounds and are seeking competitive admission into some of the

country's most selective schools – a relatively small segment of the college-bound population (McDonough, 1997). Most students and their families simply cannot afford such services and must turn to other sources for information and advice.

Based on their review and synthesis of prior research, Hossler, et al. (1989) concluded that peer support and encouragement are not strongly associated with predisposition to attend college. On the other hand, Chapman (1981) found that in selecting a college, students are strongly persuaded by the comments and advice of their friends. Chapman (1981) further noted that where a student's close friends go to college will influence the student's decision about which institution to attend. Similarly, in a recent study of high school seniors from Texas, Fletcher (2010) found that peer preferences in high school are associated with an individual's eventual choice of which college to attend. Specifically, an individual in a high school with 10-percentage point more peers with matching preferences for a particular college is 3- percentage points more likely to attend his/her preferred college. That is, individuals who prefer an “unpopular” college are less likely to enroll in their preferred college than individuals with classmates who agree on what colleges are most preferred (Fletcher, 2006). Through interviews and focus groups with 106 high school juniors and seniors, McDonough and Perez (2008) also found that as primarily first generation college students, Latino and Latina students rely heavily on siblings and peers in addition to relatives and school contacts for postsecondary planning and for considering a college consideration and application set. In contrast, Hossler et al (1989) noted that, while friends, peers and current college students tend to be popular

sources of information during the search stage, by the time students reach the choice stage, peers do not appear to have an impact.

Given the focus of this study, the following sections of the literature review take a closer look at what is known about the role of teachers in shaping and influencing students' educational aspirations and more specifically teachers' influence in students' choice of college.

### *Teachers' Role in Influencing Students Educational Aspirations*

Literature on teachers' role in influencing and shaping students' educational aspirations fall into three major categories: 1) the role of teachers in preventing drop-out amongst at-risk students, 2) the role of teachers in encouraging and promoting math and science interest, particularly, amongst female and minority students, and 3) the role of teachers in encouraging students to pursue post-secondary plans. A summary of each path of the literature follows.

Teachers have long been recognized as having a key role in influencing students' decisions to stay in school (Croninger & Lee, 2001). Specifically, a student's relationship with his/her teacher has been identified as a key factor in students' decision to leave school (Edgar & Johnson, 1995). In an examination of the National Center for Educational Statistics (NCES) data on student drop out, the Policy Information Center of the Educational Testing Service (ETS) (Schwartz, 1995) reported not getting along with teachers and students as one of the most commonly cited reasons for dropping out.

Several studies (McCaul, 1989; Romo, 1998) examining specific populations of at-risk students draw similar conclusions. For example, in an analysis of the High

School and Beyond Data, McCaul (1989) found that rural students cited the inability to get along with teachers more frequently than urban students as a reason for leaving school. Likewise, Romo (1998) notes the important role teachers play in preventing drop out among Hispanic girls. Romo offers teachers practical solutions to addressing the problem of drop out among Hispanic girls and Latino students in general including 1) connecting with Latina students by making physical or eye contact, 2) allowing Latinas ample time to answer questions, 3) creating a sense of community and participation in the classroom, 4) using examples in the classroom that are inclusive of Latinas, 5) listening carefully and respectfully to students' questions and comments, and 6) coaching students who seem reticent to speak.

On the opposite end of the spectrum, examining what is referred to as “resilient children” – children that are able to adapt and transform despite risk - Bernard (1993) concluded that the presence of at least one caring person provides support for healthy development and learning. Werner and Smith (1989) found that a favorite teacher who was not just an instructor for academic skills for the youngsters but also a confidant and positive model for personal identification was most influential. Likewise, Noddings (1988) found that a caring relationship with a teacher gave youth a motivation to learn.

There is a small body of literature (Dee, 2005; Schwartz & Hanson, 1992; Strutchens, 1999) that examines teachers' roles in influencing students' academic achievement, particularly in the math and sciences. Among the strategies identified to be most effective in improving the achievement in mathematics among underrepresented groups, Strutchens (1999) found that when teacher-student

relationships are fluid, equitable, and extend beyond the classroom, student math achievement is the highest among underrepresented groups. Schwartz and Hanson (1992) examine the mathematic achievement of females noting that traditionally, females have found advanced mathematics achievement elusive. The researchers found that teachers' differential treatment of female students in the classroom with respects to mathematics inhibits their ability to successfully learn math. Shoffner and Vacc (1999) offer strategies to increase math achievement and the number of students aspiring to pursue careers in mathematics. Namely, they suggest that counselors can assist teachers to critically examine their relations with students and help them provide opportunities for all students in their mathematics courses.

The literature review suggests that beyond retention and achievement, teachers also play a role in shaping and influencing students' aspiration to go to college. In a 2010 survey of young adults ages 22 to 30, Johnson et al. (2010) found that young adults with aspirations to go to college received good support from their high school teachers and coaches. Sixty-seven percent of the respondents indicated that they had a teacher who really took an interest in them and encouraged them to go to college. On the contrary, in a questionnaire study conducted by Richer et al (1998) designed to understand the factors that influenced the attitudes of Australian students about furthering their education, Aboriginal youth felt neglected by and uncomfortable with many of their teachers. In the study, Aboriginal youth did not believe teachers encouraged them nor had high expectations of their educational futures. The study found that 42% of the students did not like their teachers; 37% believed that the teachers did not care about them, and 20% felt that their teachers "ganged" up on

them. These school experiences with respects to Aboriginal students' relationships with their teachers were believed to impact students' expectations about going to college.

McIntosh and Greenlaw (1990) recognize the importance of teachers in shaping the postsecondary educational aspirations of bright urban minority students urging teachers to be sensitive to the disparity between their aspiration for the student and the students' aspiration for themselves. Teachers are also encouraged to recognize that as they work to encourage students to increase their aspirations, defense attitudes may surface from both students and parents. Ford and Thomas (1997) examined underachievement (lack of representation in talented and gifted and other college preparatory courses) among gifted minority students and found that underachievers typically reported less positive student-teacher relations. When it comes to postsecondary pursuits, Kumar and Hruda (2001) argue that schools, and teachers, in particular, can serve as gatekeepers when it comes to informational support for students interested in attending college. Though not specific to postsecondary educational plans, Weiler (1997) notes that teachers can play an important role in providing overall career development for African American and Latina females. Further, in a study of the career expectations of Mexican American girls, McWhirter et al., (2007) found that girls from lower socioeconomic backgrounds found support from teachers as extremely important in shaping their career aspirations.

Corwin and Tierney (2007) note the importance of not isolating college services (that is, limiting activities for college planning and preparation solely to the guidance office or the college counselor) in developing a college-going culture within



a school. Specifically, Corwin and Tierney suggest that college-planning services should be a coordinated and synchronized effort between guidance, college counselors and teachers in which college expectations and goals are constantly reinforced. In particular, teachers can 1) motivate students by sharing personal college experiences, 2) discuss how they afforded college, 3) ask students about their college plans and assist with applications for admission and financial aid and 4) prepare students by building college activities into curricula such as writing a college personal statement or developing an expense budget for freshman year. Corwin and Tierney argue that by engaging in these activities, teachers improve the likelihood that students will apply for college. Plank and Jordan (2001) support this notion of engaging teachers in the college planning process. In their examination of the National Educational Longitudinal Study data and interviews of high school counselors, the researchers Plank and Jordan found a direct correlation, regardless of students socioeconomic status, between college entrance rates and early (at least by 10<sup>th</sup> grade) and consistent talks about college between adults and students. Plank and Jordan suggest that in schools where counselors are overloaded, teachers might be enlisted as college advisors and each one could follow a cohort of students throughout high school.

The literature review offers useful insight to the role of teachers in shaping students educational aspirations. While much of the literature on teachers' role in student educational aspirations focused on at-risk youth and drop out prevention (Croninger & Lee, 2001; McCaul, 1989; Melograno, 1971; Romo, 1998), there is evidence that teachers are also influential in shaping students' aspiration for

postsecondary education as well (Ford & Thomas, 1997; Johnson et al., 2010; Kumar & Hruda, 2001; McIntosh & Greenlaw, 1990; Richer et al., 1998). Specifically, through motivation, support and encouragement teachers can be most influential in shaping the postsecondary plans for urban and minority students (Ford & Thomas, 1997; McIntosh & Greenlaw, 1990). In addition, by better promoting student achievement in math, teachers can be influential in students' ability to achieve their postsecondary plans (Dee, 2005; Schwartz & Hanson, 1992; Strutchens, 1999). The section that follows examines the role of teachers specifically in students' choice of college.

#### *Teachers' Role in Students' Choice of College*

While there exist an abundance of research on college choice, research specifically on the influence of teachers in the college choice process is limited. In fact, in their study of the role of college counseling in shaping college opportunity in fifteen high schools in five states, Perna, Rowan-Kenyon, Thomas, Bell, Anderson and Li (2007) found tremendous variability in the use of high school teachers to provide college counseling. The researchers noted that in most schools teachers play a limited role in providing college counseling to students while at other schools assistance with college counseling was at the discretion of the teacher. Still, at some schools counselors work with teachers to systematically infuse college-related information into the curriculum, particularly into English classes (Perna et al., 2007).

The research is even more limited in providing insight into the role and influence of teachers in the final stage of the process or students' choice of college. The literature

review revealed a few studies that note the role of teachers specifically in students' choice of college (Kealy & Rockel, 1987; Leon, 1983; Segall, 1989).

Several market research studies (Kealy & Rockel, 1987; Leon, 1983) examining a student's decision to apply to and attend a particular institution note that teachers are among the individuals who influence students' decision to apply to and to enroll at the institution. Market research efforts in college admissions typically seek to understand "why" and "how" a student chooses a specific college or university (Litten, 1984). College admissions research is frequently conducted by surveying or interviewing students who have contacted, applied to or recently matriculated to the college conducting the study (Litten, 1984). Several of these studies are described below.

Teachers are found to be a significant influence in college choice amongst Chicano students at California State University - Fresno. Leon (1983) surveyed Chicano freshmen entering California State University – Fresno (CSU-Fresno) in the fall of 1981. The study yielded data on the influence of social factors, family background, and academic preparation leading students to enroll at CSU-Fresno. Responses from 119 students indicated that the top six influences on students' college choice were parents, high school counselors, Educational Opportunity Program staff, siblings, Recruiting Students Via Parents (RSVP) staff, and high school teachers.

Teachers perceive they have long-term influence on their students (Segall, 1989). The Academic Bowl, an integral part of Oklahoma State University's public effort to encourage excellence in Oklahoma's secondary schools is designed to foster an awareness of Oklahoma higher education and attract a teacher cadre of exceptional

talent and ability. In a survey of 26 Academic Bowl teacher/coaches, Segall (1989) found that these individuals perceive that they have opportunities for having long-term influence on their students, especially extremely capable students who generally leave the state to attend college.

Teachers are found to have positive influence on college quality perceptions with students at Colgate University (Kealy & Rockel, 1987). In 1984, Kealy and Rockel (1987) surveyed 1,424 accepted applicants at Colgate University to assess the relative impact of observable influences on student perception of college quality. The questionnaire asked students to rate the quality of several attributes of the college and to then assess the degree to which their college-choice decision was influenced by three types of information: 1) information obtained from people, 2) information gleaned from written materials, and 3) information learned through personal contact with some aspect or program of the college. Kealy and Rockel (1987) found that the more students relied on teachers (including coaches) for information the more positive were the perceptions of college quality, particularly academic and athletic quality. In contrast Kealy and Rockel (1987) also found that the more students relied upon high school counselors for information, the more negative were the perceptions of quality at Colgate. However, the counselors' influence is only significant for the perception of the attractiveness of the location and for the perception of athletic quality, but not for the perceptions of academic or social life qualities.

Teachers are reported by students to be among the most positive influences in their decision to attend Blinn College (*Results of Entering Student Survey, 1993 Fall and 1994 Spring Semesters*, 1994). In 1993 and 1994, Blinn College (BC)

administered its Entering Student Survey to students who were registering for one or more classes and who had not been enrolled for the preceding 6-year period. Survey findings, based on responses from 3,468 students to the 1993 survey and 1721 students to the 1994 survey, suggested that the top five most common factors that students reported to influence their decision to attend BC were facilities, faculty reputation, academic reputation, size of institution and classes, and costs. In addition, over 43 percent indicated that a high school counselor or teacher had been a positive influence in their decision to attend BC and 94 percent felt that the college catalog was a helpful source of information.

Several studies (Moogan, 1999; Ray, 1992) examine high school students' perception of the role of teachers in the college choice process. These studies offer conflicting findings in students' perception of the significance of teachers in the college choice process.

Teachers are perceived by students to be a most helpful resource during the college choice process (Moogan, 1999). Moogan (1999) investigated potential higher education students' decision-making behavior by studying 19 students from a high school in the northwest of England and 45 students in a control group from Great Britain. The study found that participants sought different types of information from a number of sources to assist their decision-making. The results showed that in both groups, participants' most often stated response was that teachers were responsible for introducing students to higher education options.

Teachers are perceived to be a least helpful resource during the college choice process (Ray, 1992). The study, designed to determine which strategies and

interventions used by high school counselors to assist students in the college-choice process was perceived by students to be most helpful, examined the perceptions of 57 students in a middle-income, small city high school. College visits were perceived to be the most helpful resource in facilitating the college choice decision while individual conferences with classroom teachers were perceived to be the least helpful resource. The researcher, however, offered as a recommendation, “strategies for enlisting more involvement from teachers in the college-search activities of the students could significantly augment the services provided by the high school in the area of college-selection assistance.” (Ray, 1992 pg 5)

A few studies (Ad Council, 2006; Ceja, 2000; Loudermilk, 1983; McDonough & Antonio, 1996; McDonough & et al., 1997) note the influence of teachers on specific populations of students in their choice of college. For example, in a study designed to assess the degree of importance of selected factors influencing the college choice of student-athletes, Loudermilk (1983) found that female athletes placed greater importance on advice of high school teachers than male athletes. Male athletes tended to rate the advice of high school coaches as more important in the college choice process.

In a survey of 396 low-income teens (\$25,000 or less household income) conducted by the Ad Council (2006), teachers (22%) were found to be the second most helpful resource to teens in applying to or considering colleges. Specifically, parents (26%) were found to be most helpful and school counselors (5%) were found to be least helpful (2006).

In two separate qualitative studies examining the effects of ethnic and racial differences on student college choice, McDonough and Antonio (1996) and Ceja (2000) found that teachers play a more influential role for students of color, particularly in formulating the student's preference for a predominately white institution or more selective institution. McDonough and Antonio (1996) further suggest that the nature of teachers' influence in student college choice varies among racial and ethnic groups. That is, teachers are most influential for Black students when those students seek the teacher's advice after class, whereas for Asian American and Chicano/a students, teachers are influential through the process of having students over to their home. McDonough and Antonio (1996) explain that this variance demonstrates how cultural capital operates differently for different racial and ethnic groups.

Using data drawn from the Cooperative Institutional Research Program (CIRP) 1994 Freshman Survey, McDonough et al.(1997) explored 40 variables to test a model of college choice that suggests that students' choice of college can be related to perceived "capital conversion" benefits. These variables included arts participation, valuing education for its liberal and general education qualities and evidence of engaged, non-routine contact with teachers. The model was tested on an evenly distributed sample (n=22,109) of students; one group attending elite colleges and the other attending less-selective colleges. McDonough and associates found a positive relationship, using both descriptive and ordinary least squares analyses, between maintaining personal or informal relationships with teachers and students attendance at an elite rather than non-elite institution.

This review of research suggests that teachers indeed play an influential role in the student college choice process. However, the research is limited in that most of the research on student college choice is not theoretically based and rely on data from single institutional studies (Kealy & Rockel, 1987; Leon, 1983; *Results of Entering Student Survey, 1993 Fall and 1994 Spring Semesters*, 1994) that ask students who have been admitted to a particular institution to reflect back on the college choice process. In addition, in terms of research design, the impact of teachers on students' choice of college is often blurred by the aggregation of "teachers and counselors" or "teachers and coaches" in the analyses (Hossler et al., 1989; Hossler & Stage, 1992; Maryland State Higher Education Commission Annapolis, 1977). Also, beyond race and gender, little is known about the characteristics of students who report that teachers influenced their decision about which institution to attend. Even studies that are based on students from multiple institutions, using multivariate analysis have limitations. Specifically, McDonough et al., (1997) relied on data from the Cooperative Institution Research Program (CIRP) 1994 Freshman Survey. CIRP has limitations regarding survey design and administration schedule for assessing the influence of teachers. CIRP is a longitudinal study designed to assess the effects of college on students. While the survey contains some specific questions regarding a student's choice of college, many of the survey questions are designed to capture students' values, attitudes, goals, self-concepts and degree and career aspirations at the point of entry. In addition, because CIRP is administered to first semester college freshmen, it relies on students' recollections of their college choice experiences, which, in many cases, may be four or more months after their point of decision.



In summary, there is a lack of theoretically and empirically based research examining the influences of teachers on student college choice. This knowledge gap limits the ability of secondary school administrators to develop effective college counseling strategies and limits postsecondary administrators' ability to develop effective student marketing and recruitment strategies.

### Conclusion

The literature revealed that econometric models were most useful in understanding college decision making but were limited in examining the nature of information that is available to decision makers (Hossler et al., 1989; Perna, 2006). On the contrary, sociological approaches provide insight on the ways in which individuals gather information, but do not provide explanation in the ways in which individuals make decisions based on this information (Hossler et al., 1989; Perna, 2006). Socio-psychological or combined models of college choice (Perna, 2006), representing the longitudinal nature of the college choice process appear to have more explanatory power than economic or sociological models in understanding the influence of significant persons (particularly, those outside the home) on student college choice behavior. Specifically, Perna's proposed conceptual model of student college choice (2006) appears to provide the most explanatory power when examining student college choice particularly when attempting to understand those students in the college choice process that indicate teachers are a significant influence in their decision-making..

The literature supported the notion that teachers sometimes play a critical role in shaping students educational aspirations (Ford & Thomas, 1997; Kumar & Hruda,

2001; McIntosh & Greenlaw, 1990; Richer et al., 1998; Weiler, 1997); however, the review provided limited understanding of teachers' influence in students' choice of college or in understanding students who identify teachers as influential in their choice of college. Most of the research (2006; Kealy & Rockel, 1987; Leon, 1983; *Results of Entering Student Survey, 1993 Fall and 1994 Spring Semesters*, 1994) is limited to descriptive analyses and often based on single institutional studies with no strong theoretical framework. While there appear to be some limited understanding of the role of teachers in student choice of college across racial/ethnic backgrounds (Ceja, 2000; McDonough & Antonio, 1996; McDonough & et al., 1997), very little empirical analysis has been conducted to understand teachers and student college choice across other student characteristics e.g., academic backgrounds, socio-economic, etc.

## Chapter 3 : Research Design

### Introduction

This exploratory study sought to provide a quantitative comparative analysis to understand how high school graduates who identified teachers as influential in their choice of college differ from those who do not in terms of their academic and demographic background and their college choice outcomes. The study utilized Perna's proposed model of college choice (Appendix 1) as a conceptual framework for understanding differences in the college choice process between high school graduates who identified teachers as significant influence compared to those who did not. Perna's (2006) conceptual model draws on both economic and sociological perspectives. Specifically, the model suggests that while students' college choice outcome is ultimately based on a comparison of the benefits and costs of enrolling, assessments of the benefits and costs are shaped by four contextual layers: 1) the individual's habitus, 2) school and community context, 3) the higher education context, and 4) the broader social, economic, and policy context.

This dissertation relied on data captured from College Board's 2006 Admitted Student Questionnaire (ASQ), a cross-sectional survey voluntarily administered by participating colleges and universities to gain insight into students' college choice decisions, that is, their decision to apply to and/or enroll in an institution. This chapter presents the research questions and describes the research design including the data, variables and methods of analyses. Last, the limitations of the research design are also discussed.

### Research Question

This study sought to understand high school graduates who identify teachers as significant influences in their choice of college. Specifically, the study addresses the following research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes?

### Data

Data for this study were drawn from student responses to the 2006 Admitted Student Questionnaire (ASQ), a market research tool developed by the College Board to help institutions better understand how admitted students – both enrolling and nonenrolling – perceive and rate the institution in areas that influence their decision to enroll. The ASQ is a cross-sectional survey voluntarily administered by participating institutions to admitted students. Specifically, the ASQ is designed to capture information on 1) the importance of various college characteristics and influences to students in choosing which college they will attend; 2) the participating college's ratings on these factors in comparison to other colleges considered by the student; 3) the degree of exposure to and comparative ratings of various sources of information about the college; 4) images of the college; 5) other colleges applied to and application status; 6) financial aid applications and awards; and, 7) personal and academic background characteristics. The survey also asks students to rate the opinions of influential people (e.g., parents, school counselors, teachers, friends, potential employers and graduate/professional schools) in their decisions to apply to and/or enroll at a particular institution.

This dissertation also used data from the US Census Bureau 2000 Census Demographic Profile data to develop measures for 1) cultural capital and 2) availability of resources. Specifically, student respondents' home zip codes were used to ascertain 1) education attainment level as a measure of cultural capital and 2) median family income as a measure of availability of resources.

### *Institutions*

This study draws on responses from students who were surveyed by colleges and universities that participated in the ASQ in 2006. The 41 participating institutions included 9 (22%) four-year public and 32 (78%) four-year private, not-for-profit institutions. Table 1 provides a breakdown of the participating institutions by Carnegie classification. It is important to note that an overwhelming portion of the sample applied to four-year private, not for profit institutions with the Carnegie classification of baccalaureate colleges (arts and sciences) and master colleges and universities (larger programs). Note: The 2006 ASQ data set was selected for use in this study because at the start of this study, the 2006 data file was the most recent *normalized* ASQ data file available through The College Board.

**Table 3-1. 2006 Admitted Student Questionnaire (ASQ) Participating Institutions**

Carnegie Classification	# Institutions	% Distribution
Baccalaureate Colleges - Arts and Sciences	11	28.2%
Baccalaureate Colleges – Diverse Fields	5	12.2%
Master’s Colleges and Universities – Smaller Programs	3	7.3%
Master’s Colleges and Universities - Medium Programs	5	12.2%
Master’s Colleges and Universities – Larger Programs	11	28.2%
Research Universities - Very High Research Activity	2	4.9%
Doctoral Research Universities	2	4.9%
Special Focus – Arts	2	4.9%

*Subjects*

The analytic sample includes admitted students, both enrolling and non-enrolling. The 41 institutions surveyed 59,250 admitted students with an overall 30% response rate, yielding 17,734 respondents. The survey response rate for enrolling students is 51% (n = 11,011) and for non-enrolling students is 18% (n = 6,723).

*Comparison Groups*

To address the research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes? This study relied on survey items numbered 21 through 26 – “Opinions important in choosing a college” to formulate the comparison groups. Specifically, the study relied on item number 23 which asked the students the importance of *teachers’ opinions* in their

choice of college to create the two groups under examination. That is, students who indicate teachers' opinions were "very important" in their choice of college will serve as the first comparison group and all other students (including those that indicate teachers' opinions as "somewhat important" and "not important") will serve as the second comparison group. These comparison groups were chosen to appraise the different components of Perna's model (Appendix 1). As noted in Table 3, only 20.3% (n=3,600) of the survey respondents indicated high school teachers' opinions were "very important" in their choice of college while 79.7% (n=14,134) of survey respondents *did not* indicate teachers opinions to be "very important" (including those who indicated teachers' opinions to be "somewhat important" or "not important").

#### *Variables*

Using Perna's proposed conceptual model for college choice as a framework (Appendix 1), the study variables included: *core college choice* variables including demand for higher education/preparation for college (grade point average and admissions test scores), expected benefits (important college characteristics) and expected costs (importance of costs, significance of financial aid and total amount of financial aid awarded); *habitus contextual factors* (layer 1) including demographic characteristics (gender and race/ethnicity), cultural capital (educational attainment level), social capital (family income and opinions important in choosing college), and supply of resources (family income, financial aid and number of institutions applied to); *school and community contextual factors* (layer 2) including availability of resources (median family income and total expenditures per family) and types of resources (type of high school); and *higher education contextual factors* (layer 3)

including marketing/recruitment (information sources), location (residency), distance and institutional characteristic (institutional control and institutional type). Given the nature and scope of this research - an exploratory study to develop an understanding of high school graduates who identify teachers as significant influences in their choice of college - and the lack of available data, variables identified in Perna's *social, economic and policy contextual factor* (layer 4) will not be explored.

Tables 2 and 3 map the constructs in Perna's conceptual model (Appendix 1) to the respective variables in the Admitted Student Questionnaire (ASQ) (Appendix 2):

**Table 3-2. Mapping of Perna's Core of College Choice Decision Constructs to Admitted Student Questionnaire (ASQ) Variables**

<b>Perna's Conceptual Model</b>	<b>Admitted Student Questionnaire</b>	<b>%Distribution</b>
<b>Core of College Choice Decision</b>		
<b>Demand for Higher Education/Preparation for College</b>	<b>Average HS GPA</b>	
	A (90-100) B (80-90) C (70-79) D or below (69 or below)	62.79 34.25 2.90 0.06
	<b>Admissions Tests</b>	
	<i>SAT Critical Reading</i>	
	No Score	37.56
	200-290	0.23
	300-390	1.10
	400-490	8.19
	500-590	18.64
	600-690	21.85
	700-790	10.44
	800	1.99
	<i>SAT Math</i>	
	No Score	36.93
	200-290	0.16
	300-390	1.16
	400-490	7.23
	500-590	18.15
	600-690	23.28
700-790	12.02	
800	1.07	
<i>ACT Composite</i>		
1-5	0.15	
6-10	0.39	



Perna's Conceptual Model	Admitted Student Questionnaire	%Distribution
	11-15 16-20 21-25 26-30 31-35 36	0.54 10.51 34.47 37.10 16.58 0.26
<b>Expected Benefits</b>	<b>Important College Characteristics (Very Important)</b> Quality of faculty Quality of majors of interest to you Overall academic reputation Quality of academic facilities Variety of courses Access to faculty Concentration on undergraduate education Prominent intercollegiate athletics Athletic programs in which you would participate Availability of extracurricular activities Access to off-campus cultural/recreational opportunities Availability of religious activities Quality of social life Attractiveness of campus Surroundings Part of the country college is located Quality of on-campus housing Ease of getting home Chance to be with students from different backgrounds	85.10 87.31 71.09 62.43 61.03 72.44 64.47 18.57 22.79 38.66 37.95 22.12 59.88 48.65 51.42 50.39 55.51 42.80 34.34
<b>Expected Costs</b>	<b>Importance of <i>net cost to your family in making a college choice</i></b> Very Important Somewhat Important Not Important	68.13 23.60 8.27
	<b>Significance of financial aid or college costs in decision to enroll in the college student plans to attend</b> Yes No	64.80 35.20
	<b>Total amounts of financial aid awarded by the college student plans to attend</b> less than \$5,000 \$5,000-\$9,999 \$10,000-\$14,999 \$15,000-\$19,999 \$20,000-\$24,999 \$25,000-\$29,999 \$30,000-\$34,999 \$35,000-\$39,999 \$40,000-\$44,999 \$45,000-\$49,999 \$50,000 and over.	56.90 9.37 9.42 8.39 5.86 3.83 2.78 1.47 1.26 0.40 0.32

**Table 3-3. Mapping of Perna’s Contextual Layers Affecting College Choice Decision Constructs to the Admitted Student Questionnaire (ASQ) Variables**

<b>Perna’s Conceptual Model</b>	<b>Admitted Student Questionnaire</b>	<b>%Distribution</b>
<b>Habitus (Layer 1)</b>		
<b>Demographic Characteristics</b>	<b>Gender</b> Female Male	65.14 34.86
	<b>Race/Ethnicity</b> American Indian or Alaskan Native Asian, Asian American, or Pacific Islander Mexican American or Chicano Puerto Rican Latin American, South American, Central American or other Hispanic Black or African American White Other	0.59 5.99 3.13 0.84 3.71 4.27 78.58 2.90
<b>Cultural Capital</b>	<b>Education Attainment Level - % Bachelor’s Degree or Higher (based on home zip code)</b> 0-4.999 5-9.999 10-14.999 15-19.999 20-24.999 25-29.999 30-34.999 35-39.999 40-44.999 45-49.999 50 and over	1.69 11.64 20.92 17.85 15.99 14.30 10.62 5.37 1.46 0.16 0
<b>Social Capital</b>	<b>Opinions Very Important in Choosing a College</b> High School Teacher Non-HS Teacher	20.28 79.72
	<b>Parent Income (See below)</b>	
<b>Supply of Resources</b>	<b>Parent Income</b> Less than \$30,000 \$30,000 to \$39,999 \$40,000 to \$59,999 \$60,000 to \$79,999 \$80,000 to \$99,999 \$100,000 to \$149,999 \$150,000 to \$199,999 \$200,000 or higher	11.38 6.02 14.67 14.35 14.18 21.20 6.50 11.71

<b>Perna's Conceptual Model</b>	<b>Admitted Student Questionnaire</b>	<b>%Distribution</b>
	<b>Financial Aid</b> Applied (Yes) Applied (No)  Received Aid (Yes) Received Aid (No)	66.56 33.44  50.47 49.53
	<b>Number of institutions to which student applied</b> 1-5 6-10 11-15 16-20 21 or more	60.42 33.00 5.71 0.70 0.16
<b>School and Community Context (Layer 2)</b>		
<b>Availability of Resources</b>	<b>Median Family Income (based on home zip code)</b> Less than \$30,000 \$30,000-\$39,999 \$40,000-\$59,999 \$60,000-\$79,999 \$80,000-\$99,999 \$100,000-\$149,999 \$150,000-\$199,999 \$200,000 or higher	2.49 7.20 39.63 29.29 12.47 7.93 0.92 0.07
<b>Types of Resources</b>	<b>Type of High School</b> Public Independent, Not Religiously Affiliated Independent, Catholic Other Independent, Religiously Affiliated	73.63 8.78 11.83 5.76
<b>Structural Support and Barriers</b>	Not Available	
<b>Higher Education Context (Layer 3)</b>		
<b>Marketing and Recruitment</b>	<b>Information Sources (Offered/Used)</b> Visits by admissions staff at your high school College-sponsored meetings in your home area College publications (catalogs, brochures, etc.) College videos or CD-ROMs College website Communications about financial aid (not aid decision) Electronic communications with the college Visit to campus On-campus interview with admissions staff Contact with the college after you were admitted Contact with faculty from the college Contact with coaches Contact with graduates of the college Contact with students who attend the college	43.32 34.74 91.37 31.23 95.47 86.64 85.18 86.34 55.43 92.66 61.74 32.48 44.13 70.06
<b>Location</b>	<b>Residence (Derived)</b> In-State Out-of-State	49.79 37.58

<b>Perna's Conceptual Model</b>	<b>Admitted Student Questionnaire</b>	<b>%Distribution</b>
	Unknown	12.63
<b>Institutional Characteristics</b>	<b>Institutional Control (school planning to attend)</b>	
	Public Private	28.07 71.93
	<b>Institutional Carnegie Classification (school planning to attend)</b>	
	Associate	0.78
	Bachelors	3.23
	Masters	22.28
	Research	43.43
	Other	2.78
<b>Social, Economic and Policy Context (Layer 4)</b>		
<b>Demographic Characteristics</b>	Not Available	
<b>Economic Characteristics</b>	Not Available	
<b>Public Policy Characteristics</b>	Not Available	

### **Core of College Decision**

The following sections describe in detail each of the core constructs and related survey variables considered in addressing the research question:

#### ***Demand for Higher Education/Preparation for College***

College choice research (Cabrera & La Nasa, 2000; Cabrera & La Nasa, 2000; Perna & Titus, 2004) suggests that academic preparation and academic achievement are the most important predictors of college enrollment. Among the measures most often used to assess preparation for college are high school curriculum and grade point average. Standardized test scores are often used to measure academic achievement (Perna, 2006).

#### ***Average High School Grades***

To examine the difference in average grades between students who report teachers as influential in their choice of college and those who do not, this study uses

the following average grade level categories: A (90 to 100), B (80 to 89), C (70 to 79), and D or Below (69 or below) as defined by College Board's Admitted Student Questionnaire (ASQ).

### ***Admission Test Scores***

To examine the difference in admission test scores between students who report teachers as influential in their choice of college and those who do not, this study uses the following categories of SAT Critical Reading and SAT Math scores as defined by College Board's Admitted Student Questionnaire (ASQ): No score; 200-290; 300 to 390; 400 to 490, 500 to 590; 600 to 690; 700 to 790; 800. The study uses the following categories of ACT Composite scores: 1-5; 6-10; 11 to 15; 16-20; 21-25; 26-30; 31-35; 36.

### ***Expected Benefits***

Based on her review and analysis of the literature, Perna (2006) reports that there are very few studies that examine the effects of expected monetary benefits on student college choice and even fewer that examine the effects of non-monetary benefits. Perna and Titus (2005) speculate that gender differences in expected benefits may be one cause of the higher observed college enrollment rates for women than for men.

### ***Important College Characteristics***

To examine the differences in expected benefits between students who report teachers as influential in their choice of college and those that do not, this study uses twenty college characteristics drawn from the questionnaire including quality of faculty, quality of majors, overall academic reputation and quality of facilities.

### ***Expected Costs***

In her review of the college choice literature, Perna (2006) notes that both the likelihood of enrolling in college and the type of college in which a student enrolls are related to tuition. Kane (1999) suggests that enrollment at public colleges and universities within a state declines when tuition increases and that changes in tuition tend to have a greater impact on enrollment at public two-year colleges versus public four-year institutions. To understand the difference in expected costs between students who report teachers as influential in their choice of college and those that do not, this study uses “importance of cost to family in making a college choice”, “significance of financial aid or college costs in decision to enroll in the college student plans to attend” and “total amounts of financial aid awarded by the college student plans to attend”.

#### ***Importance of net cost to family in making a college choice***

To examine the difference in importance of net costs to family in making a college choice between students who report teachers as influential in their choice of college and those that do not, this study uses the following categories: very important, somewhat important or not important.

#### ***Significance of financial aid or college costs in decision to enroll***

To examine the difference in significance of financial aid or college costs in decision to enroll between students who report teachers as influential in their choice of college and those who do not, this study uses the following response categories: yes or no.

### ***Total amounts of financial aid awarded by the college***

To examine the difference in total amounts of financial aid awarded by the college student plans to attend between students who report teachers as influential in their choice of college and those who do not, this study uses the following categories of aid: less than \$5,000; \$5,000 to \$9,999; \$10,000 to \$14,999; \$15,000 to \$19,999; \$20,000 to \$24,999; \$25,000 to \$29,999; \$30,000 to \$34,999; \$35,000 to \$39,999; \$40,000 to \$44,999; \$45,000 to \$49,999; \$50,000 and over.

The following sections describe in detail each of the contextual constructs and variables considered in addressing the research question.

#### ***Habitus (Layer 1)***

##### **Demographic Characteristics**

Perna (2006) identifies gender and race/ethnicity as important background variables in measuring college choice outcome.

##### ***Gender***

In her synopsis of the literature, Perna (2006) concludes that little research exists that focuses on the difference in college choice based on gender and that the available research suggests that the relationship between gender and college-choice outcomes is ambiguous. Perna's own research offers conflicting observations. Perna (2000) finds that women and men are equally likely to enroll in college after taking into account other variables. On the contrary, Perna and Titus (2005) found that women are more likely than men to enroll in both two-year and four-year colleges and universities and in-state public two-year institutions, in-state public four-year

institutions, in-state private four-year institutions, and out-of-state institutions in the fall after graduating from high school.

Research (Loudermilk, 1983) suggests that female students athletes are more likely than male students athletes to utilize teachers in the college choice process after controlling for other variables. To examine the difference in gender between students who report teachers as influential in their choice of college and those that do not, this study uses the following gender categories: female or male.

### ***Race/Ethnicity***

In her synopsis of the literature, Perna (2006) notes that several researchers found that African-Americans are more likely than Whites to enroll in four-year rather than two-year college (Plank & Jordan, 2001) and attend higher cost rather than lower-costs institutions (Hearn, 1991). While Perna (2000) found that Hispanics are as likely as Whites to enroll in a four-year college after graduating from high school, Plank and Jordan (2001) found that Hispanics are more likely than Whites to attend a four-year college than to enroll full-time in a two-year college or never enroll in college.

Research (McDonough & Antonio, 1996) suggests that African-American students are more likely than White students to utilize teachers in the college search process after controlling for other variables. In addition, McDonough and Antonio (1996) and Ceja (2000) found that teachers play a more influential role for students of color particularly in formulating the student's preference for a predominately white institution or more selective institution.



To examine the difference in race/ethnicity between students who report teachers as influential in their choice of college and those that do not, this study uses the following 8 racial/ethnic categories as defined by the ASQ questionnaire:

American Indian/Alaskan Native, Asian/Pacific Islander, Mexican American/Chicano, Puerto Rican, Latin American/Other Hispanic, Black/African American, White, Other.

### **Cultural Capital**

Perna (2006) notes that while research has shown that cultural capital has been shown to increase the frequency of interactions about postsecondary plans between high school students and “high-status” individuals, such as teachers, school counselors, and peers (DiMaggio & Mohr, 1985), other research shows that an indicator of whether the student attends a music, art, or dance class at least once a week is unrelated to enrollment in either a two-year or four-year college or university (Perna & Titus, 2005). In her proposed conceptual framework, Perna identifies cultural knowledge and value of college attainment as important measures of cultural capital. For the purpose of this study, education attainment level (based on zip-code) is used as a measure of cultural capital.

### ***Education Attainment Level***

To examine the difference in educational attainment level between students who report teachers as influential in their choice of college and those that do not, this study draws from US Census Bureau 2000 Census Demographic Profile data. Specifically, zip codes from survey respondents are used to capture census data on percent of population in the student’s zip code area that is 25 and older with

bachelor's degrees. The study will use the following categories of percent w/ bachelor's degrees: 0-4.999; 5-9.999; 10-14.999; 15-19.999; 20-24.999; 25-29.999; 30-34.999; 35-39.999; 40-44.999; 45-49.999; 50 and over.

### **Social Capital**

In her review of the college choice literature, Perna (2006) notes that parents, peers, teachers and school counselors are transmitters of social capital. Perna suggests that the availability of the types of social capital that promote college choice may be manifested through information about college and assistance from school officials with college-choice processes. This study uses "parent income" and "opinion important in choosing a college" as measures of social capital.

### ***Parent Income***

McDonough, Korn and Yamasaki (1997) suggest that students from higher income families tend to have access to additional resources, such as private college counseling, private tutoring, and test preparation to assist them in the college choice process. In addition, students from higher income families are likely to have well-educated parents who could serve as socializing agents, therefore the constructs of social capital would suggest that these students are less likely to rely on teachers in the college choice process. To examine the difference in parent income levels between students who report teachers as influential in their choice of college and those that do not, this study uses the following parent income level categories (as defined by the ASQ questionnaire): less than \$30,000; \$30,000 to \$39,000; \$40,000 to \$59,000, \$60,000 to \$79,000; \$80,000 to \$99,000; \$100,000 to \$149,000; \$150,000 to \$199,000; \$200,000 or higher.

### *Opinion Important in Choosing a College*

A number of studies note that parents are a significant factor in the college choice process (Ad Council, 2006; Bateman & Kennedy, 1999; Bers & Galowich, 2002; Broekemier & Seshadri, 1999; Cabrera & La Nasa, 2000; Cabrera & LaNasa, 2001; Choy et al., 2000; Rowan-Kenyon et al., 2008). Several studies (Hossler et al., 1999; Litten et al., 1983; Tillery & Kildergaard, 1973) on parental influence on student college choice note that it is specifically parents' perceptions of cost (affordability) of the college or the framing of students' realistic options that influence the student.

Likewise, research on student college choice (Fallon, 1997; McDonough, 2005; Perna et al., 2008; Plank & Jordan, 2001; Rosenbaum et al., 1996; Venezia et al., 2003) generally agrees that school counselors and the presence of a strong guidance program have a degree of influence on students' decisions to go to college as well as their choice of college.

Chapman (1981) found that in selecting a college, students are strongly persuaded by the comments and advice of their friends. Chapman (1981) further notes that where a student's close friends go to college will influence the student's decision about which institution to attend. Perez and McDonough (McDonough & Perez, 2008) found that as primarily first generation college students, Latino and Latina students rely heavily on siblings and peers in addition to relatives and school contacts for postsecondary planning and for considering a college consideration and application set.

Perna, Rowan-Kenyon, Thomas, Bell, Anderson and Li (2007) found tremendous variability in the use of high school teachers to provide college counseling. The researchers noted that in most schools teachers play a very limited role in providing college counseling to students while at other schools assistance with college counseling was at the discretion of the teacher. Still, at some schools counselors work with teachers to systematically infuse college-related information into the curriculum, particularly into English classes (Perna et al., 2007). In terms of their role in students choice of college, McDonough and Antonio (1996) and Ceja (2000) found that teachers play a more influential role for students of color particularly in formulating the student's preference for a predominately white institution or more selective institution.

To examine opinion important in choosing a college as a measure of social capital, this study uses the following categories: high school teachers and non-high school teachers. In this study, non-high school teachers are defined as parents, guidance counselors, friends, potential future employers; and graduate and professional schools.

### **Supply of Resources**

Perna (2006) contends that low levels of financial resources may constrain a family's ability to pay the cost of investment in higher education and consequently impact their ability to realize the benefits that exceed the costs. In her synopsis of the research, Perna (2006) notes that while there are inconsistencies in the research regarding the relationship between family income and educational aspiration, there is a consistent positive relationship between family income and indicators such as

number of applications submitted, enrollment in either a two-year or four-year institution and number of years of school completed.

This study uses parent income, application for financial aid and number of institutions to which student applied as measures of supply of resources.

### ***Parent Income***

To examine the difference in parent income levels between students who report teachers as influential in their choice of college and those that do not, this study uses the following parent income level categories as defined by the ASQ questionnaire: less than \$30,000; \$30,000 to \$39,000; \$40,000 to \$59,000, \$60,000 to \$79,000; \$80,000 to \$99,000; \$100,000 to \$149,000; \$150,000 to \$199,000; \$200,000 or higher.

### ***Applied for Financial Aid***

To examine the difference in application for financial aid between students who report teachers as influential in their choice of college and those who do not, this study uses the following categories of financial aid: did not apply; applied but did not receive aid and applied and received aid.

### ***Number of institutions to which student applied***

To examine the difference in number of institutions to which the student applied between students who report teachers as influential in their choice of college and those that do not, this study uses the following categories of number of institutions applied to: 1 to 5; 6 to 10; 11 to 15; 16-20; and 21 or more.

## *School and Community Context (Layer2)*

### **Availability of Resources**

Perna (2006) explains that the proposed conceptual model incorporates both Bourdieu's (1986) and Lin's (2001) assumptions that an individual's behavior cannot be understood without understanding the social context (school and community) in which the behavior occurs. Perna and Titus (2005) found that college enrollment rates are positively related to the volume of economic, cultural, and social capital that is available through social networks at the school attended. This study uses median family income as a measure of availability of resources.

### ***Median Family Income***

To examine the difference in median family income between students who report teachers as influential in their choice of college and those who do not, this study uses data from US Census Bureau 2000 Census Demographic Profile data. Specifically, zip codes from survey respondents are used to capture census data on median family income. The following median family income categories will be used: Less than \$30,000; \$30,000-\$39,999; \$40,000-\$59,999; \$60,000-\$79,999; \$80,000-\$99,999; \$100,000-\$149,999; \$150,000-\$199,999; \$200,000 or higher.

### **Type of Resources**

Perna further contends that aspects of the school context shape college choice such as urging students to consider their career aspirations when making high school curricular choices, availability of gifted and talented program, and an orientation towards college (e.g. a mission statement in which college preparation is the "default")

curricular track). This study uses type of high school as a measure of type of resources.

### ***Type of High School***

To examine the difference in type of high school attended between students who report teachers as influential in their choice of college and those who do not, this study uses the following categories for type of high school: public, independent/non religious, independent/catholic, other independent/religious.

### ***Higher Education Context (Layer 3)***

In her summary of the research, Perna (2006) notes that various characteristics of the higher education context influence student college choice including institutional marketing, institutional location, characteristics as well as competition.

### **Marketing and Recruitment**

#### ***Information Sources***

To examine the difference in the role of marketing and recruitment between students who report teachers as influential in their choice of college and those who do not, this study uses the following information sources: visits by admissions staff at your high school, college-sponsored meetings in your home area, college publications (catalogs, brochures, etc.), college videos or CD-ROMs, college website, communications about financial aid (not aid decision), electronic communications with the college, visit to campus, on-campus interview with admissions staff, contact with the college after you were admitted, contact with faculty from the college, contact with coaches, contact with graduates of the college, and contact with students who attend the college.

## **Location**

### ***Residence***

Segall (1989) found that teachers perceived that they had opportunities for having long-term influence on their students, especially extremely capable students who generally leave the state to attend college. In this study, residence is measured as where the student lives in relation to the college. To examine the difference between students who report teachers as influential in their choice of college and those who do not, this study uses two categories of residence: student living in same state as college is considered “in-state resident”; student living in different state as college is considered “out-of-state resident”. Note: “in-state” and “out-of-state” residency status was derived from student’s home zip-code and the state of the college selected to attend.

## **Institutional Characteristics**

### ***Institutional Control***

McDonough and Antonio (1996) and Ceja (2000) found that teachers play a more influential role for students of color particularly in formulating the student’s preference for a predominately white institution or more selective institution. To examine student choice outcome in terms of institutional control between students who report teachers as influential in their choice of college and those who do not, this study uses two categories of institutional control – public and private.

### ***Institutional Type***

To examine the difference in institutional type between students who report teachers as influential in their choice of college and those who do not, this study uses



the following categories (groupings of Carnegie Classifications) to define institutional type: Associate Colleges, Baccalaureate Colleges, Master's Colleges and Universities, and Research Universities/Doctoral Research Universities and Other.

*Social, Economic and Policy Context (Layer 4)*

Perna (2006) suggests that student college choice is shaped by the broader social, economic and policy context. According to Perna, social context may include demographic characteristics of the population such as percentage of population that holds a bachelors degree. Economic context may include characteristics of the labor market such as state poverty rates, and policy context may include policies and structures that discourage, or encourage, college enrollment such as those affecting student financial aid and tuition.

Given the nature and scope of this study, an exploratory study to develop an understanding of students who report teachers as influential in their choice of college, and the limited availability of relevant data, this study will not examine the broader social, economic and political contextual factors identified by Perna.

*Analysis*

To examine the academic and demographic differences and college choice outcomes between high school graduates who indicate teachers as influential in their choice of college and those who do not, this study used cross-tabulations, descriptive and inferential statistics, and test of differences in proportions analysis.

*Cross-Tabulation*

Cross-tabulations or contingency tables display the joint distribution of two or more variables. Cross-tabulation depicts how two variables inter-relate and helps the

researcher determine if there are patterns of interaction. Among the many benefits of cross-tabulations is the fact that they can be used with any level of data including nominal, ordinal, interval or ratio (Wonnacott, 1990).

In this study, cross tabs were used to depict the inter-relatedness of:

1. Students' indication of the importance of "opinions of high school teachers" in their college choice and the *core college choice* variables identified in Perna's conceptual model including demand for higher education/preparation for college (grade point average and admissions test scores), expected benefits (important college characteristics) and expected costs (importance of costs, significance of financial aid and total amount of financial aid awarded).
2. Students' indication of the importance of "opinions of high school teachers" in their college choice and variables identified in Perna's *habitus contextual layer 1* including demographic characteristics (gender and race/ethnicity), cultural capital (educational attainment level), social capital (family income and opinions important in choosing college), and supply of resources (family income, financial aid and number of institutions applied to).
3. Students' indication of the importance of "opinions of high school teachers" in their college choice and variables identified in Perna's *school and community contextual layer2* including availability of resources (median family income) and types of resources (type of high school).
4. Students' indication of the importance of "opinions of high school teachers" in their choice of college and variables identified in Perna's *higher education*

*contextual layer 3* including marketing/recruitment (information sources), and location (residency).

5. Students' indication of the importance of "opinions of high school teachers" in their choice of college and students' *college choice outcomes* (i.e. institutional control and institutional type).

#### *Descriptive Statistics and Analysis*

Descriptive analysis describes conditions, populations, and phenomena as they are. Descriptive statistics is the basic measure used to summarize or describe a set of quantitative data. Common descriptive techniques used in statistics include measures of central tendency, such as the mean (or arithmetic average) and median (Vogt, 1993). In this study, percentages are used to summarize the data and to describe the distribution of survey respondents across the categories of variables. Specifically, descriptive statistics will be used to characterize the survey respondents across Perna's core and contextual college choice variables outlined above as well as their college choice outcomes. Where appropriate, graphs are used to depict the frequency of each category of data points for each study group (students who indicated opinions of high school teachers were "very important" versus those who did not).

#### *Inferential Statistics and Analysis*

Inferential statistics and analysis attempt to reach a conclusion beyond the immediate data alone. Inferential statistics is used to predict the probability that an observed difference between groups is a dependable observation and not simply by chance (Vogt, 1993).

#### **Test of Independence**

The chi-square test is a statistical test that can be used to determine if there is a significant relationship between variables (Gall, Borg & Gall, 2005). Specifically, the Pearson's chi-square test allows the researcher to test the independence of two categorical variables. A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other (Schlotzhauer, 1997). That is, whether observed frequencies are significantly different from expected frequencies. In this study, the Pearson's chi-square will be used to analyze the relative independence of 1) students indication (or non-indication) that teachers opinions were "very important" in their choice of college and students' core and contextual college choice variables and 2) students indication (or non-indication) that teachers opinions were "very important" in their choice of college and students' college choice outcome.

### **Measure of Strength of Association**

To test the strength of association between the variables, this study relies on Cramer's V correlation and Phi coefficient. Cramer's V and Phi coefficient are post-estimation tests that assess correlation in tables. Cramer's is frequently used with analyses involving large dataset and can be used with tables that are larger than 2x2 while Phi coefficient is used with 2X2 tables (Stockburger, 1996). Cramer's V correlation and Phi coefficient will be used to test the strength of association of 1) students indication (or non-indication) that teachers opinions were "very important" in their choice of college and students' core and contextual variables and 2) students indication (or non-indication) that teachers opinions were "very important" in their choice of college and students' college choice outcomes.

## **Test for Significance in Difference of Proportions**

To compare the difference in the observed proportions between the two independent populations (students reporting teachers opinions as “very important” versus those who do not) across the variables in Perna’s model, this dissertation study uses the z-test for two proportions. The z-test allows for the testing of the hypotheses of the significance of the difference between two proportions. (Sirkin, 2006). The test statistic is a z-score ( $z$ ) defined by the following equation:  $z = (p_1 - p_2) / SE$ , where  $p_1$  is the proportion from sample 1,  $p_2$  is the proportion from sample 2, and SE is the standard error of the sampling distribution (Petlier, 2011).

### Assumptions

The researcher made the following assumptions in performing the analyses and in presenting the results:

- Although the data was missing approximately 17 percent (~3,000) of the frequencies due to unanswered questions or unknown/invalid responses, the effective sample size (~14,000) was representative of the survey population.
- In testing the independence of the variables, the following hypotheses guided the analyses:
  - $H_0$  = The variables are associated
  - $H_a$  = The variables are not associated
- In assessing Pearson’s Chi-square as a test of independence, a  $p$ -value below the conventionally-accepted 0.05 significance level would be considered *statistically associated*. This would suggest that there is very low probability that the observed distribution is due entirely to chance in which case the null hypothesis

cannot be rejected. A  $p$ -value that is above the 0.05 significance level would be considered *not statistically associated* and would provide reasonable probability that the observed distribution is due entirely to chance in which case the null hypothesis would be rejected (Gall et al., 2005).

- In assessing the Cramer's V coefficient or Phi coefficient as measures of the strength of relationship (association) between the two variables, the values were interpreted as follows using Cohen's (1988) interpretation of the correlation coefficient as a guide:

- If the correlation is less than or equal to  $\pm .30$ , then a weak relationship between the two variables is present.

- If the correlation is between  $\pm 0.30$  and 0.5, then a moderate relationship between the two variables is present

- If the correlation is greater than or equal to 0.5, then a strong relationship between the two variables is present

- In testing the difference between proportions, the following hypotheses guided the analysis:

- $H_0$  = The sample population proportions are equal

- $H_a$  = The sample population proportions are not equal

- In assessing the z-score as a test of differences between proportions, a Normal Distribution Calculator will be used to assess the  $p$ -value associated with the z-score. A  $p$ -value below the conventionally-accepted 0.05 significance level would be considered *statistically significant* and would provide reasonable evidence that the observed differences in proportion are not equal while a  $p$ -value that is above the 0.05

significance level would be considered *not statistically significant* and would provide reasonable evidence that the observed differences in proportions are equal.

### Limitations

This study has several limitations. First, because the study relies on a cross-sectional study, the researcher will not be able to infer causal connections between the importance of teachers' opinions and the college choice variables embedded into Perna's model and the college choice outcomes.

Second, the sample is limited to responses from four-year public and private postsecondary institutions participating in the survey of newly admitted undergraduate students. Therefore, the findings and results are limited in scope and in the extent to which they can be generalized. For example, the findings may not be as useful to those seeking to understand the decision making behavior of prospective graduate school students, nontraditional students such as transfer students, returning students or mature adult populations or students considering an institutional type not adequately represented by the survey participants, i.e. historically black colleges and universities.

Third, the overall student response rate was 30 percent representing a 51 percent response rate for enrolling students and 18 percent response rate for non-enrolling. The overall response rate represents a relatively low number of admitted students, particularly non-enrolling students.

Fourth, the study relies on students' recollection of the college search process and the factors that influence that process. As with any questionnaire survey, timing is critical for accurate recall. The ASQ is typically administered to students in their

senior year immediately after the May 1 National Decision Deadline. This timing helps ensure that students are reflecting on their experience with as much accuracy as possible. However, some institutions choose, for various reasons, to administer the survey at later points and time (e.g. summer or early fall). A time lag of several months between the point at which students make their decision about which college to attend and completion of the survey may present concerns about data quality.

Fifth, the study was limited to only those factors that could be measured by the Admitted Student Questionnaire (ASQ). For example, the study relies on student responses to one survey item to measure the variable of interest in this study – teacher influence. Ideally, multiple survey items would have been used to construct a factor composite or a more reliable indicator of this measure. In addition, while this study may assist us in understanding those students most influenced by teachers’ opinions and even understanding college choice outcomes of these students, this study is limited in terms of developing an understanding of exactly what teachers do to influence students’ decision-making.

Sixth, survey respondents’ interpretation of “teacher” may have varied thereby affecting their responses and the quality of the data. That is, does “teacher” include only classroom instructional teachers or does it encompass high school coaches? Similarly, is the designated instructor for, example, the AVID (Advancement Via Individual Determination) course, a college-readiness system designed to increase the number of students enrolled in four year colleges in the U.S., considered a teacher or a school counselor?



Seventh, the study lacks indicators to appraise in a full manner Perna's constructs of *demand for higher education/preparation for college* and *structural support and barriers* as well as the constructs associated with the *social, economic and policy context* (Layer 4).

Despite these limitations, this exploratory research provides useful insight about students who report teachers' opinion as "very important" in their choice of college. The following chapter presents the results of the study followed by a discussion of their relevance to prior research.

## Chapter 4 : Research Finding

### Introduction

This exploratory study sought to understand how high school graduates who identified teachers as influential in their choice of college differ from those who do not in terms of academic and demographic background variables. Using Perna's proposed college choice model as a guide, contingency tables were constructed (Appendix III) to summarize the data and to analyze and compare the study groups (students who indicated teacher's opinions were "very important" in their choice of college and those who did not indicate teacher's opinions were "very important" in their choice of college) across various college choice variables (Tables 2 and 3). This section begins with a descriptive summary of the survey respondents in terms of academic and demographic characteristics and continues with an analyses of the two populations (students who reported high school teachers' opinions as "very important" in their choice of college and those who did not) in terms of Perna's core and contextual college choice variables.

### Descriptive Summary

Tables 2 and 3 highlight the distribution of survey respondents by Perna's core and contextual college choice variables. In terms of key demographic variables, of the 17,734 respondents to the 2006 Admitted Student Questionnaire (ASQ), 65.14 percent were female and 34.86 percent were male. The largest proportion of respondents were White (78.58 percent) followed by Black or African American (4.27 percent). Slightly more than 20 percent of the students reported parent incomes

in the \$100,000 – \$149,999 range followed by approximately 14 percent reporting parent incomes in the \$40,000-\$59,999, \$60,000-\$79,999 and the \$80,000-\$99,999 ranges.

In terms of key academic variables, of the 17,734 respondents to the 2006 Admitted Student Questionnaire (ASQ), approximately 63 percent reported grade averages of A (90-100), 34 percent reported grade averages of B (80-89), 3 percent reported grade averages of C (70-79) and less than 1 percent reported a grade average of D or lower. The largest proportion of students did not report either a SAT critical reading scores (37.65 percent) or a SAT math scores (36.93 percent), however of those reporting SAT scores the largest proportion of students reported scoring in the 600-690 range on both the SAT critical reading exam (21.85 percent) and the SAT math exam (23.28 percent). Approximately 73.63 percent of the respondents reported attending a public high school followed by 11.83 percent attending an independent Catholic high school.

The section that follows highlights the results of the statistical analyses of the two populations of students under consideration (students reporting teachers' opinions as "very important" in their choice of college and students who did not) across each of Perna's core and contextual college choice variables.

### Results of Analyses

As noted in Table 3, of the 17,734 respondents to the 2006 Admitted Student Questionnaire (ASQ), 20.3 percent (3,600) of the survey respondents indicated teachers' opinions were "very important" in their choice of college, while 79.7 percent (14,134) of respondents *did not* indicate that teachers' opinions were "very

important” in their choice of college (including respondents who indicated teachers opinions to be “somewhat important “or “not important”). Contingency tables (Appendix III) were constructed and statistical analyses were conducted (i.e. Chi-square and Cramer’s V tests) to offer insight to the two populations of students with respect to Perna’s core and contextual college choice variables. Table 4-1 summarizes the results of the statistical analyses. In addition, for those variables found to be statistically associated (Chi-square  $p$ -value<.05), Table 4-2 summarizes the results of the z-test for significance of differences of proportions. The section that follows provides a detailed review of the results of the analyses.

**Table 4-1. Importance of High School Teachers Opinions: Summary of Results of Indicators Across the Different Constructs In Perna’s Conceptual Model**

Layer and Indicators	$\chi^2$	$df$	$p$ -value	Correlation (Cramer’s V)
Core of College Choice Decision				
Demand for Higher Education/Preparation for College				
HS GPA	27.72	3	<.0001	0.0451
SAT Critical Reading	205.74	7	<.0001	0.1193
SAT Math	155.80	7	.0001	0.1039
ACT Composite	116.55	7	<.0001	0.1470
Expected Benefits				
Quality of faculty	88.26	2	<.0001	0.0783
Quality of majors	62.20	2	<.0001	0.0657
Academic reputation	117.41	2	<.0001	0.0904
Quality of academic facilities	158.74	2	<.0001	0.1053
Variety of courses	158.25	2	<.0001	0.1049
Access to faculty	168.82	2	<.0001	0.1085
Concentration on undergraduate education	132.91	2	<.0001	0.0965
Prominent intercollegiate athletics	161.17	2	<.0001	0.1061.
Availability of athletic programs to participate	94.52	2	<.0001	0.0811
Extracurricular activities	227.53	2	<.0001	0.1259

Layer and Indicators	$\chi^2$	<i>df</i>	<i>p-value</i>	Correlation (Cramer's V)
Access to off-campus opportunities	121.31	2	<.0001	0.0920
Religious activities	97.51	2	<.0001	0.0824
Quality of social life	57.82	2	<.0001	0.0636
Attractiveness of campus	179.71	2	<.0001	0.1120
Surroundings	106.86.	2	<.0001	0.0863
College location	84.77	2	<.0001	0.0768
Quality of on-campus housing	174.11	2	<.0001	0.1102
Easiness of getting home	289.67	2	<.0001	0.1421
Diversity of students	292.02	2	<.0001	0.1426
Expected Costs				
Importance of Net Cost	150.31	2	<.0001	0.1023
Significance of Financial Aid or Cost	18.05	1	<.0001	0.0366
Total Amounts of Financial Aid Awarded	15.02	10	0.1313	0.0322
Habitus (Layer 1)				
Demographic Characteristics				
Gender.	2.11	1	0.1467	-0.0124
Race/Ethnicity.	57.87	7	<.0001	0.0652
Cultural Capital				
% Bachelors Degree (Based on Zip Code).	121.76	9	<.0001	0.0982
Social Capital				
Parent Income	103.87	7	<.0001	0.0953
Supply of Resources				
Parent Income	103.87	7	<.0001	0.0953
Applied for Financial Aid	11.28	1	0.0008	-0.0485
Number of Institutions Applied	34.25	4	<.0001	0.0493
School and Community Context (Layer 2)				
Availability of Resources				
Median Family Income (Based on Zip Code)	103.38	7	<.0001	0.0904
Types of Resources				
Type of High School.	2.88	3	0.4099	0.0146
Structural Support and Barriers	--	--	--	--
Higher Education Context (Layer 3)				
Marketing and Recruitment				
Visits by admissions staff	41.49	1	<.0001	-0.0540

Layer and Indicators	$\chi^2$	<i>df</i>	<i>p-value</i>	Correlation (Cramer's V)
Meetings in home area	40.99	1	<.0001	-0.0537
College publications	0.00	1	0.9239	0.0008
College videos or CD-ROMS	117.63	1	<.0001	-0.0910
College websites	0.83	1	0.3615	-0.0077
Communications about financial aid	32.59	1	<.0001	-0.0479
Electronic communications	14.85	1	<.0001	-0.0323
Visit to campus	0.03	1	0.8622	0.0015
On-campus interview	12.50	1	0.0004	-0.0297
Contact with college after admission				
Contact with faculty	61.45	1	<.0001	-0.0658
Contact with coaches	35.09	1	<.0001	-0.0497
Contact with graduates	53.95	1	<.0001	-0.0617
Contact with students	12.20	1	0.0005	-0.0293
Location				
In-State/Out-State Residence	81.12	2	<.0001	0.0747
Institutional Characteristics				
Institutional Control	4.99	3	0.1723	0.0189
Institutional Carnegie Classification	74.11	4	<.0001	0.0729
Social, Economic and Policy Context (Layer 4)				
Demographic Characteristics	--	--	--	--
Economic Characteristics	--	--	--	--
Public Policy Characteristics	--	--	--	--

**Table 4-2. Importance of High School Teachers Opinions: Summary of Significance of Differences of Proportions Across The Different Constructs in Perna’s College Choice Model**

Percent %	Importance of High School Teachers’ Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
<b>High School Grades</b>				
A (90-100)	58.57	63.87	-5.30	-5.15**
B (80-89)	38.18	33.24	4.94	4.89**
C (70-79)	3.14	2.84	0.3	0.83
D or below(69 or below)	0.11	0.05	0.06	1.20
<b>SAT Critical Reading Score</b>				
200-290	0.37	0.19	0.18	1.81
300-390	2.09	0.85	1.24	5.77**
400-490	11.60	7.30	4.30	7.62**
500-590	19.54	18.40	1.14	1.42
600-690	17.09	23.08	-5.99	-7.04**
700-790	7.16	11.29	-4.13	-6.55**
800	0.87	2.28	-1.41	-4.90**
No Score	41.27	36.60	4.67	4.68**
<b>SAT Math Score</b>				
200-290	0.34	0.11	0.23	2.71**
300-390	1.68	1.02	0.66	3.01**
400-490	9.62	6.62	3	5.63**
500-590	20.15	17.63	2.52	3.17*
600-690	18.70	24.47	-5.77	-6.63**
700-790	8.14	13.03	-4.89	-7.31**
800	0.64	1.18	-0.54	-2.54*
No Score	40.73	35.94	4.79	4.83**
<b>ACT Score</b>				

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
1-5	0.19	0.14	0.05	0.37
6-10	0.37	0.39	-0.02	-0.09
11-15	1.12	0.39	0.73	2.91**
16-20	17.03	8.90	8.13	7.75**
21-25	40.22	33.05	7.17	4.42**
26-30	28.34	39.27	-10.93	-6.62**
31-35	12.44	17.60	-5.16	-4.06**
36	0.28	0.25	0.03	0.15
Quality of Faculty				
Very Important	90.56	83.68	6.88	9.36**
Somewhat Important	9.17	15.67	-6.5	-8.99**
Not Important	0.27	0.65	-0.38	-2.44*
Quality of Majors				
Very Important	91.59	86.20	5.39	7.86**
Somewhat Important	8.10	13.16	-5.06	-7.54**
Not Important	0.30	0.64	-0.04	-2.16*
Academic Reputation				
Very Important	79.11	69.01	10.01	10.80**
Somewhat Important	19.80	29.65	-9.85	-10.67**
Not Important	1.08	1.33	-0.25	-1.08
UG Education				
Very Important	73.45	62.14	11.31	11.41**
Somewhat Important	24.44	34.04	-9.60	-9.93**
Not Important	2.11	3.82	-1.71	-4.50**
Athletic Programs Avail				
Very Important	28.52	21.31	7.21	8.33**



Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
Somewhat Important	37.62	36.51	1.11	1.11
Not Important	33.86	42.18	-8.32	-8.21**
Off-Campus Opp				
Very Important	46.56	35.72	10.84	10.81**
Somewhat Important	43.84	51.12	-7.28	-7.05**
Not Important	9.60	13.16	-3.56	-5.21**
Religious Activities				
Very Important	27.30	20.78	6.52	7.61**
Somewhat Important	34.89	31.96	2.93	3.03**
Not Important	37.80	47.26	-6.46	-9.19**
Social Life				
Very Important	65.98	58.30	7.68	7.57**
Somewhat Important	31.24	37.99	-6.75	-6.77**
Not Important	2.78	3.71	-0.93	-2.44*
Surroundings				
Very Important	59.86	49.23	10.63	10.29**
Somewhat Important	35.80	45.75	-9.95	-9.72**
Not Important	4.34	5.02	-0.68	-1.52
Part of Country				
Very Important	57.84	48.44	9.4	9.20**
Somewhat Important	32.04	39.44	-7.40	-7.39**
Not Important	10.02	12.12	-2.1	-3.16**
Academic Facilities				
Very Important	72.46	59.84	12.62	12.59**
Somewhat Important	26.52	38.56	-12.04	-12.12**
Not Important	1.02	1.60	-0.58	-2.32*

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
Variety of Courses				
Very Important	71.06	58.43	12.63	12.55*
Somewhat Important	27.73	39.51	-11.78	-11.83*
Not Important	1.22	2.06	-0.84	-3.01*
Access to Faculty				
Very Important	81.97	69.97	12.0	12.99**
Somewhat Important	17.29	28.70	-11.41	-12.54**
Not Important	0.75	1.33	-0.58	-2.57**
Intercollegiate Activities				
Very Important	25.69	16.72	8.97	11.15**
Somewhat Important	37.60	35.98	1.62	1.63
Not Important	36.72	47.30	10.58	10.29**
Avail of Extracurricular				
Very Important	50.47	35.60	14.87	14.79**
Somewhat Important	43.25	54.08	-10.83	-10.51**
Not Important	6.30	10.32	-4.02	-6.65**
Attractive Campus				
Very Important	59.64	45.80	13.84	13.40**
Somewhat Important	36.83	49.55	-12.72	-12.33**
Not Important	3.52	4.65	-1.13	-2.66**
Qlty On-Campus Housing				
Very Important	65.98	52.80	13.18	12.83**
Somewhat Important	26.56	38.98	-12.39	-12.49**
Not Important	7.46	8.23	-0.77	-1.36
Ease of Getting Home				
Very Important	56.61	39.24	17.37	16.98**

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
Somewhat Important	32.89	45.02	-12.13	-11.86**
Not Important	10.50	15.74	-5.24	-7.16**
Student Diversity				
Very Important	47.38	30.96	16.42	16.74**
Somewhat Important	41.42	51.25	-9.83	-9.52**
Not Important	11.21	17.80	-6.59	-8.61**
Net Cost to Family				
Very Important	77.35	65.74	11.61	12.07**
Somewhat Important	17.64	25.14	-7.5	-8.56**
Not Important	5.01	9.12	-4.11	-7.23**
Cost or Aid Significant?				
Yes	68.28	63.92	4.36	4.25**
No	31.72	36.08	-4.36	-4.25**
Total Aid Received	----	----	----	----
Gender	----	----	----	----
Ethnicity				
American Indian/Alaskan Native	0.65	0.57	.08	0.50
Asian, Asian American, Pacific Islander	7.50	5.60	1.9	3.75**
Mexican American or Chicano	3.95	2.92	1.03	2.77*
Puerto Rican	1.09	0.77	0.32	1.61
Latin American, South American, Central American, or other Hispanic	4.93	3.40	1.53	3.79**
Black or African American	5.36	3.99	1.37	3.18**
White	73.61	79.84	6.23	-7.12**
Other	2.90	2.89	0.01	0.01

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
%w Bachelor's Degrees				
0-4.999	2.35	1.53	0.82	2.89**
5-9.999	15.27	10.72	4.55	6.40**
10-14.999	24.25	20.08	4.17	4.62**
15-19.999	19.07	17.54	1.53	1.81
20-24.999	14.13	16.46	-2.33	-2.87**
25-29.999	11.77	14.93	-3.16	-4.07**
30-34.999	7.89	11.30	-3.41	-5.00**
35-39.999	3.92	5.74	-1.82	-3.63**
40-44.999	1.18	1.54	-0.36	-1.35
45-49.999	0.16	0.16	-0.00	-0.02
50 and over	0.00	0.00	0.00	----
Parent Income				
Less than \$30,000	14.67	10.53	4.14	5.61**
\$30,000 to \$39,999	7.51	5.64	1.87	3.38**
\$40,000 to \$59,999	17.20	14.02	3.18	3.87**
\$60,000 to \$79,999	14.89	14.21	0.68	0.83
\$80,000 to \$99,999	13.94	14.24	-0.3	-0.337
\$100,000 to \$149,999	18.28	21.94	-3.66	-3.87**
\$150,000 to \$199,999	5.62	6.73	-1.11	-1.93
\$200,000 or higher	7.89	12.68	-4.79	-6.42**
Applied for Fin Aid				
Yes	61.89	67.68	-5.97	-3.36**
No	38.11	32.32	5.79	3.36**
Schools Applied To				
1-5	64.69	59.33	5.36	5.23**

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
6-10	29.98	33.78	-3.80	-3.87**
11-15	4.46	6.03	-1.57	-3.24**
16-20	0.59	0.72	-0.13	-0.75
21 or more	0.28	0.13	0.15	1.72
Median Family Income				
Less than \$30,000	3.25	2.30	0.95	2.75*
\$30,000 to \$39,999	10.22	6.44	3.78	6.60**
\$40,000 to \$59,999	43.56	38.63	4.93	4.55**
\$60,000 to \$79,999	25.95	30.13	4.18	4.15**
\$80,000 to \$99,999	10.10	13.07	-2.97	-4.07**
\$100,000 to \$149,999	6.34	8.33	-1.99	-3.33**
\$150,000 to \$199,999	0.59	1.01	-0.42	-1.99
\$200,000 or higher	0.00	0.09	-0.09	-1.51
Type of High School Attended	----	----	----	----
College Publications	----	----	----	----
College Websites	----	----	----	----
Visit to Campus	----	----	----	----
Visit by Admissions Staff				
Not Used/Not Considered	52.44	59.04	-6.6	-6.44**
Used/Considered	47.56	40.96	6.6	6.44**
College Sponsored Meetings in Home Area				
Not Used/Not Considered	60.23	66.56	-6.33	-6.40**
Used/Considered	39.77	33.44	6.33	6.40**
College Videos/CD				
Not Used/Not Considered	60.46	70.91	-10.45	-10.84**

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
Used/Considered	39.54	29.09	10.45	10.84**
Comm. About Fin Aid				
Not Used/Not Considered	10.15	14.19	-4.04	-5.71**
Used/Considered	89.85	85.81	4.04	5.71**
Electronic Comm. w/ College				
Not Used/Not Considered	12.56	15.40	-2.84	-3.85**
Used/Considered	87.44	84.60	2.84	3.85**
On Campus Interview				
Not Used/Not Considered	41.66	45.32	-3.66	-3.54**
Used/Considered	58.34	54.68	3.66	3.54**
Contact w/ Faculty				
Not Used/Not Considered	31.97	39.89	-7.92	-7.84**
Used/Considered	68.03	60.11	7.92	7.84**
Contact w/ Coaches				
Not Used/Not Considered	62.93	68.70	-5.77	-5.92**
Used/Considered	37.07	31.30	5.77	5.92**
Contact w/ Graduates				
Not Used/Not Considered	49.85	57.42	-7.57	-7.34**
Used/Considered	50.15	42.58	7.57	7.34**
Contact w/ Students				
Not Used/Not Considered	27.30	30.62	-3.32	-3.49**
Used/Considered	72.70	69.38	3.32	3.49**
Attending School In-State or Out-of-State				
In-State	55.75	48.24	7.51	7.30**
Out-of-State	30.46	39.42	-8.96	-8.99**

Percent %	Importance of High School Teachers' Opinions			
	Very Important	Not Very Important	% Difference	Z-Value
Unknown	13.79	12.33	1.46	2.13*
Institutional Control	----	----	----	----
Carnegie Classification				
Associates	0.80	0.78	0.02	0.15
Baccalaureate Colleges	27.68	32.15	-4.47	-4.59**
Doctoral and Research Universities	18.90	23.15	-4.25	-4.88**
Masters Colleges and Universities	49.55	41.85	7.7	7.42**
Specialty Schools	3.07	2.07	1.0	3.19**
* $p < .05$ ; ** $p < .01$				

Demand for Higher Education/Preparation for College

### Average High School Grades

According to Perna (2006), average high school grades are measures of the demand for higher education or preparation for college. The Chi-square calculation ( $\chi^2 = 27.7242$ ,  $df = 3$ ,  $p < .0001$ ) indicates the variables (importance of teachers' opinions and average high school grades) are statistically associated. The Cramer's V correlation ( $v = 0.0451$ ) suggests, on the other hand, a weak association between these two variables. The shared variance is less than one percentage point (.20%).

While the association between the variables is weak, a comparison of the differences of proportions of the two populations under consideration (Table 4-2) revealed noteworthy differences in grade averages. That is, it appears students

reporting grade averages of A (90-100) were 5 percentage points ( $z$ -value=-5.15\*\*) less likely to indicate teachers' opinions as "very important" than "not very important", while students reporting grade averages of B (80-89) were approximately 5 percentage points ( $z$ -value=4.89\*\*) more likely to report teachers' opinions as "very important" than "not very important" in their choice of college. The results of the  $z$ -test analyses (Table 4-2) confirmed that these observed differences in proportions were statistically significant. This would suggest that for students with grade averages of B (80-89) teachers' opinions in the college choice process tend to matter. In contrast, however for high achieving students ("A" grade average) teacher's opinions in the college choice process is less important.

### **SAT Critical Reading**

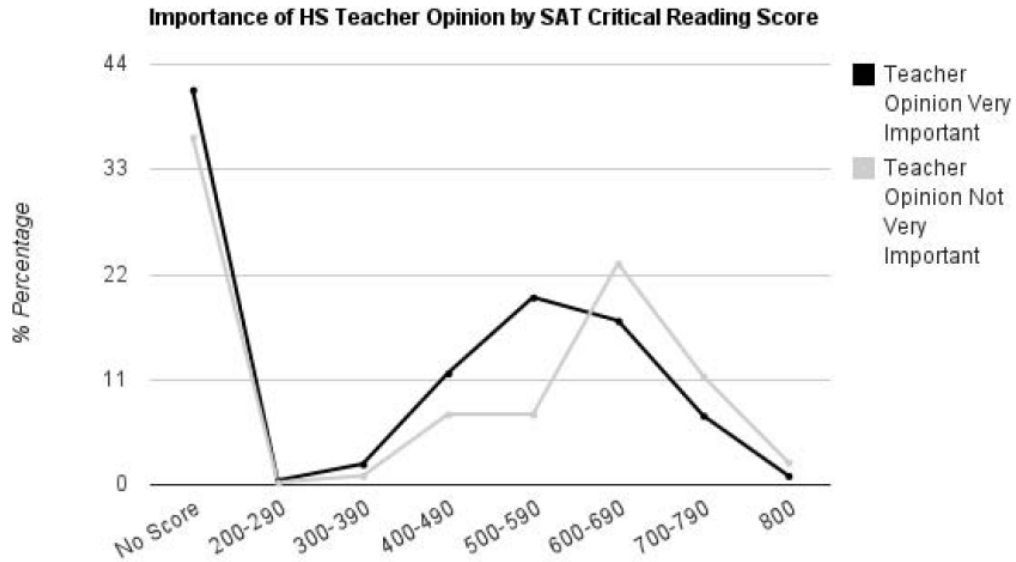
Admissions tests also serve as measures of demand for higher education and preparation for college (Perna, 2006). The Chi-square calculation ( $\chi^2 = 205.7388$ ,  $df = 7$ ,  $p < .0001$ ) suggests that the variables SAT critical reading and importance of high school teachers' opinions are statistically associated however the Cramer's V correlation ( $v = 0.1193$ ) suggests a weak relationship between the two variables. The shared variance between these two variables is 1.4%.

While the relationship between the variables is weak, a comparison of the proportions revealed noticeable differences in students' indication of the importance of high school teachers' opinions across various reported SAT critical reading score ranges (Table 4-2). First, students who did not report SAT critical reading scores are almost 5 percentage points more likely to indicate that teachers' opinions was "very important" than "not very important" in their choice of college ( $z$ -value = 4.68\*\*).



Of those reporting SAT critical reading scores, students in the low to mid ranges (300-390 to 400-490) were approximately 1 to 4 percentage points more likely to indicate that teachers' opinions was "very important" than "not very important" (z-value= 5.77\*\* and 7.62\*\*) while students in the higher SAT critical reading score ranges (600-690 to 700-790 and 800) were 1 to 6 percentage points less likely to indicate teachers' opinions as "very important" than "not very important" (z-value= -4.90\*\* to -7.04\*\*). The z-test analysis confirmed that these observed differences in proportions were statistically significant (Table 5). This finding would suggest that for students reporting no SAT critical reading scores and for students reporting low to mid range SAT critical reading scores, teachers' opinions in the college choice process matter; at the same time teachers' opinions are less important for students with SAT critical reading scores in the upper ranges. Figure 4-1 illustrates the influence of high school teachers at the lower SAT critical reading score ranges.

**Figure 4-1 Importance of High School Teachers' Opinions by Sat Critical Reading Score**



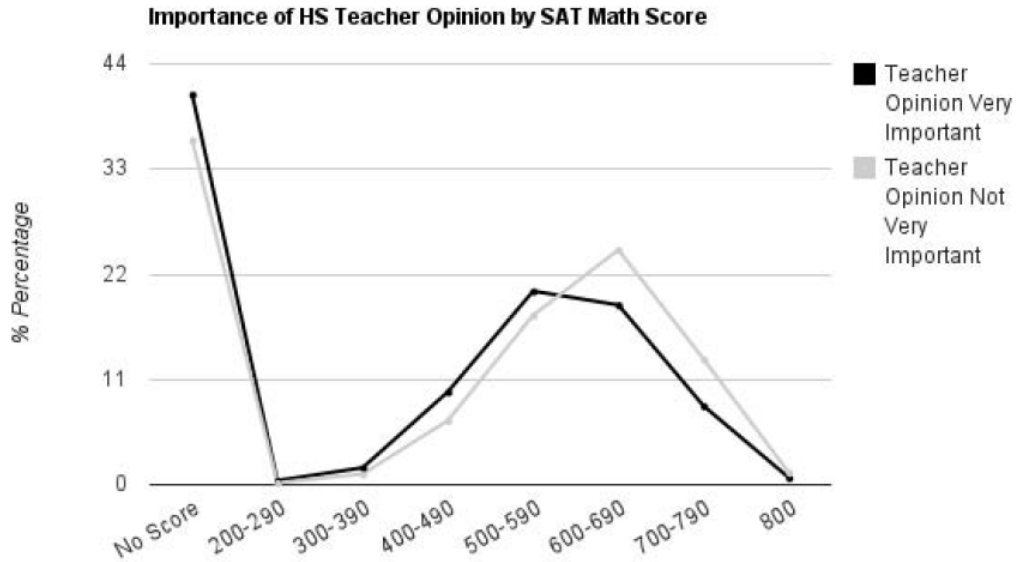
### SAT Math

Similar to the SAT critical reading score, the SAT math score and importance of teachers' opinions were found to be statistically associated ( $\chi^2 = 155.8001$ ,  $df = 7$ ,  $p < .0001$ ) but to have a weak relationship ( $\nu = 0.1039$ ). The shared variance is 1.08%.

Similar to the critical reading score, students who did not report SAT critical math scores were almost 5 percentage points ( $z\text{-value} = 4.83^{**}$ ) more likely to indicate that teachers' opinions was "very important" than "not very important" in their choice of college (Figure 2). Of those reporting SAT math scores, students reporting scores in the low to mid ranges (400-490 and 500-590) were approximately 3 percentage points more likely ( $z\text{-value} = 5.63^{**}$  and  $3.17^*$ ) to indicate teachers' opinions as "very important" than "not very important" while students reporting SAT math scores in the

upper ranges (600-690 and 700-790) are approximately 5 to 6 percentage points less likely (z-value=-6.63\*\* and -7.31\*\*) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. The test of significance of differences in proportions (z-test) confirmed that these observed differences were statistically significant (Table 4-2). Similar to the SAT critical reading scores, this finding would suggest that while teachers' opinions in the college choice process matter for students with no math SAT scores or for students with low to mid range SAT math scores, their opinions are less important for students in the upper range SAT math score. Figure 4-2 illustrates the influence of high school teachers on students in the low to mid ranges of SAT math scores.

**Figure 4-2 Importance of High School Teachers' Opinions by SAT Math Score**



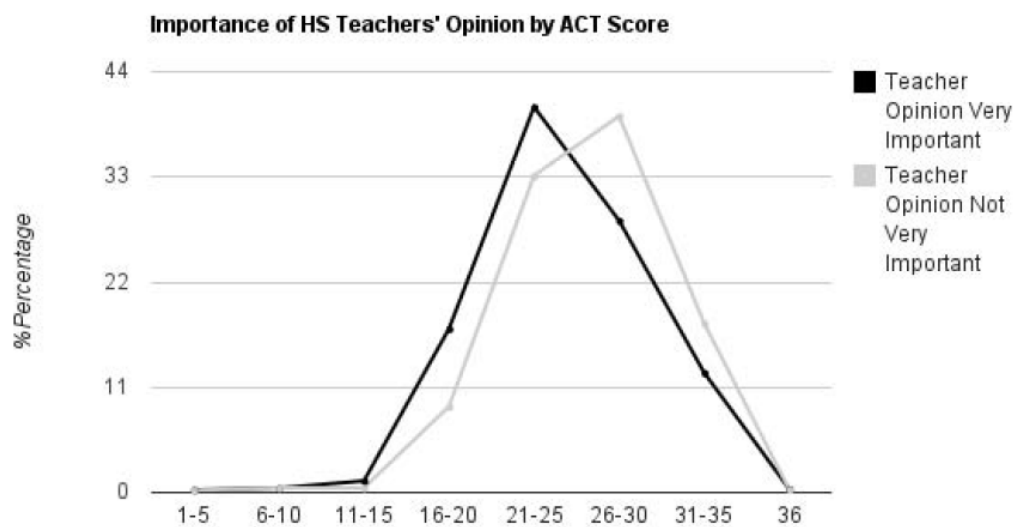
### ACT Composite

Like SAT critical reading and math, ACT composite score and importance of high school teachers' opinions were found to be statistically associated ( $\chi^2=116.5486$ ,  $df=7$ ,  $p < .0001$ ) but to have a weak relationship ( $\nu = 0.1470$ ). The shared variance is 2.16 %.

A comparison of the population proportions (Table 4-2) revealed that students reporting ACT composite scores in the low to mid ranges (11-15, 16-20 and 21-25) were approximately 1 to 8 percentage points more likely to indicate teachers' opinions as "very important" than "not very important" ( $z$ -value= $2.91^{**}$ ,  $7.75^{**}$  and  $4.42^{**}$ ) while students reporting ACT composite scores in the upper ranges (26-30 and 31-35) were approximately 5-11 percentage points less likely to indicate teachers' opinions as "very important" than "not very important" in their choice of

college (z-value=-6.62\*\* and -4.06\*\*). The test of significance of proportions (Table 4-2) confirmed that these observed differences are statistically significant. Similar to SAT critical reading and math scores, this finding suggests that teachers' opinions in the college choice process matter for students with low to mid range ACT composite scores but is less important for students in the upper range of ACT composite scores. Figure 4-3 illustrates the influence of high school teachers on students in the low to mid ACT score ranges.

**Figure 4-3 Importance of High School Teachers' Opinions by ACT Composite Score**



Expected Benefits

### Important College Characteristics

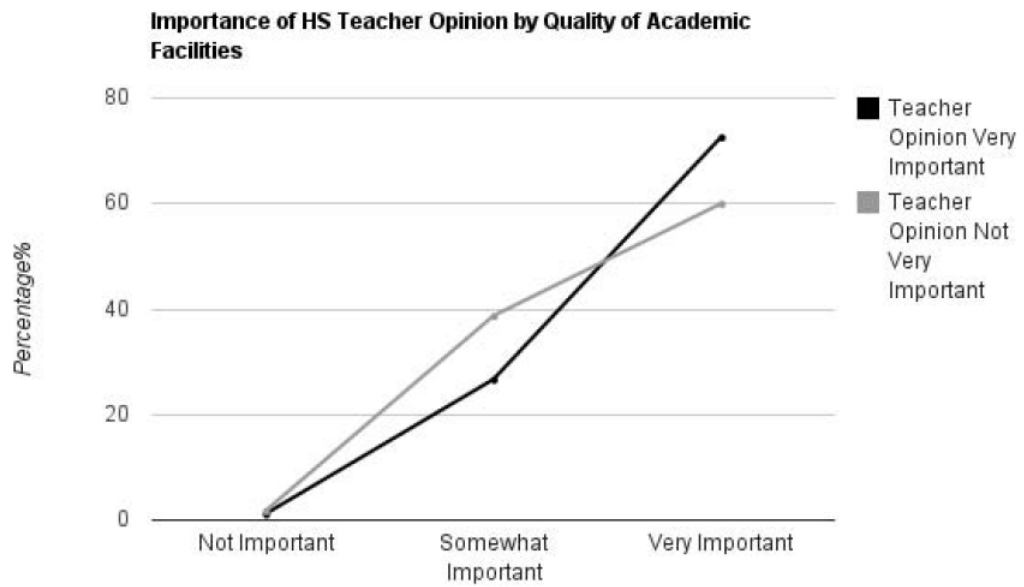
College characteristics including quality of faculty, quality of majors, and academic reputation served as measures of what Perna referred to as “expected benefits” (2006). For each of the important college characteristics, the Chi-square

calculation resulted in a  $p$ -value  $<.0001$  suggesting the important college characteristics variables and importance of high school teachers' opinions are statistically associated. For each of the important college characteristics the Cramer's  $V$  correlation value, however, was less than  $+/- .30$  suggesting a weak relationship between the variable and importance of high school teachers' opinions in student's choice of college.

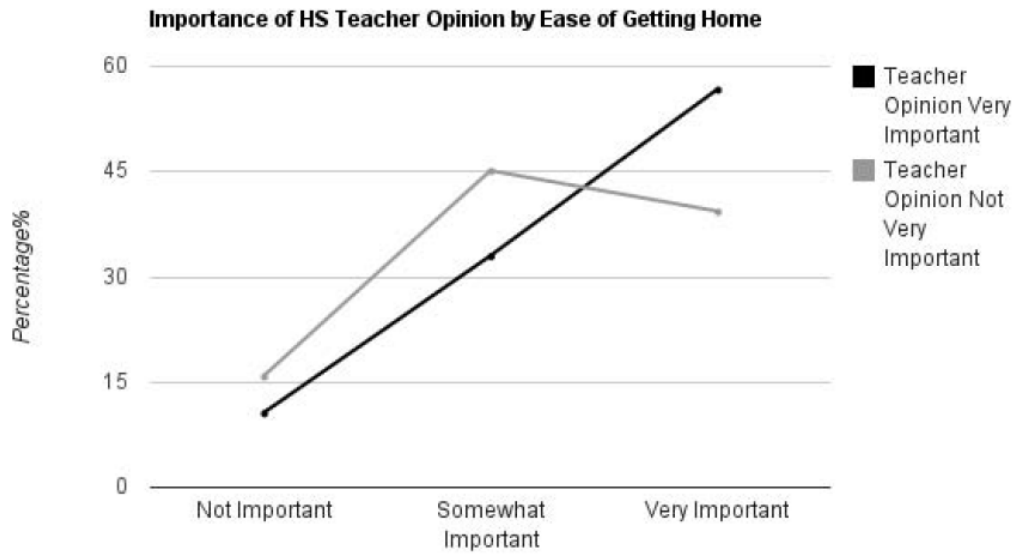
Despite this weak association, an examination of the population proportions (Table 4-2) revealed noticeable differences in students' indication of the importance of teachers' opinions across the various important college characteristics. In general, students that indicated the various college characteristics were "very important" in their college choice process were more likely to indicate teachers' opinions were "very important" than "not very important". More notably, students identifying the following college characteristics as "very important" were 10 to 17 percentage points more likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college ( $z$ -values= $10.29^{**}$  to  $16.98^{**}$ ): academic reputation, concentration on undergraduate education, off-campus opportunities, surroundings, academic facilities, variety of courses, access to faculty, availability of extracurricular activities, attractiveness of campus, quality of on-campus housing, ease of getting home, student diversity and net cost to family. Conversely, students indicating that these same college characteristics were "somewhat important" or "not important" were 7 to 13 percentage points less likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college ( $z$ -values=  $-12.54^{**}$  to  $-7.05^{**}$ ). The test of significance of proportions (Table 4-2) confirmed

that these differences were statistically significant. Figures 4-4 through 4-7 highlight a few of these trends.

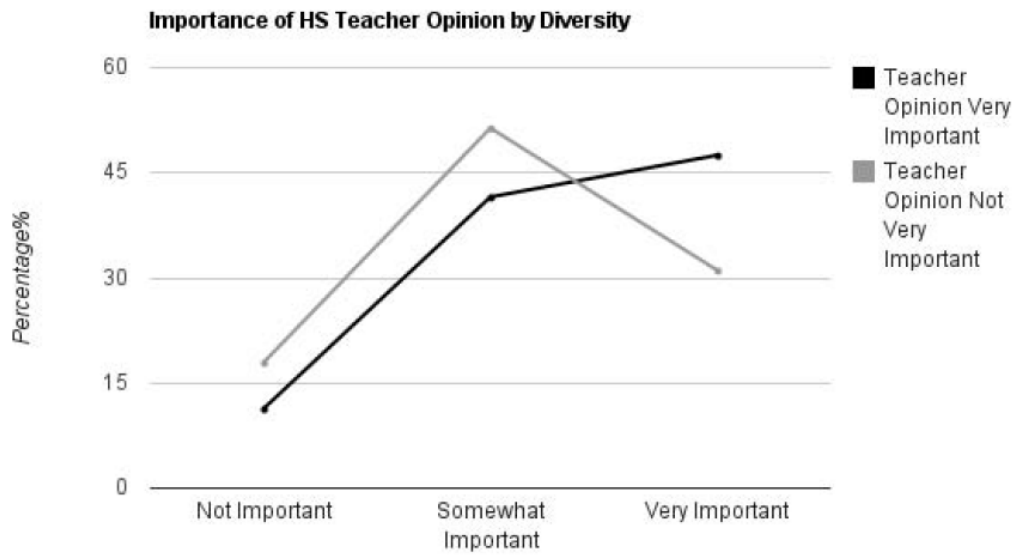
**Figure 4-4 Importance of High School Teachers' Opinions by Importance of Quality of Academic Facilities**



**Figure 4-5 Importance of High School Teachers' Opinion by Importance of Ease of Getting Home**

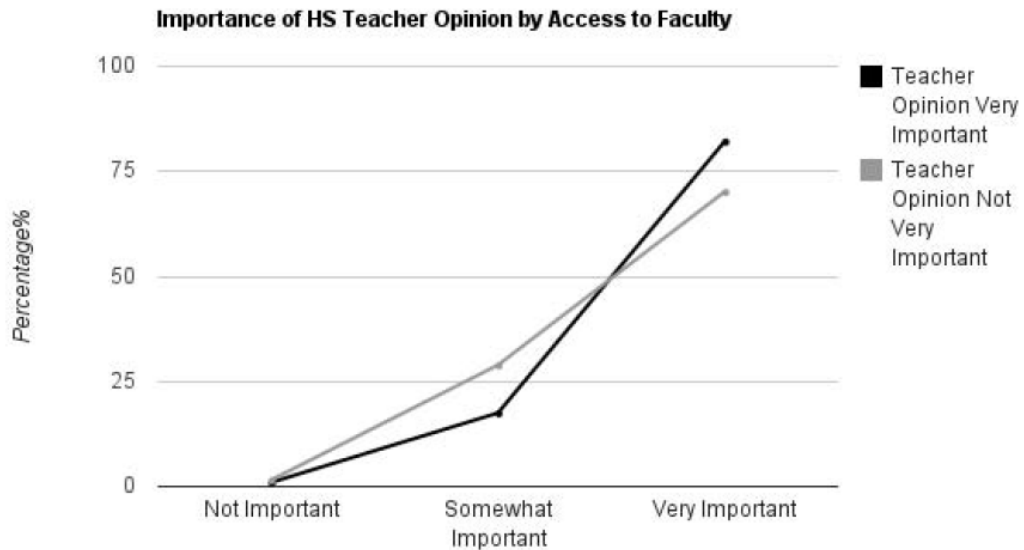


**Figure 4-6 Importance of High School Teachers' Opinions by Importance of Student Diversity**





**Figure 4-7 Importance of High School Teachers' Opinions by Importance of Access to Faculty**



*Expected Costs*

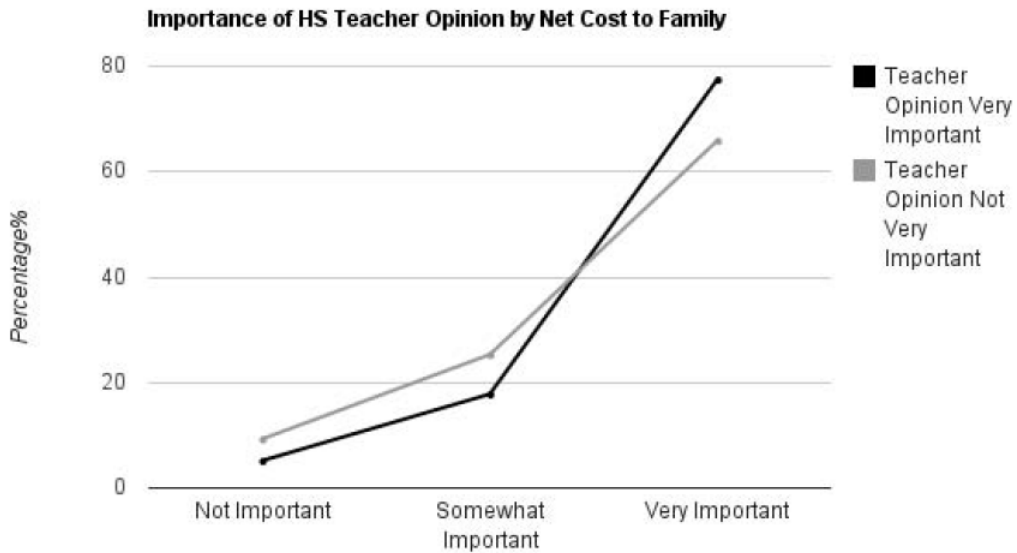
**Importance of Net Cost to Family**

Importance of net cost to the family also served as a measure of Perna’s “expected costs”. The Chi-square calculation ( $\chi^2 = 150.3063, df = 2, p < .0001$ ), indicates that the variables (importance of high school teachers’ opinions in students choice of college and importance of net cost to family) are statistically associated. The Cramer’s V correlation ( $v = 0.1023$ ) however suggests a small relationship between the two variables. The shared variance is 1.05%.

While the relationship between the variables is weak, an examination of the population proportions suggests that there are indeed differences in students’ indication of the importance of teachers’ opinions depending on their perception of the importance of net cost to family (Table 4-2). Specifically, students who indicate

net cost to family as “very important” are 12 percentage points more likely (z-value=12.07\*\*) to report teachers’ opinions as “very important” than “not very important” in their choice of college. Conversely, students who indicate net cost to family as “somewhat important” or “not important” are approximately 4 to 8 percentage points less likely (z-value=-7.23\*\* and -8.56\*\*) to report teachers’ opinions as “very important” than “not very important” in their choice of college. The z-test analysis confirmed that these differences in proportions are statistically significant. This would suggest that students who report net cost to family as a significant factor in their choice of college give more credence to teachers’ opinions in the college choice process than students who do not report net cost to family as a significant factor. Figure 4-8 illustrates the influence of high school teachers on students’ college choice for students indicating net cost is very important.

**Figure 4-8 Importance of High School Teachers' Opinions by Importance of Net Cost**



**Significance of Financial Aid or Cost**

Like importance of net cost to family, significance of financial aid or cost also served as a measure of Perna’s “expected costs”. The Chi-square calculation ( $\chi^2 = 18.0460, df = 1, p < .0001$ ) indicates that the variables (importance of high school teachers’ opinions in students choice of college and significance of financial aid or cost) are statistically associated. On the other hand, the Phi coefficient ( $\nu = 0.0366$ ) suggests quite a weak relationship between the two variables. The shared variance is .13%.

An examination of the population proportions (Table 4-2) revealed that students reporting cost or aid to be significant factor in their college choice were 4 percentage points more likely ( $z\text{-value}=4.25^*$ ) to indicate teachers’ opinions as “very important” than “not very important” in their college choice. Conversely, students indicating cost or aid to not be a significant factor in their college choice were 4

percentage points less likely ( $z\text{-value}=-4.25^{**}$ ) to indicate teachers' opinions to be "very important" than "not very important" in their choice of college. The test of significance of proportions confirmed that these observed differences are statistically significant. Similar to net cost to family, these findings suggest that while teachers' opinions appear to matter for students who indicate cost or aid to be significant factor in their choice of college, their opinions matter less for those who indicate cost of aid to not be a significant factor in their choice of college.

### **Total amounts of financial aid awarded by the college**

Total amounts of financial aid awarded by the college also served as a measure of "expected costs". The Chi-square calculation ( $\chi^2 = 15.0208, df = 10, p = 0.1313$ ) indicated that the variables (importance of high school teachers' opinions in students' choice of college and total amounts of financial aid) are not statistically associated. That is, students' indication of the importance of teachers' opinions in their choice of college does not vary by total amounts of financial aid awarded.

### Demographic Characteristics

#### **Gender**

Perna identified gender as a demographic characteristic important to the college choice process (2006). The Chi-square calculation ( $\chi^2 = 2.1059, df = 1, p = 0.1467$ ) indicated that the importance of teachers' opinions does not vary across gender. Put differently, proportionately, males and females were each likely to indicate that teachers' opinions were important, or not, to their choice of college.

## **Race/Ethnicity**

Like gender, race/ethnicity was also identified by Perna (2006) as a demographic variable that was a key factor in the college choice decision. The Chi-square calculation ( $\chi^2 = 57.8700$ ,  $df = 7$ ,  $p < .0001$ ) indicated the variables are statistically associated. The Cramer's V correlation value ( $v = 0.0652$ ), on the other hand, suggested a weak relationship between the two variables - importance of high school teachers' opinions in students' choice of college and race/ethnicity.

While the relationship between the variables (ethnicity and importance of high school teachers' opinions) is weak, a comparison of the population proportions (Table 4-2) provide additional insight into how students of different race/ethnic backgrounds rate the importance of teachers' opinions in their choice of college. Specifically, Asian/Asian American/Pacific Islander, Mexican American/Chicano, Latin American/South American/Central American/Other Hispanic, and Black/African American, were 1 to 2 percentage points more likely ( $z$ -value= $2.77^{**}$  to  $3.79^{**}$ ) to report teachers' opinions as "very important" than "not very important" while White students were 6 percentage points less likely ( $z$ -value= $-7.12^{**}$ ) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. The  $z$ -test analysis confirmed that these differences in proportions were statistically significant. This would suggest that students of color are more inclined to heed to teachers' advice and opinions regarding choice of college, while White students are less inclined to heed to teachers advice and opinions.

## Cultural Capital

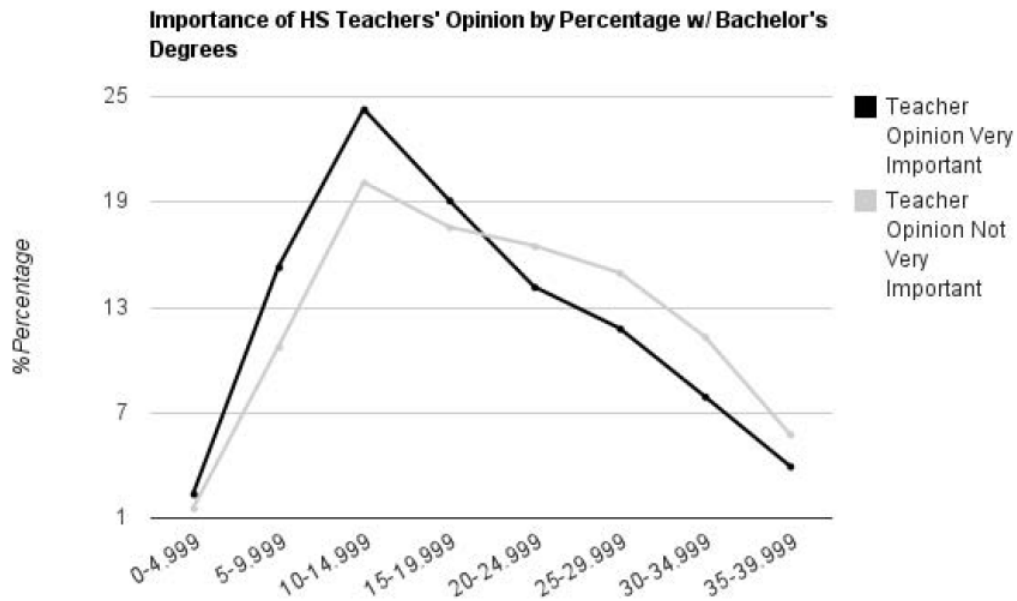
### **Percentage with Bachelors Degrees (Based on Zip Code)**

Percentage of head of household with bachelors degrees served as a measure of “cultural capital” which Perna (2006) suggested was an important factor in the college choice process. The Chi-square calculation ( $\chi^2 = 121.7604$ ,  $df = 9$ ,  $p < .0001$ ) indicated that the variables are statistically associated. This association, however, is negligible (Cramer’s  $V = 0.0982$ ). The shared variance is .9%.

Despite the weak association between the variables, there are some noticeable differences in responses across the various ranges of bachelor degree percentages. In fact, a comparison of population proportions (Table 4-2) revealed that students that report living in zip code areas where the percentage of bachelors degrees attained by head of households are in the lower ranges (0.-4.999, 5-9.999, and 10-14.999) are approximately 1 to 5 percentage points more likely (z-value=2.89\*\*, 6.40\*\* and 4.62\*\*) to report teachers’ opinions as “very important” than “not very important” in their choice of college. Conversely, students that report living in zip code areas where the percentage of bachelor’s degrees attained are in the mid to upper ranges (20-24.999, 25-29.999, 30-34.999, and 35-39.999) are 2 to 3 percentage points less likely (z-value=-2.87\*\* to -5.00\*\*) to report teachers’ opinions as “very important” than “not very important” in their choice of college. The z-test analysis confirmed that these observed differences in proportions are statistically significant. This finding would suggest that for students living in communities where percentage of degree attainment is low, teachers’ opinions regarding students’ choice of college matter while teachers’ opinions matter less for students living in communities where

the percentage of degree attainment is moderate to high. Figure 4-9 illustrate the influence of high school teachers on students living in communities where there is relatively low college degree attainment.

**Figure 4-9 Importance of High School Teachers Opinions by Percentage with Bachelor's Degrees**



*Supply of Resources*

**Parent Income**

Parent income served as a measure of “supply of resources” which Perna (2006) suggested was a critical factor in the college choice process. The Chi-square calculation ( $\chi^2 = 103.8748, df = 7, p < .0001$ ) indicates the variables are statistically associated; however Cramer’s V correlation ( $v = 0.0953$ ) suggested a weak relationship between the two variables. The shared variance is .9%.

Although the variables were found to have a weak relationship, a comparison of the population proportions (Table 4-2) offered useful insight. Specifically,

students reporting parent incomes in the lower ranges (less than \$30,000, \$30,000 to \$39,999, and \$40,000 to \$59,999) were approximately 2 to 4 percentage points more likely (z-value=5.61\*\*, 3.38\*\* and 3.87\*\*) to indicate teachers opinions as “very important” than “not very important” in their choice of college. Conversely, students in the upper income ranges (namely, \$100,000 to \$149,999 and over \$200,000) were approximately 4 to 5 percentage points less likely (z-value=-3.87\*\* and -6.42\*\*) to indicate teachers’ opinions as “very important” than “not very important” in their choice of college. A test of significance of proportions confirms that these observed differences are statically significant. These findings would suggest that teachers’ opinions in students’ choice of college resonate for students from low income families, while their opinions resonate less for students from middle to upper income families.

### **Applied for Financial Aid**

Applying for financial aid also served as a measure of Perna’s “supply of resources”. The Chi-square calculation ( $\chi^2 = 11.2779$ ,  $df = 1$ ,  $p < .01$ ) suggests that the variables are statistically associated. The Phi coefficient (-0.0485) suggested, on the other hand, a weak negative relationship between the two variables. The shared variance is .2%

A comparison of the population proportions (Table 4-2) revealed that students who reported that they applied for financial aid were almost 6 percentage points less likely (z-value=-3.36\*\*) to indicate teachers’ opinions as “very important” than “not very important”. Conversely, those who reported that they *did not* apply for financial aid were almost 6 percentage points more likely (z-value=3.36\*\*) to indicate



teachers' opinions as "very important" than "not very important" in their choice of college. The z-test analyses confirmed that these observed differences in proportions were statistically significant, suggesting that for students who *do not* apply for financial aid, teachers' opinions in students' choice of college matter. In contrast, teachers' opinions in students' college choice matters less for students who apply for financial aid.

### **Number of Institutions to Which Student Applied**

Like parent income and applied for financial aid, number of institutions to which student applied served as a measure of Perna's "supply of resources". The Chi-square calculation ( $\chi^2 = 34.2484$ ,  $df = 4$ ,  $p < .0001$ ) indicate the variables are statistically associated. The Cramer's V correlation ( $v = 0.0493$ ) suggests, on the other hand, a weak relationship between the two variables. The shared variance is .02%.

Students reporting application counts in the lower ranges (1-5) were 5 percentage points more likely ( $z\text{-value} = 5.23^{**}$ ) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. Conversely, students reporting application counts in the upper ranges (6-10 and 11-15), were almost 2 to 4 percentage points less likely ( $z\text{-value} = -3.80^{**}$  and  $-1.57^{**}$ ) to report teachers' opinions as "very important" than "not very important" in their choice of college. The z-test confirms that these differences in proportions are statistically significant suggesting that for students applying to fewer numbers of colleges (5 and under), teachers' opinions in students' choice of college matter while teachers' opinions matter less for students applying to higher number of colleges (over 5).

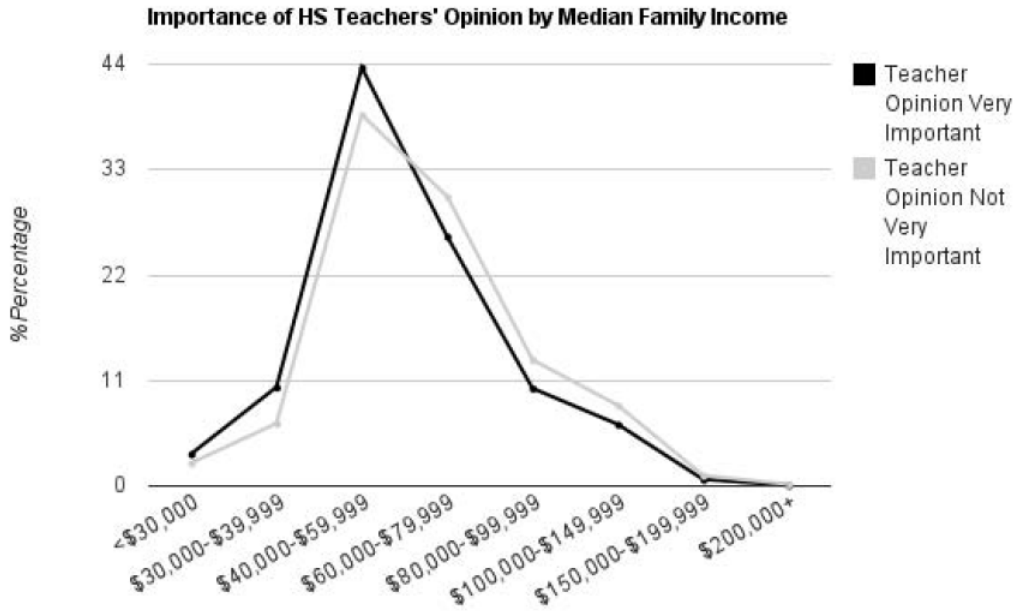
## Availability of Resources

### **Median Family Income (Based on Zip Code)**

Median family income served as a measure of “availability of resources” which Perna (2006) indicated was a key factor in the college choice process. The Chi-square calculation ( $\chi^2 = 103.3788$ ,  $df = 7$ ,  $p < .0001$ ), indicates the variables are statistically associated however, the Cramer’s V correlation ( $v = 0.0904$ ) suggests a quite weak relationship between the two variables. The shared variance is .8%.

Though the variables were found to have a weak relationship, a comparison of the population proportions (Table 4-2) provides additional insight. Students reporting living in zip code areas where the median family income is in the low to mid ranges (less than \$30,000, \$30,000 to \$39,999, \$40,000 to \$59,999, and \$60,000 to \$79,000) were almost 1 to 5 percentage points more likely ( $z$ -value= $2.75^*$  to  $6.60^{**}$ ) to indicate teachers’ opinions as “very important” than “not very important” in their choice of college. Conversely, students reporting living in zip code areas where the median family income is in the upper income ranges (\$80,000 to \$99,999 and \$100,000 to \$149,999) were 2 to 4 percentage points less likely ( $z$ -value= $-4.07^{**}$  and  $-3.33^{**}$ ) to indicate teachers’ opinions as “very important” than “not very important” in their choice of college. The  $z$ -test analysis confirms that these observed differences in proportions are statistically significant. These findings suggest that teachers’ opinions in students’ choice of college matter most to students from low to middle-income families while they matter less to students from upper income families. Figure 4-10 illustrates the influence of high school teachers on students at the lower median income ranges.

**Figure 4-10 Importance of High School Teachers' by Median Family Income**



*Types of Resources*

**Type of High School**

Type of high school served as a measure of “types of resources” which Perna (2006) argues are important factors in the college choice process. The Chi-square calculation ( $\chi^2 = 2.8839, df = 3, p = .4099$ ) suggests that the variables are not statistically associated. That is, students’ indication of the importance of teachers’ opinions in their choice of college does not vary by the type of high school the students attended.

## *Marketing and Recruitment*

### **Information Sources**

Information sources served as a measure of “marketing and recruitment” which Perna (2006) posits is an important factor in the college choice process. A Chi-square calculation was performed to assess the relative independence of the variables with importance of high school teachers’ opinions. For college publications, college website, and visit to campus, the Chi-square calculation resulted in  $p$ -values greater than the 0.05 significance level suggesting that the respective variables and importance of high school teachers’ opinions are not statistically associated.

For the remaining information sources (visit by admissions staff at your high school, college sponsored meetings in home area, college videos or CD ROMS, communications about financial aid, electronic communications with college, on-campus interview, contact with faculty, contact with coaches, contact with graduates and contact with students) and importance of high school teachers’ opinions, the Chi-square calculation resulted in  $p$ -values lower than the 0.05 significance level indicating the variables are statistically associated. In each of the cases, however, the Phi coefficient value was less than +/- .10, suggesting a weak relationship between the variables.

A comparison of the population proportions offered useful insight (Table 4-2). In general, students reporting that the information source was *used or considered* were more likely to indicate teachers’ opinions as “very important” than “not very important” in their choice of college. More substantial differences were found with those reporting that the following information sources were *used or considered*: visit

by admissions staff, college sponsored visits by admissions staff, college videos/CD, contact with faculty and contact with graduates. In these cases, students were 6 to 11 percentage points more likely (z-value=6.40\*\* to 10.84\*\*) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. Conversely, students reporting that the information sources were *not used or not considered* in their college search were 6 to 11 percentage points less likely (z-value=-6.40\*\* to -10.84\*\*) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. The z-test confirmed that the observed differences in proportions were statistically significant. These findings suggest that for students taking advantage of opportunities to interact with members of the campus community (faculty, staff, students and alumni) during their college search, teachers' opinions in students' choice of college matter while it matters less for students not taking advantage of these resources during their college search.

### *Location*

#### **Residence (Attending In-State or Out-of-State)**

Residence (attending school in-state or out-of-state) served as a measure of "location". Perna (2006) suggested that "location" was a critical factor in the college choice process. A chi-square test was performed to assess the relative independence of location and importance of high school teachers' opinions. The Chi-square ( $\chi^2 = 81.1173$ ,  $df = 2$ ,  $p < .0001$ ) indicated the variables are statistically associated. The Cramer's  $v$  correlation value was 0.0749 suggesting, on the other hand, a weak relationship between the variables. The shared variance is .5%.

Despite the weak relationship, a comparison of the population proportions reveal that students indicating that they will be attending a school in the same state as their home of residence were 7 percentage points more likely ( $z\text{-value}=7.30^{**}$ ) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. Conversely, those indicating intent to enroll in an institution outside of their home state, were 9 percentage points less likely ( $z\text{-value}=-8.99^{**}$ ) to indicate teachers' opinions as "very important" than "not very important" in their choice of college. These observed differences in proportion were confirmed to be statistically significant using the z-test of significance of proportions, suggesting that for students planning to attend college in their home state, teachers' opinions in students' choice of college matter, while it matters less for students planning to attend college outside their home state.

## *Institutional Characteristics*

### **Institutional Control**

Institutional control (public v private) serves as a measure of institutional characteristic, which Perna suggests is an important factor in the college choice process. The Chi-square calculation ( $\chi^2 = 4.9929$ ,  $df = 3$ ,  $p < .1723$ ) indicated the variables (institutional control and importance of teacher's opinion) are not statistically associated. That is, students' indication of importance of teachers' opinion in their choice of college does not appear to vary by the institutional control (public v private) of the school the student ultimately chooses to attend.

### **Institutional Type (Carnegie Classification)**

Like institutional control, institutional type (Carnegie Classification) served as a measure of institutional characteristic. The Chi-square calculation ( $\chi^2 = 74.1147$ ,  $df = 4$ ,  $p < .0001$ ) indicates the variables are statistically associated; at the same time, the Cramer's V correlation ( $v = 0.0749$ ) suggested a weak relationship between the variables. The shared variance is .5%.

A comparison of population proportions (Table 4-2) revealed that students who reported plans to attend a master college or university or a specialty school were 1 to 7 percentage points more likely ( $z$ -value= $7.42^{**}$  and  $3.19^{**}$ ) to report teachers' opinions in their choice of college as "very important" than "not very important". Conversely, students who report plans to attend a baccalaureate college or a doctoral and research university were 4 to 7 percentage points less likely ( $z$ -value= $-4.59^{**}$  and  $-4.88^{**}$ ) to indicate teachers' opinion as "very important" than "not very important" in their choice of college. These differences in proportions were statistically

significant. This finding suggest that teachers' opinions on students' choice of college matters most for students choosing to attend masters colleges or universities and specialty schools, while it matters less for students choosing to attend baccalaureate or doctoral/research universities.

### Summary of Findings

This study sought to understand how students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic variables and college choice outcomes. Specifically, the study examined students who indicated teachers' opinions in the college choice process was "very important" and those who did not across Perna's core and contextual college choice variables. Using the Chi-square calculation as test of independence, the analysis revealed that, in most cases, the study variables were statistically associated. And yet, the Cramer's V test indicated, in all cases, a weak relationship between the teacher's influence and the variables in the Perna's model. Using a test of differences in proportions (z-test), the study provided useful insight into how these two populations of students differ with respects to Perna's core and contextual college choice variables. Table 4-3 summarizes the findings.

In examining those factors identified by Perna as "core of college choice decision" (demand for higher education/preparation for college, expected benefits, and expected costs), this study revealed that with the exception of "total amount of financial aid awarded by college" students who identify teachers as influential in their choice of college differ significantly from students who do not identify teachers as influential in their choice of college. In considering those factors identified by Perna



as “habitus (layer 1)” (demographic characteristics, cultural capital, social capital and supply of resources), this study revealed that with the exception of “gender”, students who identify teachers as influential in their choice of college differ significantly from students who do not. Further, in examining those factors identified by Perna as “school and community (layer 2)” (availability of resources and types of resources), the study concluded that while students who identify teachers as influential in their choice of college differ significantly from students who do not in terms of “median family income” they do not differ in terms of “type of high school”. Last in considering those factors identified by Perna as “higher education context (layer 3)” (marketing/recruitment, location and institutional characteristics), the study revealed that with the exception of “institutional control” students who identify teachers’ as influential in their choice of college differ significantly from those who do not.

With regard to the specific research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes? The findings suggests that in terms of academic characteristics, graduates who report teachers as being influential in their choice of college differ from those who do not in terms of grade average and standardized admissions test scores. That is, teachers’ influence appears to be felt more strongly among students with “B” averages and students reporting admission tests (SAT and ACT) scores in the low to mid ranges. In terms of demographic characteristics (i.e. gender and race/ethnicity), while graduates who report teachers as influential in their choice of college do not appear to differ in terms of gender they do differ in terms of race/ethnicity. Specifically,

teachers' influence in the college choice decision appears to be felt more strongly among students of color than White students. Last, in terms of college choice outcomes, the findings suggests that graduates who report teachers as influential in their choice of college do not differ from those who do not in terms of institutional control (public, private, independent. etc.); however, they do appear to differ in terms of where they opt to attend college (in-state v. out-of-state) and the type of institution (Carnegie Classification) they choose to attend. That is, teachers appear to be a more influential factor for students planning to attend an in-state school and a school in the "masters college and universities" or "specialty schools" Carnegie Classifications. Further, teachers appear to be a more influential player in the college choice decision for students partial to the following college characteristics: academic reputation, concentration on undergraduate education, off-campus opportunities, surroundings, academic facilities, variety of courses, access to faculty, availability of extracurricular activities, attractiveness of campus, quality of on-campus housing, ease of getting home, student diversity and net cost to family. The section that follows provides a detailed discussion of each of the findings.

**Table 4-3. Importance of High School Teachers' Opinions: Summary of Important Findings**

	<b>Variable</b>	<b>Variables Associated?</b>	<b>Strength of Association?</b>	<b>Difference in Proportions Significant?</b>
<b>Core of College Choice Decision</b>				
<b>Demand for Higher Education/Preparation for College</b>	<b>Average HS GPA</b>	Yes	Weak	Yes
	<b>Admissions Tests</b>			
	<i>SAT Critical Reading</i>	Yes	Weak	Yes
	<i>SAT Math</i>	Yes	Weak	Yes
	<i>ACT Composite</i>	Yes	Weak	Yes
<b>Expected Benefits</b>	<b>Important College Characteristics</b>			
	Quality of faculty	Yes	Weak	Yes
	Quality of majors of interest to you	Yes	Weak	Yes
	Overall academic reputation	Yes	Weak	Yes
	Quality of academic facilities	Yes	Weak	Yes
	Variety of courses	Yes	Weak	Yes
	Access to faculty	Yes	Weak	Yes
	Concentration on undergraduate education	Yes	Weak	Yes
	Prominent intercollegiate athletics	Yes	Weak	Yes
	Athletic programs in which you would participate	Yes	Weak	Yes
	Availability of extracurricular activities	Yes	Weak	Yes
	Access to off-campus cultural/recreational opportunities	Yes	Weak	Yes
	Availability of religious activities	Yes	Weak	Yes
	Quality of social life	Yes	Weak	Yes
	Attractiveness of campus	Yes	Weak	Yes

	<b>Variable</b>	<b>Variables Associated?</b>	<b>Strength of Association?</b>	<b>Difference in Proportions Significant?</b>
	Surroundings			
	Part of the country college is located	Yes	Weak	Yes
	Quality of on-campus housing	Yes	Weak	Yes
	Ease of getting home	Yes	Weak	Yes
	Chance to be with students from different backgrounds	Yes	Weak	Yes
<b>Expected Costs</b>	<b>Importance of <i>net cost to your family</i> in making a college choice</b>	Yes	Weak	Yes
	<b>Significance of financial aid or college costs in decision to enroll in the college student plans to attend</b>	Yes	Weak	Yes
	<b>Total amounts of financial aid awarded by the college student plans to attend</b>	No	--	--
<b>Habitus (Layer 1)</b>				
<b>Demographic Characteristics</b>	<b>Gender</b>	No	--	--
	<b>Race/Ethnicity</b>	Yes	Weak	Yes
<b>Cultural Capital</b>	<b>Education Attainment Level - % Bachelor's Degree or Higher (based on home zip code)</b>	Yes	Weak	Yes
<b>Social Capital</b>	<b>Opinions Very Important in Choosing a College</b>			
	<b>Parent Income</b>	Yes	Weak	Yes
<b>Supply of Resources</b>	<b>Parent Income</b>	Yes	Weak	Yes
	<b>Applied for Financial Aid</b>	Yes	Weak	Yes
	<b>Number of institutions to which student applied</b>	Yes	Weak	Yes
<b>School and Community</b>				

	<b>Variable</b>	<b>Variables Associated?</b>	<b>Strength of Association?</b>	<b>Difference in Proportions Significant?</b>
<b>Context (Layer 2)</b>				
<b>Availability of Resources</b>	<b>Median Family Income (based on home zip code)</b>	Yes	Weak	Yes
<b>Types of Resources</b>	<b>Type of High School</b>	No	--	--
<b>Structural Support and Barriers</b>	Not Available			
<b>Higher Education Context (Layer 3)</b>				
<b>Marketing and Recruitment</b>	<b>Information Sources (Offered/Used)</b>			
	Visits by admissions staff at your high school	Yes	Weak	Yes
	College-sponsored meetings in your home area	Yes	Weak	Yes
	College publications (catalogs, brochures, etc.)	No	---	--
	Communications about financial aid (not aid decision)	Yes	Weak	Yes
	Electronic communications with the college	Yes	Weak	Yes
	Visit to campus	No	---	--
	On-campus interview with admissions staff	Yes	Weak	Yes
	Contact with faculty from the college	Yes	Weak	Yes
	Contact with coaches	Yes	Weak	Yes
	Contact with graduates of the college	Yes	Weak	Yes
	Contact with students who attend the college	Yes	Weak	Yes
<b>Location</b>	<b>Residence (Derived)</b>	Yes	Weak	Yes
<b>Institutional Characteristics</b>	<b>Institutional Control (school planning to attend)</b>	No	--	--
	<b>Institutional Carnegie Classification (school planning to attend)</b>	Yes	Weak	Yes

	<b>Variable</b>	<b>Variables Associated?</b>	<b>Strength of Association?</b>	<b>Difference in Proportions Significant?</b>
<b>Social, Economic and Policy Context (Layer 4)</b>				
<b>Demographic Characteristics</b>	Not Available			
<b>Economic Characteristics</b>	Not Available			
<b>Public Policy Characteristics</b>	Not Available			

## Chapter 5 : Conclusions

### Discussion

Using Perna's proposed conceptual model for college choice as a theoretical framework, this exploratory study sought to determine how high school graduates who identify teachers as influential in their choice of college differ from graduates who do not. Specifically, the study sought to answer the following research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes?

In this chapter, Perna's college choice model serves as a lens to analyze the findings and discuss their importance. The discussion starts with those factors identified in the core of the model as important to college choice and then discusses the four contextual layers affecting the college choice decision: Habitus (Layer 1), School and Community Context (Layer 2), Higher Education Context (Layer 3) and Social, Economic and Policy Context (Layer 4). This study focused on the first three layers.

Specifically, the findings suggest that in terms of academic background, students who identified teachers as influential in their choice of college differed from those who do not in terms of grade average and standardized test scores. Likewise, in terms of demographic background, the students (those who indicated teachers as influential in the college choice process and those who do not) differed in terms of race/ethnicity. In terms of college choice outcomes, the students differed in terms of

institutional location (in-state v. out-of-state) and institutional type (Carnegie Classification). Further, students who indicated teachers as influential in the college choice process appear to differ from those who do not also in terms of important college characteristics.

Core of College Choice

### **Demand for Higher Education**

Perna suggests that at the core of the college choice decision is the demand for higher education/preparation for college, expected benefits and expected costs. In this study, grade average, SAT critical reading, SAT critical math and ACT composite scores served as indicators of demand for higher education and preparation for college. While the variables were statistically associated with importance of high school teachers' opinions, the association was weak. Despite these findings, the test of significance of proportions offered useful insight about these core college choice factors and importance of teachers' opinions. As a whole, the opinions of the high school teacher were felt stronger among above average high school performers, among those students who do not report standardized admission test scores and among those students who perform in the low to mid ranges of the standardized test scores. Specifically, in terms of demand for higher education and preparation for college, the data revealed that students reporting grade averages of B (80-89) were statistically more likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college. The reverse was true for students with grade averages of A (90-100). Further, the study revealed that students not reporting SAT critical reading and math scores were statistically more likely to indicate



teachers' opinions as "very important" than "not very important". It should be noted that students not reporting SAT scores may include students who have opted to take the ACT over the SAT. Of those students reporting SAT critical reading and math scores, students reporting scores in the low to mid SAT score ranges (400-490 and 500-590) were statistically more likely to identify teachers' opinions as "very important" than "not very important" in their choice of college. A similar theme was found with students who reported ACT scores. Students scoring in the low to mid ranges of the ACT were statistically more likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college. These data and analyses seem to imply that teachers' influence in the college choice decision is felt more strongly among students who are slightly *less competitive academically*. A review of some key demographic variables such as percentage of head of household with Bachelors degrees, parent income, and median family income, discussed later, offer additional insight to this finding. Nonetheless, this information can be useful for both secondary school administrators and higher education administrators in understanding which students are likely to seek the help of teachers. That is, for whom the role of the teacher in discussing college choice is more important. Further, this information can be useful in understanding which college options might be available to these students.

### **Expected Benefits**

Important college characteristic variables served as indicators and measures for "expected benefits" associated with attending college. While most of the important college characteristics variables were found to be statistically associated with

importance of high school teachers' opinions, the relationship was found to be weak in all cases. However, the test of significance of proportions revealed noteworthy tendencies with respects to these important college characteristics. Specifically, the findings on quality of academic facilities, attractiveness of campus and quality of on-campus housing might suggest that teachers' influence is felt more strongly among students who tend to be more influenced by *campus aesthetics*. The findings on variety of courses and access to faculty, might suggest too that teachers' influence in the college choice decision is felt more strongly among students who give greater consideration to the *quality of the student academic experience*, in particular, opportunities for faculty-student engagement. Last, the findings on intercollegiate activity, extracurricular activities and perhaps even student diversity might suggest that teachers' influence on students' choice of college is more prominent among students who give greater consideration to *opportunities for active involvement outside the classroom* such as student clubs and organizations and other leadership opportunities than those students who do not report high school teachers' opinions as influential.

These findings seem to be consistent with Kealy and Rockel's findings (1987). Specifically, the researchers found that teachers had positive influence on college quality perceptions with students at Colgate University (Kealy & Rockel, 1987). In this respect, Kealy and Rockel (1987) reported that the more students relied on teachers (including coaches) for information the more positive were their perceptions of college quality, particularly academic and athletic quality.

## Expected Costs

Significance of financial aid or cost, total aid awarded and importance of net costs to family were indicators and measures of “expected costs”. While total aid awarded was found to be not statistically associated with importance of high school teachers’ opinions, financial aid or cost and net costs to family were found to be statistically associated; however, the association was weak. Using a z-test of significance of proportion, the researcher unveiled important themes with regard to these variables. That is, students who reported net cost to family as “very important” factor in their choice of college were statistically more likely to rate high school teachers’ opinions as “very important” than “not very important” in their choice of college, whereas those reporting net cost to family as “somewhat important” or “not important” were statistically less likely to rate high school teachers’ opinions as “very important” than “not very important”. Likewise, students who reported financial aid or cost as *significant* in their decision were statistically more likely to indicate teachers’ opinions as “very important” than “not very important” in their choice of college while those reporting financial aid or cost to be *not significant* in their decision were statistically less likely to indicate teachers opinions as “very important” than “not very important”. Said differently, teachers’ opinions on student college choice are felt more strongly among graduates concerned about *costs and affordability* as they consider their educational options.

In summary, with respects to those constructs that make up Perna’s core of college choice decision (demand for higher education/preparation for college, expected benefits and expected costs), this study revealed that students who identify

high school teachers as influential in their choice of college are more likely than their peers who do not identify teachers as influential in their choice of college to be 1) less competitive academically, 2) more interested in the quality of the academic experience, opportunities to get involved and campus aesthetics, and 3) more concerned about costs and affordability of attending college.

Habitus (Layer 1)

Perna suggests that Habitus (Layer 1) include key factors such as demographic characteristics, cultural capital, social capital, and supply of resources.

### **Demographic Characteristics**

In this study, gender and race/ethnicity served as demographic characteristics. The analyses found the variables – importance of high school teachers’ opinions and gender to be not statistically associated. In other words, students indication of teachers as influential, or not, in their choice of college does not differ by gender. Interestingly, this finding does not support existing research (Loudermilk, 1983) that suggests that gender may play a role in students’ use of teachers in the college choice process. Note that the Loudermilk (1983) study was designed to understand the factors influencing college choice behaviors among student athletes.

The analyses found the variables - importance of high school teachers’ opinions and race/ethnicity - to be statistically associated; however, the association was weak. A comparison of differences of proportions revealed that Asian/ Asian American/Pacific Islander, Mexican American/Chicano, Latin American/South American/Central American/Other Hispanic and Black/African American were

statistically more likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college while White students were statistically less likely to indicate teachers' opinions as "very important" than "not very important". This would suggest that teachers' influence on the college choice decision is felt more strongly among *students of color* than White students. This finding seems to confirm findings by McDonough and Antonio (1996) and Ceja (2000) in which the researchers concluded that teachers play a more influential role in the college choice process for students of color. McDonough and Antonio (1996) further suggest that the nature of teachers' influence in student college choice varies among racial and ethnic groups. That is, teachers are most influential for Black students when those students seek the teacher's advice after class, whereas for Asian American and Chicano/a students, teachers are influential through the process of having students over to their home. McDonough and Antonio (1996) explain that this variance demonstrates how cultural capital operates differently for different racial and ethnic groups. The section below takes a closer look at what the analysis revealed about importance of high school teachers' opinions and indicators of cultural capital.

### **Cultural Capital**

This study used education attainment (percentage of head of household with bachelor's degrees) as an indicator of cultural capital. The analyses revealed percentage of head of household with bachelor's degrees to be statistically associated with importance of high school teachers' opinions though the association was weak. A test of significance of difference of proportion highlighted noteworthy themes with respects to these variables. Specifically, students who reported living in zip code

areas where the percentage of bachelors degrees were in the lower percentage ranges (0-4.999, 5-9.999 and 10-14.999) were statistically more likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college while those reporting living in zip code areas where the education attainment levels were in the mid to upper ranges were statistically less likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college. In other words, teachers' influence in the college choice decision is more prominent among students who come from backgrounds with less cultural capital. Having fewer immediate family members with college experience, these students likely have little or no additional resources outside of school to draw upon to assist them with the college choice process. On the contrary, their peers living in zip code areas where bachelor degree attainment is higher likely come from families with college educated parents and thus have access to additional resources (parents/family, alumni, private college counselors, etc.) to support them through the college choice process.

### **Social Capital**

Although, the association was weak, the analyses further reveals that an indicator of social capital (parent income) is statistically associated with importance of high school teachers' opinions. A test of significance of difference of proportion highlighted noteworthy tendencies with respects to these variables. Specifically, students who reported parent incomes in the lower ranges (less than \$30,000, \$30,000 to \$39,999 and \$40,000 to \$59,999) were statistically more likely to indicate teachers' opinions as "very important" than "not very important" in their choice of college while those reporting parent incomes in the mid to upper ranges were statistically less

likely to report teachers' opinions as "very important" than "not very important". Similar to the cultural capital findings, this finding would suggest that teachers' influence is felt more strongly among students who come from low income families or families from *less privileged backgrounds*. These students turn to teachers for advice during the college choice process because they have limited resources outside of school to guide them through the process. On the contrary, their peers who report higher parent income levels likely have access to additional resources outside of school to assist them through the college choice process i.e. parents, siblings. In fact, McDonough and colleagues (1997) suggests that for students from the wealthiest families, private college counseling services are yet another resource for this elite group of high school students.

These findings also support findings from a 2006 study conducted by the Ad Council (2006) involving a survey of 396 low-income teens (\$25,000 or less household income). The Ad Council researchers concluded that teachers (22%) were found to be the second most helpful resource to teens from low-income families in applying to or considering colleges.

### **Supply of Resources**

Although the associations were weak, several indicators of supply of resources (parent income, applied for financial aid, and number of institutions to which applied) were statistically associated with importance of teachers' opinions. At the same time, the test of significance of differences of proportions revealed that students who reported *not applying* for financial aid were statistically more likely to indicate high school teachers' opinions as "very important" than "not very important" in their

choice of college while those reporting to have *applied* for financial aid were statistically less likely to indicate teachers opinions as “very important” than “not very important”. Similarly, students who reported applying to fewer schools (1-5) were statistically more likely to indicate teachers’ opinions as “very important” than “not very important” in their choice of college while those applying to higher numbers of schools were statistically less likely to report teachers’ opinions as “very important” than “not very important”. Given the other findings with respect to percentages with bachelor’s degrees and parent income, these findings (not applying for financial aid and applying to fewer numbers of institutions) imply that teachers’ influence is felt more strongly among students who *lack sophistication with the college application, admission and financial aid processes*.

#### School and Community Context (Layer 2)

Perna identified availability of resources and types of resources as important School and Community Context (Layer 2) in the college choice decision. In this study, median family income served as an indicator of availability of resources and type of high school (public, independent/not religiously affiliated, independent/Catholic, other independent/religiously affiliated) served as an indicator of types of resources. Type of high school and importance of teachers’ opinions were not statistically associated. That is, students’ who indicate teachers as influential in their choice of college do not differ significantly from those who do not in terms of the type of high school attended. On the other hand, median family income and importance of teachers’ opinions were statistically associated though the association was weak. However, the test for significance of difference of proportions suggest



that students who report living in zip-code areas where the median family income is in the lower ranges (less than \$30,000, \$30,000-\$39,999, and \$40,000-\$59,999) are statistically more likely to indicate high school teachers' opinions as "very important" than "not very important" in their choice of college while those in the upper median family income ranges (\$60,000-\$79,999, \$80,000-\$99,999, \$100,000-\$149,999) are less likely to report teachers' opinions as "very important" than "not very important" in their choice of college. This finding would suggest that in terms of school and community context, teachers' influence in students' choice of college is more prominent among students from lower socio-economic backgrounds. This finding is not surprising as these students have limited resources and thus are more inclined to seek and heed the advice of others, including high school teachers, when making their college choice. In fact, these findings are in alignment with Croninger and Lee's (2001) work on social capital in which the researchers contend that teachers help compensate for the absence of social and academic resources in other parts of students' lives by providing tutoring, academic counseling, and guidance about educational decisions. Croninger and Lee note that, "these findings are consistent with a growing recognition that the quality of students' relationships with teachers is an important predictor of educational success (2001, p. 548). On the other end of the family income spectrum, this notion, yet again, supports research conducted by McDonough and colleagues (1997) in which the researchers noted the increase use of private college counseling services among the college-going population and concluded that students using these for-hire services are generally from high socio-economic backgrounds.

### Higher Education Context (Layer 3)

Perna identified marketing and recruitment, location, and institutional characteristics as important Higher Education Context (Layer 3) affecting the college choice decision. This study used important information sources as indicators of marketing and recruitment, residency (in-state versus out-of-state) as an indicator of location, and institutional control as well as institutional Carnegie Classifications as indicators of institutional characteristics. The latter two indicators also served as measures of college choice outcomes. The analyses revealed that the importance of high school teachers' opinions and several of the information source variables including college publications, websites, visit to campus, contact with college after admit, were not statistically associated. While the remaining information source variables (including visit by admissions staff, college sponsored meetings, communication about financial aid, electronic communications with college, on-campus interview, and contact with faculty, graduates and coaches) and importance of high school teachers' opinions were statistically associated, the relationships proved to be rather small, if not trivial. Nevertheless, the test of significance of differences of proportion revealed that in each case, students who reported that these information sources were *used or considered* were statistically more likely to indicate that teachers' opinions was "very important" in their choice of college. In contrast, students reporting that the information sources were *not used or not considered* were statistically less likely to indicate teachers' opinions as "very important" than "not very important". This finding would suggest that teachers' influence on students'

choice of college is felt more strongly among students who are *more receptive to and, perhaps, more responsive to institutional marketing and recruitment outreach efforts.*

While institutional control (independent, private/for profit, private/independent, private/not for profit and public) as an indicator of institutional characteristics and importance of teachers opinions in students college choice were statistically not associated, residence (in-state versus out-of-state) as well as institutional Carnegie Classification and importance of high school teachers' opinions were found to be statistically associated though the associations were weak. However, the test of significance of differences of proportion revealed that students reporting plans to attend schools in their home state were statistically more likely than their peers who reported plans to attend a school outside their home state to indicate teachers' opinions as "very important". The test of significance of differences of proportions also revealed interesting associations between high school teacher's opinions and college destinations (i.e. Carnegie Classifications). That is, students reporting plans to attend schools in the "masters colleges and universities" or "specialty schools" classifications are statistically more likely to report high school teachers' opinions as "very important" than "not very important" in their choice of college while those students reporting plans to attend a "baccalaureate colleges" or "doctoral and research universities" were less likely to indicate teachers opinions as " very important" than "not very important" in their choice of college. McDonough and Antonio (1996) and Ceja (2000) concluded, from two separate quantitative studies, that teachers play a more influential role, particularly for students of color, in formulating student's preference for a predominately white institution or more selective institution. The

findings on both institutional control (public versus private) and Carnegie Classification seem to negate this notion. First, institutional control (public versus private) and importance of high school teachers' opinions were not statistically associated. Second, assuming institutions classified as "doctoral and research universities" to be, in general, more selective than "masters colleges or universities" and "specialty schools", findings from this study would suggest that, in fact, teachers' influence is felt more strongly among students planning to attend *less selective institutions*.

### Summary

This study contributes to what is known about the college choice process by addressing the following research question: How do students who identify teachers as influential in their choice of college differ from those who do not in terms of academic and demographic characteristics and college choice outcomes? Although the study was exploratory and based on cross-sectional data, several conclusions can be drawn from the findings.

First, in terms of academic characteristics, the researcher concludes that graduates who report teachers as influential in their choice of college differ from those who do not in terms of grade average and admissions test scores. Specifically, teachers are most influential for students who have a grade average of B (80-89), score in the mid to lower ranges of the admissions tests (SAT and ACT) or who report no SAT scores at all. That is, teachers' influence is felt stronger among students who are less competitive academically.

Second, in terms of demographic characteristics (i.e. gender and race/ethnicity), the researcher concludes that while graduates who report teachers as influential in their choice of college do not appear to differ in terms of gender; they do differ in term of race/ethnicity background. Specifically, teachers are most influential for students of color (Asian/ Asian American/Pacific Islander, Mexican American/Chicano, Latin American/South American/Central American/Other Hispanic and Black/African American) than for White students.

Last, in terms of college choice outcomes, the study reveals that graduates who report teachers as influential in their choice of college do not differ from those who do not in terms of institutional control (independent, private/for profit, private/independent, private/not for profit and public). At the same time, the study found that students who report teachers as influential in their choice of college do differ in terms of location and institutional type. That is, teachers are most influential among students who opt to attend institutions in their home state and institutions in the “masters colleges and universities” or “specialty schools” Carnegie Classifications. In other words, teachers’ influence is felt stronger among students choosing to attend less selective institutions. Further, teachers are most influential among students who give greater consideration to schools where the perceived emphasis is on “quality of students’ academic experience”, “opportunities for involvement outside the classroom” and “campus aesthetics”.

#### *Implications for Future Research and Practice*

This exploratory study has implications for both future research and practice. First, in terms of future research, the study highlights the need for education

researchers and market researchers, in particular, to expand their thinking about who influences students' choice of college; thereby, designing surveys and studies that more effectively capture and measure students' feedback on the role of a range of significant persons in the college choice process, including high school teachers. Further, in the research design, special effort should be given to clearly distinguish and delineate the roles of the high school teachers from other influencers in the college choice process, for example, professional school counselors, high school coaches and club advisors. This delineation has not always been very clear in past studies designed to understand the role of significant persons on the college choice process.

Second, while this study provides a comparative analysis of the two populations of students under consideration - students who report teachers as influential in their choice of college and those who do not, the body of literature on college choice would be enhanced by a more thorough examination that focuses exclusively on students who identify teachers as influential in their choice of college. In explaining her conceptual model of college choice that draws on both economic and sociological perspectives (Figure 1), Perna (2006) notes that the model assumes that students' educational decisions are determined, in part, by their habitus, or the system of values and beliefs that shapes an individual's views and interpretations. Perna (2006) further asserts that a key strength of an integrated conceptual model is the assumption that the pattern of educational attainment is not universal but may vary across racial/ethnic, socioeconomic, and other groups. Therefore, understanding more deeply the college choice behaviors of students who indicate teachers as

influential in their choice of college across various racial/ethnic and socioeconomic variables would be beneficial. A qualitative study, involving interviews and/or focus groups, would be ideal as such a study would allow for more insight to the nature of the student-teacher interaction (e.g. if the interaction is taking place during or outside of the class/classroom), and specifically *how* the teacher is influencing students decisions (i.e. by recommending specific colleges/universities for consideration or by offering opinions about colleges/universities on students' short list).

Third, the college choice literature would be greatly enhanced by a thorough examination of the teachers themselves. That is, an examination of teachers serving in an advisory capacity to students with respects to their college choice decision. This study found that students who identified teachers as influential in their choice of college were statistically more likely to attend school in-state and attend a less selective schools. What can we learn about these teachers? That is, what do we know about their demographic backgrounds and their own collegiate experiences. A mixed methods approach including surveys and interviews would provide useful insight to these influencers.

In terms of future practice, this study has numerous implications. First, a better understanding of students who indicate teachers as influential in their choice of college has significant implications for institutional marketing and recruitment strategies. Specifically, this insight will assist institutions in ascertaining to what extent teachers are shaping the perceptions of their target student populations. Enrollment managers and institutional marketing staff can be more strategic in their marketing efforts by designing and developing publications and other marketing and

communication activities that address the specific needs and interests of teachers as potential influencers on the student college choice process. Further, by developing a deeper understanding of the role of teachers in students' college choice, institutions may design outreach activities aimed at further cultivating the relationship between the institution and its teacher constituency. For example, since high school teachers' influence is felt stronger among students of color and among students attending in-state schools, institutions seeking to enhance racial and ethnic diversity should consider as part of its overall strategy ways to engage local high school teachers who serve racial/ethnic student populations. In addition, as institutions develop publications and other marketing materials designed for teachers, among the institutional characteristics they may want to highlight in these publications will be quality of student academic experience, opportunities to get involved and campus aesthetics since students who report teachers as influential in their choice of college tend to place emphasis on these college attributes. With regard to the latter (campus aesthetics), institutions may want to consider, as part of their overall awareness strategy, developing opportunities for teachers to visit the campus so they may experience first-hand the quality of the academic facilities, quality of on-campus housing, campus attractiveness, and campus surroundings.

Second, from a secondary school perspective, developing a better understanding of students who indicate teachers as influential in their choice of college presents an opportunity for school administrators to maximize the effectiveness of scarce resources. In most schools, the school counselor is tasked as the "official" resource person for college information and college counseling. And



yet, there is a growing concern among educators and parents that high school counselors are overburdened with administrative tasks and may not be able to adequately counsel and advise all students during their college search (McDonough, 1991; McDonough, 2005; Murphy, 1981; Sanoff, 1999). Recognizing and better understanding the role of teachers in the college choice process presents an opportunity to enhance teacher preparation programs by providing more training for teachers specifically in the college choice process. For example, secondary schools and their students may be better served if their teachers had a general understanding of and were more versed on the federal financial aid application process particularly given that high school teachers' influence is felt stronger among students who report that they did not apply for financial aid as well as students who report that that financial aid and cost, and net cost to family, were significant factors in their choice of college. Recognizing however that teachers, too, are often overwhelmed and can sometimes face difficulty delivering existing lesson plans, school administrators might consider how they might collaborate with local colleges and universities to partner, for example, financial aid professionals with high school teachers to assist in the delivery of important college planning material.

More important, perhaps, than teachers' ability to offer much needed technical advice and assistance to some students in the college choice process, is the role of teachers in influencing students' educational goals and aspirations (Ford & Thomas, 1997; Johnson et al., 2010; Kumar & Hruda, 2001; McIntosh & Greenlaw, 1990; Richer et al., 1998). In that spirit, school administrators that recognize, embrace and support the role of teachers in the college choice process, whether in the early stage

(pre-disposition) of students' college choice process or at the latter stage (choice), also serve in further promoting and encouraging a college-going culture in the school and community. A college-going culture is an environment where the attitudes and practices of administrators and teachers encourage students and their families to obtain the information, tools and perspective to enhance access to and success in post-secondary education (University of California, 2009). It is the belief and expectation that every student can achieve. In their report on Critical Conditions for Equity and Diversity in College Access: Informing Policy and Monitoring Results, University of California researchers suggest that developing a college-going culture matters because students' learning is strongly tied to the expectations of those around them and the quality of their opportunities to learn. The researchers further explain that minority students, in particular, perform poorly when their teachers do not believe in their abilities (Oakes, 2003).

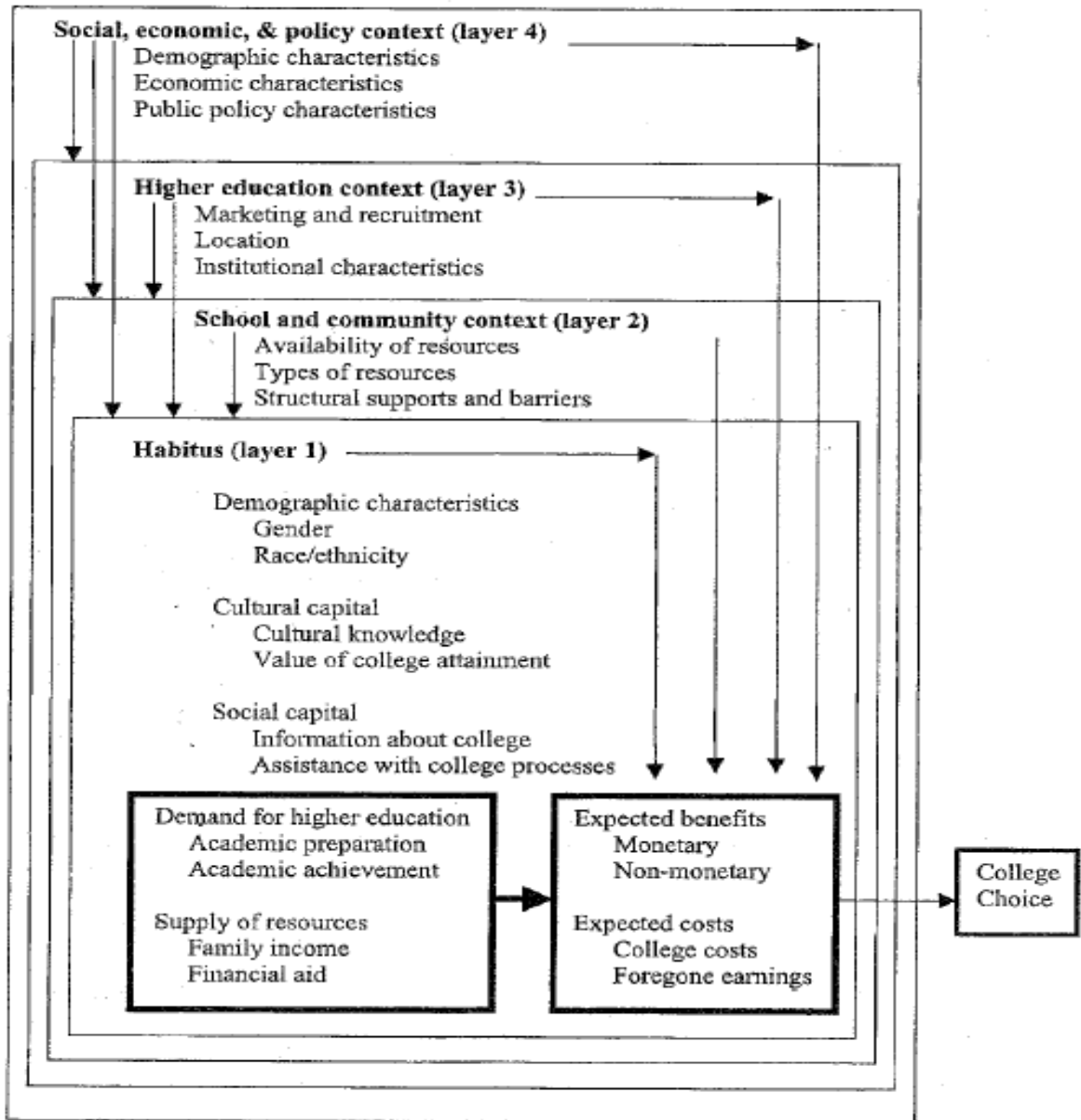
Finally, it's important to note that while this study highlights the influence and impact of teachers opinions on the college choice decisions of some specific populations of students namely, students of color and students from less privileged backgrounds, it is not the intend of this study to imply that teachers do not serve a critical role for all other students. Educators and policy makers must keep in mind that all students, regardless of race and socio-economic background benefit from a positive and supportive relationship with their teachers. We'd be remiss to think otherwise. In fact, several education researchers (Dee, 2005; Schwartz & Hanson, 1992; Strutchens, 1999) have found that by better promoting student achievement in math particularly among female students, teachers can be influential in students'

interests in and their ability to achieve their postsecondary plans in science, technology, engineering and mathematics.

By enhancing our understanding of students in the college choice process that give serious consideration to the opinions and perspective of high school teachers in deciding which college to attend, this dissertation study informs future college choice research and future practice. Specifically, the study provides insight to ways institutions might enhance their marketing and recruitment efforts to address the information needs of teachers as influencers in the college choice process. In addition, this research has implications for teacher preparation programs that educate and train teachers about the fundamentals of the college choice process and formally engage teachers in the college choice process.

# Appendix I

## *Perna's Proposed Conceptual Model of Student College Choice*



# Appendix II

## College Board's Admitted Student Questionnaire (ASQ)

### ADMITTED STUDENT QUESTIONNAIRE<sup>®</sup>

Many characteristics of colleges are important to students in making college choices. Some of these characteristics are listed below. Please indicate in column A how important each college characteristic was to you in choosing the college that you will attend. In column B indicate how our college compared to other colleges that you considered *seriously*. Circle the numbers that best represent your ratings.

COLLEGE CHARACTERISTICS	A. IMPORTANCE TO YOU			B. HOW OUR COLLEGE COMPARED TO OTHERS YOU CONSIDERED					
	Very Important	Somewhat Important	Not Important	Best	Better than Most	About the Same	Poorer than Most	Worst	Can't Compare
1. Quality of faculty	1	2	3	1	2	3	4	5	0
2. Quality of majors of interest to you	1	2	3	1	2	3	4	5	0
3. Overall academic reputation	1	2	3	1	2	3	4	5	0
4. Quality of academic facilities (library, laboratories, computers, etc.)	1	2	3	1	2	3	4	5	0
5. Variety of courses	1	2	3	1	2	3	4	5	0
6. Access to faculty	1	2	3	1	2	3	4	5	0
7. Concentration on undergraduate education	1	2	3	1	2	3	4	5	0
8. Prominent intercollegiate athletics	1	2	3	1	2	3	4	5	0
9. Cost to your family – how much you and your family would have to pay after grants and scholarships (if any) are subtracted from total college costs	1	2	3	1	2	3	4	5	0
10. Athletic programs in which you would like to participate	1	2	3	1	2	3	4	5	0
11. Availability of extracurricular activities (clubs, debate, drama, music, etc.)	1	2	3	1	2	3	4	5	0
12. Access to off-campus cultural and recreational opportunities	1	2	3	1	2	3	4	5	0
13. Availability of religious activities	1	2	3	1	2	3	4	5	0
14. Quality of social life	1	2	3	1	2	3	4	5	0
15. Attractiveness of campus	1	2	3	1	2	3	4	5	0
16. Surroundings (neighborhood, town or city)	1	2	3	1	2	3	4	5	0
17. Part of the country in which the college is located	1	2	3	1	2	3	4	5	0
18. Quality of on-campus housing	1	2	3	1	2	3	4	5	0
19. Ease of getting home	1	2	3	1	2	3	4	5	0
20. Chance to be with students from different backgrounds	1	2	3	1	2	3	4	5	0

[40]

Students often take into account the opinions of other people when making college choices. They may also take into account how they think colleges are viewed by potential employers or by graduate schools. Please indicate in column A how important such opinions were to you in choosing the college that you will attend. In column B indicate how our college tends to be compared to other colleges that you considered *seriously*. Circle the numbers that best represent your ratings.

OPINIONS	A. IMPORTANCE TO YOU			B. HOW OUR COLLEGE TENDS TO BE COMPARED TO OTHERS YOU CONSIDERED					
	Very Important	Somewhat Important	Not Important	Best	Better than Most	About the Same	Poorer than Most	Worst	Don't Know
21. My parents or guardians	1	2	3	1	2	3	4	5	0
22. My guidance counselor	1	2	3	1	2	3	4	5	0
23. My high school teacher(s)	1	2	3	1	2	3	4	5	0
24. My friends	1	2	3	1	2	3	4	5	0
25. Potential future employers	1	2	3	1	2	3	4	5	0
26. Graduate and professional schools	1	2	3	1	2	3	4	5	0

[52]

To help improve the information we make available to students, please rate the quality of the information we provided to you. For each source listed, indicate how our information compared to that provided by other colleges you considered *seriously*. Circle the number that represents your rating for each information source. If a given type of information was not available from our college or not used by you, circle zero.

INFORMATION SOURCES	HOW OUR COLLEGE COMPARED TO OTHERS YOU CONSIDERED					
	Not Offered or Not Used	Best	Better than Most	About the Same	Poorer than Most	Worst
27. Visits by admissions staff at your high school	0	1	2	3	4	5
28. College-sponsored meetings in your home area	0	1	2	3	4	5
29. College publications (catalogs, brochures, etc.)	0	1	2	3	4	5
30. College videos or CD-ROMs	0	1	2	3	4	5
31. College web site	0	1	2	3	4	5
32. Communications about financial aid (not the aid decision)	0	1	2	3	4	5
33. Electronic communication with the college	0	1	2	3	4	5
34. Visit to campus	0	1	2	3	4	5
35. On-campus interview with admissions staff	0	1	2	3	4	5
36. Contact with the college after you were admitted	0	1	2	3	4	5
37. Contact with faculty from the college	0	1	2	3	4	5
38. Contact with coaches	0	1	2	3	4	5
39. Contact with graduates of the college	0	1	2	3	4	5
40. Contact with students who attend the college	0	1	2	3	4	5

[66]

From the list below, please circle all words or phrases that you would say are the most widely-held images of our college.

41. Career-oriented	47. Relaxed	53. Liberal	59. Partying
42. Personal	48. Snobbish	54. Challenging	60. Intellectual
43. Conservative	49. Fun	55. Not well-known	61. Athletics
44. Social	50. Impersonal	56. Friendly	62. Comfortable
45. Intense	51. Prestigious	57. Average	63. Exciting
46. Isolated	52. Back-up school	58. Close-knit	64. Other _____

[90]

Please provide the following information about the colleges to which you applied.

65. Including our college, to how many institutions did you apply? \_\_\_\_\_
66. Including our college, to how many of these institutions were you admitted? \_\_\_\_\_
67. Do you plan to enroll in college within the next 12 months?      1 Yes   2 No
- If "yes," please indicate the name of the college you plan to attend. \_\_\_\_\_

College Name City/State

Please list below up to five other colleges to which you applied and indicate the actions taken by these colleges on your applications. If you applied to more than five other colleges, list those you were most interested in attending. Do not list our college or the college you plan to attend.

	Admitted	Wait-Listed	Not Admitted	Withdrew Application	Haven't Heard
68. _____ College Name <span style="float: right;">City/State</span>	1	2	3	4	5
69. _____ College Name <span style="float: right;">City/State</span>	1	2	3	4	5
70. _____ College Name <span style="float: right;">City/State</span>	1	2	3	4	5
71. _____ College Name <span style="float: right;">City/State</span>	1	2	3	4	5
72. _____ College Name <span style="float: right;">City/State</span>	1	2	3	4	5

[124]

Please provide the following information about college costs and financial aid, where applicable.

- |                                                                                                                                  | <u>OUR COLLEGE</u> | <u>ANY OTHER COLLEGE</u> |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------|
|                                                                                                                                  | 1 Yes   2 No       | 1 Yes   2 No             |
| 73. Did you apply to any college for financial aid?                                                                              | 1 Yes   2 No       | 1 Yes   2 No             |
| 74. Were you offered financial aid by any college?                                                                               | 1 Yes   2 No       | 1 Yes   2 No             |
| 75. Did any college offer you a scholarship specifically in recognition of your athletic, musical, or academic talent?           | 1 Yes   2 No       | 1 Yes   2 No             |
| 76. Were either financial aid or college costs significant factors in your decision to enroll in the college you plan to attend? | 1 Yes   2 No       |                          |

[131]

Please describe how our college compared to other colleges you considered in terms of cost and financial aid amounts. Circle the numbers that best reflect comparative cost and aid amounts. If you did not apply for financial aid or if you have not yet been notified about aid awards, circle zero.

**COST AND FINANCIAL AID**      **HOW OUR COLLEGE COMPARED TO OTHERS YOU CONSIDERED**

	Highest Amount	Higher than Most	About the Same	Lower than Most	Lowest Amount	Does Not Apply
77. Total institutional price (before financial aid)	1	2	3	4	5	
78. Total cost to you and your family after grants and scholarships	1	2	3	4	5	0
79. Total dollar amount of financial aid offered	1	2	3	4	5	0
80. Portion of total financial aid that was scholarship or grant	1	2	3	4	5	0
81. Amount of financial aid given in recognition of athletic, musical, or academic talent	1	2	3	4	5	0

82. Please answer the following questions specifically about the college you are planning to attend:

- Check here  if you did not apply for financial aid at the college you will attend.      **OR**  
 Check here  if you applied for but did not receive any financial aid from the college you will attend.

If you DID receive financial aid from the college you will attend, please list the amounts of financial aid awarded by that college for the first year:

Work	\$ _____	Need-based scholarship/grant	\$ _____
Student loan	\$ _____	Merit-based scholarship	\$ _____

TOTAL \$ \_\_\_\_\_

[162]

83. How are your parents/guardians financing their contribution toward your college education? (Circle all that apply)
- |                                                                                         |                                                                                   |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1 From current income                                                                   | 4 From other parent loans (including home equity credit line, credit cards, etc.) |
| 2 From past savings (including tuition prepayment plans, Uniform Gifts to Minors, etc.) | 5 Help from relatives, friends, etc.                                              |
| 3 From parent educational loans (e.g., Federal PLUS, etc.)                              | 6 Employer's tuition benefit                                                      |
84. What is your gender?      1 Female      2 Male
85. Which of the following categories best represents your average grades in high school? (Circle one answer)
- 1 A (90-100)    2 B (80-89)    3 C (70-79)    4 D or below (69 or below)
86. What were your highest scores on the following college admission tests?  
 SAT-Critical Reading \_\_\_\_\_ SAT-Math \_\_\_\_\_ SAT-Writing \_\_\_\_\_ ACT Composite \_\_\_\_\_
87. How do you describe yourself? (Circle one answer)
- |                                              |                                                                       |
|----------------------------------------------|-----------------------------------------------------------------------|
| 1 American Indian or Alaskan Native          | 5 Latin American, South American, Central American, or other Hispanic |
| 2 Asian, Asian American, or Pacific Islander | 6 Black or African American                                           |
| 3 Mexican American or Chicano                | 7 White                                                               |
| 4 Puerto Rican                               | 8 Other                                                               |
88. Are you a resident of the state in which our college is located?      1 Yes    2 No
89. How far is our college from your home? (Circle one answer)
- 1 Less than 50 miles    2 51 to 100 miles    3 101 to 300 miles    4 301 to 500 miles    5 More than 500 miles
90. Which of the following best describes the type of high school you attended? (Circle one answer)
- 1 Public    2 Independent, Not Religiously Affiliated    3 Independent, Catholic    4 Other Independent, Religiously Affiliated
91. What was the approximate income of your parents or guardians before taxes last year? (Circle one answer)
- |                        |                        |                          |                          |
|------------------------|------------------------|--------------------------|--------------------------|
| 1 Less than \$30,000   | 3 \$40,000 to \$59,999 | 5 \$80,000 to \$99,999   | 7 \$150,000 to \$199,999 |
| 2 \$30,000 to \$39,999 | 4 \$60,000 to \$79,999 | 6 \$100,000 to \$149,999 | 8 \$200,000 or higher    |
92. What is the zip code of your home address? \_\_\_\_\_ [188]

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Please use the space below for any comments you would like to share with us about our college's admission program.

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Thank you very much for completing this questionnaire.



## Appendix III

### Contingency Tables

#### *A-1. High School Grades by Importance of High School Teachers' Opinions*

High School Grades by Importance of High School Teachers' Opinions			
High School Grades	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
A (90-100)	1623 11.93 18.99 58.57	6923 50.87 81.01 63.87	8546 62.79
B (80-89)	1058 7.77 22.70 38.18	3603 26.47 77.30 33.24	4661 34.25
C (70-79)	87 0.64 22.03 3.14	308 2.26 77.97 2.84	395 2.90
D or below (69 or below)	3 0.02 37.50 0.11	5 0.04 62.50 0.05	8 0.06
Total	2771 20.36	10839 79.64	13610 100.00
Statistic	DF	Value	Prob
Chi-Square	3	27.7242	<.0001
Likelihood Ratio Chi-Square	3	27.2517	<.0001
Mantel-Haenszel Chi-Square	1	23.9270	<.0001
Phi Coefficient		0.0451	
Contingency Coefficient		0.0451	
Cramer's V		0.0451	

*A-2. SAT Critical Reading By Importance of High School Teachers' Opinions*

SAT Critical Reading by importance of High School Teachers' Opinions			
SAT Critical Reading	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
200-290	11 0.08 33.33 0.37	22 0.15 66.67 0.19	33 0.23
300-390	62 0.43 38.99 2.09	97 0.67 61.01 0.85	159 1.10
400-490	345 2.39 29.16 11.60	838 5.80 70.84 7.30	1183 8.19
500-590	581 4.02 21.58 19.54	2111 14.61 78.42 18.40	2692 18.64
600-690	508 3.52 16.10 17.09	2648 18.33 83.90 23.08	3156 21.85
700-790	213 1.47 14.12 7.16	1295 8.97 85.88 11.29	1508 10.44
800	26 0.18 9.03 0.87	262 1.81 90.97 2.28	288 1.99
No Score	1227 8.49 22.61 41.27	4199 29.07 77.39 36.60	5426 37.56
Total	2973 20.58	11472 79.42	14445 100.00

SAT Critical Reading by Importance of High School Teachers' Opinions			
Statistic	DF	Value	Prob
Chi-Square	7	205.7388	<.0001
Likelihood Ratio Chi-Square	7	206.4217	<.0001
Mantel-Haenszel Chi-Square	1	3.4653	0.0627
Phi Coefficient		0.1193	
Contingency Coefficient		0.1185	
Cramer's V		0.1193	

A-3. SAT Math by Importance of High School Teachers' Opinions

SAT Math by Importance of High School Teachers' Opinions			
SAT Math Range	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
200-290	10 0.07 43.48 0.34	13 0.09 56.52 0.11	23 0.16
300-390	50 0.35 29.94 1.68	117 0.81 70.06 1.02	167 1.16
400-490	286 1.98 27.37 9.62	759 5.25 72.63 6.62	1045 7.23
500-590	599 4.15 22.85 20.15	2023 14.00 77.15 17.63	2622 18.15
600-690	556 3.85 16.53 18.70	2807 19.43 83.47 24.47	3363 23.28
700-790	242 1.68 13.93 8.14	1495 10.35 86.07 13.03	1737 12.02
800	19 0.13 12.34 0.64	135 0.93 87.66 1.18	154 1.07
No Score	1211 8.38 22.70 40.73	4123 28.54 77.30 35.94	5334 36.93
Total	2973 20.58	11472 79.42	14445 100.00

SAT Math by Importance of High School Teachers' Opinions			
Statistic	DF	Value	Prob
Chi-Square	7	155.8001	<.0001
Likelihood Ratio Chi-Square	7	158.3546	<.0001
Mantel-Haenszel Chi-Square	1	0.6361	0.4251
Phi Coefficient		0.1039	
Contingency Coefficient		0.1033	
Cramer's V		0.1039	

A-4. ACT by Importance of High School Teachers' Opinions

ACT by Importance of High School Teachers' Opinions			
ACT Range	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
1-5	2 0.04 25.00 0.19	6 0.11 75.00 0.14	8 0.15
6-10	4 0.07 19.05 0.37	17 0.32 80.95 0.39	21 0.39
11-15	12 0.22 41.38 1.12	17 0.32 58.62 0.39	29 0.54
16-20	182 3.37 32.10 17.03	385 7.14 67.90 8.90	567 10.51
21-25	430 7.97 23.13 40.22	1429 26.50 76.87 33.05	1859 34.47
26-30	303 5.62 15.14 28.34	1698 31.49 84.86 39.27	2001 37.10
31-35	133 2.47 14.88 12.44	761 14.11 85.12 17.60	894 16.58
36	3 0.06 21.43 0.28	11 0.20 78.57 0.25	14 0.26
Total	1069 19.82	4324 80.18	5393 100.00

ACT by Importance of High School Teachers' Opinions			
Statistic	DF	Value	Prob
Chi-Square	7	116.5486	<.0001
Likelihood Ratio Chi-Square	7	111.1747	<.0001
Mantel-Haenszel Chi-Square	1	89.7762	<.0001
Phi Coefficient		0.1470	
Contingency Coefficient		0.1454	
Cramer's V		0.1470	

*A-5. Quality of Faculty by Importance of High School Teachers' Opinions*

Importance of Quality of Faculty by Importance of High School Teachers' Opinions			
Importance of Quality of Faculty	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2685 18.67 21.94 90.56	9555 66.43 78.06 83.68	12240 85.10
Somewhat Important	272 1.89 13.20 9.17	1789 12.44 86.80 15.67	2061 14.33
Not Important	8 0.06 9.76 0.27	74 0.51 90.24 0.65	82 0.57
Total	2965 20.61	11418 79.39	14383 100.00
Statistic	DF	Value	Prob
Chi-Square	2	88.2572	<.0001
Likelihood Ratio Chi-Square	2	96.8511	<.0001
Mantel-Haenszel Chi-Square	1	87.0450	<.0001
Phi Coefficient		0.0783	
Contingency Coefficient		0.0781	
Cramer's V		0.0783	



*A-6. Quality of Majors by Importance of High School Teachers' Opinions*

Importance of Quality of Majors by Importance of High School Teachers' Opinions			
Importance of Quality of Majors	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2713 18.85 21.59 91.59	9854 68.46 78.41 86.20	12567 87.31
Somewhat Important	240 1.67 13.75 8.10	1505 10.46 86.25 13.16	1745 12.12
Not Important	9 0.06 10.98 0.30	73 0.51 89.02 0.64	82 0.57
Total	2962 20.58	11432 79.42	14394 100.00
Statistic	DF	Value	Prob
Chi-Square	2	62.2004	<.0001
Likelihood Ratio Chi-Square	2	67.8260	<.0001
Mantel-Haenszel Chi-Square	1	61.1221	<.0001
Phi Coefficient		0.0657	
Contingency Coefficient		0.0656	
Cramer's V		0.0657	

*A-7. Academic Reputation by Importance of High School Teachers' Opinions*

Importance of Overall Academic Reputation by Importance of High School Teachers' Opinions			
Importance of Overall Academic Reputation	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2341 16.29 22.92 79.11	7873 54.80 77.08 69.01	10214 71.09
Somewhat Important	586 4.08 14.76 19.80	3383 23.55 85.24 29.65	3969 27.63
Not Important	32 0.22 17.39 1.08	152 1.06 82.61 1.33	184 1.28
Total	2959 20.60	11408 79.40	14367 100.00
Statistic	DF	Value	Prob
Chi-Square	2	117.4075	<.0001
Likelihood Ratio Chi-Square	2	123.4138	<.0001
Mantel-Haenszel Chi-Square	1	106.5317	<.0001
Phi Coefficient		0.0904	
Contingency Coefficient		0.0900	
Cramer's V		0.0904	

A-8. Undergraduate Education by Importance of High School Teachers' Opinions

Importance of Concentration on Undergraduate Education by Importance of High School Teachers' Opinions			
Importance of Concentration on Und. Education	Importance of High School Teachers' Opinions		
	Very Important	Not Very Important	Total
Frequency Percent Row % Column %			
Very Important	2158 15.13 23.47 73.45	7036 49.34 76.53 62.14	9194 64.47
Somewhat Important	718 5.04 15.70 24.44	3854 27.03 84.30 34.04	4572 32.06
Not Important	62 0.43 12.55 2.11	432 3.03 87.45 3.82	494 3.46
Total	2938 20.60	11322 79.40	14260 100.00
Statistic	DF	Value	Prob
Chi-Square	2	132.9093	<.0001
Likelihood Ratio Chi-Square	2	138.3814	<.0001
Mantel-Haenszel Chi-Square	1	128.5739	<.0001
Phi Coefficient		0.0965	
Contingency Coefficient		0.0961	
Cramer's V		0.0965	

*A-9. Athletic Programs Available by Importance of High School Teachers' Opinions*

Importance of Athletic Programs Available by Importance of High School Teachers' Opinions			
Importance of Athletic Programs Available	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	843 5.87 25.75 28.52	2431 16.92 74.25 21.31	3274 22.79
Somewhat Important	1112 7.74 21.07 37.62	4166 29.00 78.93 36.51	5278 36.74
Not Important	1001 6.97 17.22 33.86	4813 33.50 82.78 42.18	5814 40.47
Total	2956 20.58	11410 79.42	14366 100.00
Statistic	DF	Value	Prob
Chi-Square	2	94.5179	<.0001
Likelihood Ratio Chi-Square	2	93.3634	<.0001
Mantel-Haenszel Chi-Square	1	94.1716	<.0001
Phi Coefficient		0.0811	
Contingency Coefficient		0.0808	
Cramer's V		0.0811	

*A-10. Off-Campus Opportunities by Importance of High School Teachers' Opinions*

Importance of Off-Campus Opportunities by Importance of High School Teachers' Opinions			
Importance of Off-Campus Opportunities	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1372 9.57 25.22 46.56	4069 28.38 74.78 35.72	5441 37.95
Somewhat Important	1292 9.01 18.16 43.84	5824 40.62 81.84 51.12	7116 49.63
Not Important	283 1.97 15.88 9.60	1499 10.45 84.12 13.16	1782 12.43
Total	2947 20.55	11392 79.45	14339 100.00
Statistic	DF	Value	Prob
Chi-Square	2	121.3087	<.0001
Likelihood Ratio Chi-Square	2	119.9889	<.0001
Mantel-Haenszel Chi-Square	1	110.5754	<.0001
Phi Coefficient		0.0920	
Contingency Coefficient		0.0916	
Cramer's V		0.0920	

*A-11. Availability of Religious Activities by Importance of High School*

*Teachers' Opinions*

Importance of Availability of Religious Activities by Importance of High School Teachers' Opinions			
Importance of Availability of Religious Activities	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	806 5.62 25.39 27.30	2369 16.51 74.61 20.78	3175 22.12
Somewhat Important	1030 7.18 22.04 34.89	3643 25.38 77.96 31.96	4673 32.56
Not Important	1116 7.78 17.16 37.80	5387 37.54 82.84 47.26	6503 45.31
Total	2952 20.57	11399 79.43	14351 100.00
Statistic	DF	Value	Prob
Chi-Square	2	97.5065	<.0001
Likelihood Ratio Chi-Square	2	97.1707	<.0001
Mantel-Haenszel Chi-Square	1	96.4099	<.0001
Phi Coefficient		0.0824	
Contingency Coefficient		0.0821	
Cramer's V		0.0824	

*A-12. Quality of Social Life by Importance of High School Teachers' Opinions*

Importance of Quality of Social Life by Importance of High School Teachers' Opinions			
Importance of Quality of Social Life	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1943 13.58 22.67 65.98	6626 46.30 77.33 58.30	8569 59.88
Somewhat Important	920 6.43 17.57 31.24	4317 30.17 82.43 37.99	5237 36.60
Not Important	82 0.57 16.27 2.78	422 2.95 83.73 3.71	504 3.52
Total	2945 20.58	11365 79.42	14310 100.00
Statistic	DF	Value	Prob
Chi-Square	2	57.8150	<.0001
Likelihood Ratio Chi-Square	2	58.7453	<.0001
Mantel-Haenszel Chi-Square	1	54.7109	<.0001
Phi Coefficient		0.0636	
Contingency Coefficient		0.0634	
Cramer's V		0.0636	

*A-13. Importance of Surroundings by Importance of High School Teachers' Opinions*

Importance of Surroundings by Importance of High School Teachers' Opinions			
Importance of Surroundings	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1766 12.30 23.93 59.86	5614 39.11 76.07 49.23	7380 51.42
Somewhat Important	1056 7.36 16.83 35.80	5217 36.35 83.17 45.75	6273 43.71
Not Important	128 0.89 18.29 4.34	572 3.99 81.71 5.02	700 4.88
Total	2950 20.55	11403 79.45	14353 100.00
Statistic	DF	Value	Prob
Chi-Square	2	106.8643	<.0001
Likelihood Ratio Chi-Square	2	107.6466	<.0001
Mantel-Haenszel Chi-Square	1	86.5383	<.0001
Phi Coefficient		0.0863	
Contingency Coefficient		0.0860	
Cramer's V		0.0863	



*A-14. Part of the Country by Importance of High School Teachers' Opinions*

Importance of Part of the Country by Importance of High School Teachers' Opinions			
Importance of Part of the Country	Importance of HS Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1711 11.92 23.65 57.94	5524 38.48 76.35 48.44	7235 50.39
Somewhat Important	946 6.59 17.38 32.04	4498 31.33 82.62 39.44	5444 37.92
Not Important	296 2.06 17.64 10.02	1382 9.63 82.36 12.12	1678 11.69
Total	2953 20.57	11404 79.43	14357 100.00
Statistic	DF	Value	Prob
Chi-Square	2	84.7708	<.0001
Likelihood Ratio Chi-Square	2	85.0909	<.0001
Mantel-Haenszel Chi-Square	1	66.9704	<.0001
Phi Coefficient		0.0768	
Contingency Coefficient		0.0766	
Cramer's V		0.0768	

*A-15. Quality of Academic Facilities by Importance of High School*

*Teachers' Opinions*

Importance of Quality of Academic Facilities by Importance of High School Teachers' Opinions			
Importance of Quality of Academic Facilities	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2131 14.89 23.85 72.46	6805 47.54 76.15 59.84	8936 62.43
Somewhat Important	780 5.45 15.10 26.52	4385 30.64 84.90 38.56	5165 36.09
Not Important	30 0.21 14.15 1.02	182 1.27 85.85 1.60	212 1.48
Total	2941 20.55	11372 79.45	14313 100.00
Statistic	DF	Value	Prob
Chi-Square	2	158.7434	<.0001
Likelihood Ratio Chi-Square	2	164.2651	<.0001
Mantel-Haenszel Chi-Square	1	152.0905	<.0001
Phi Coefficient		0.1053	
Contingency Coefficient		0.1047	
Cramer's V		0.1053	

*A-16. Variety of Courses by Importance of High School Teachers' Opinions*

Importance of Variety of Courses by Importance of High School Teachers' Opinions			
Importance of Variety of Courses	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2104 14.64 23.99 71.06	6666 46.39 76.01 58.43	8770 61.03
Somewhat Important	821 5.71 15.41 27.73	4507 31.37 84.59 39.51	5328 37.08
Not Important	36 0.25 13.28 1.22	235 1.64 86.72 2.06	271 1.89
Total	2961 20.61	11408 79.39	14369 100.00
Statistic	DF	Value	Prob
Chi-Square	2	158.2499	<.0001
Likelihood Ratio Chi-Square	2	163.3025	<.0001
Mantel-Haenszel Chi-Square	1	152.6449	<.0001
Phi Coefficient		0.1049	
Contingency Coefficient		0.1044	
Cramer's V		0.1049	

*A-17. Access to Faculty by Importance of High School Teachers' Opinions*

Importance of Access to Faculty by Importance of High School Teachers' Opinions			
Importance of Access to Faculty	Importance of HS Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2418 16.87 23.28 81.97	7968 55.58 76.72 69.97	10386 72.44
Somewhat Important	510 3.56 13.50 17.29	3268 22.79 86.50 28.70	3778 26.35
Not Important	22 0.15 12.72 0.75	151 1.05 87.28 1.33	173 1.21
Total	2950 20.58	11387 79.42	14337 100.00
Statistic	DF	Value	Prob
Chi-Square	2	168.8285	<.0001
Likelihood Ratio Chi-Square	2	180.3697	<.0001
Mantel-Haenszel Chi-Square	1	161.6711	<.0001
Phi Coefficient		0.1085	
Contingency Coefficient		0.1079	
Cramer's V		0.1085	

*A-18. Prominent Intercollegiate Activity by Importance of High School Teachers'*

*Opinions*

Importance of Prominent Intercollegiate Activity by Importance of High School Teachers' Opinions			
Importance of Prominent Intercollegiate Activity	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	757 5.28 28.46 25.69	1903 13.28 71.54 16.72	2660 18.57
Somewhat Important	1108 7.73 21.30 37.60	4094 28.58 78.70 35.98	5202 36.31
Not Important	1082 7.55 16.74 36.72	5383 37.57 83.26 47.30	6465 45.12
Total	2947 20.57	11380 79.43	14327 100.00
Statistic	DF	Value	Prob
Chi-Square	2	161.1662	<.0001
Likelihood Ratio Chi-Square	2	156.1816	<.0001
Mantel-Haenszel Chi-Square	1	157.9814	<.0001
Phi Coefficient		0.1061	
Contingency Coefficient		0.1055	
Cramer's V		0.1061	

*A-19. Availability of Extracurricular Activity by Importance of High*

*School Teachers' Opinions*

Importance of Availability of Extracurricular Activity by Importance of High School Teachers' Opinions			
Importance of Availability of Extracurricular Activity	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1491 10.38 26.86 50.47	4061 28.28 73.14 35.60	5552 38.66
Somewhat Important	1277 8.89 17.15 43.23	6169 42.96 82.85 54.08	7446 51.85
Not Important	186 1.30 13.65 6.30	1177 8.20 86.35 10.32	1363 9.49
Total	2954 20.57	11407 79.43	14361 100.00
Statistic	DF	Value	Prob
Chi-Square	2	227.5271	<.0001
Likelihood Ratio Chi-Square	2	225.3291	<.0001
Mantel-Haenszel Chi-Square	1	211.2912	<.0001
Phi Coefficient		0.1259	
Contingency Coefficient		0.1249	
Cramer's V		0.1259	

*A-20. Attractiveness of Campus by Importance of High School Teachers' Opinions*

Importance of Attractiveness of Campus by Importance of High School Teachers' Opinions			
Importance of Attractiveness of Campus	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1760 12.29 25.27 59.64	5205 36.36 74.73 45.80	6965 48.65
Somewhat Important	1087 7.59 16.18 36.83	5631 39.33 83.82 49.55	6718 46.93
Not Important	104 0.73 16.43 3.52	529 3.70 83.57 4.65	633 4.42
Total	2951 20.61	11365 79.39	14316 100.00
Statistic	DF	Value	Prob
Chi-Square	2	179.7058	<.0001
Likelihood Ratio Chi-Square	2	180.3632	<.0001
Mantel-Haenszel Chi-Square	1	156.7142	<.0001
Phi Coefficient		0.1120	
Contingency Coefficient		0.1113	
Cramer's V		0.1120	

A-21. *Quality of On-Campus Housing by Importance of High*

*School Teachers' Opinions*

Importance of Quality of On-Campus Housing by Importance of High School Teachers' Opinions			
Importance of Quality of On-Campus Housing	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1945 13.55 24.42 65.98	6020 41.95 75.58 52.80	7965 55.51
Somewhat Important	783 5.46 14.98 26.56	4444 30.97 85.02 38.98	5227 36.43
Not Important	220 1.53 19.00 7.46	938 6.54 81.00 8.23	1158 8.07
Total	2948 20.54	11402 79.46	14350 100.00
Statistic	DF	Value	Prob
Chi-Square	2	174.1144	<.0001
Likelihood Ratio Chi-Square	2	178.8511	<.0001
Mantel-Haenszel Chi-Square	1	110.8622	<.0001
Phi Coefficient		0.1102	
Contingency Coefficient		0.1095	
Cramer's V		0.1102	



A-22. Ease of Getting Home by Importance of High School Teachers' Opinions

Importance of Ease of Getting Home by Importance of High School Teachers' Opinions			
Importance of Ease of Getting Home	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1666 11.62 27.15 56.61	4471 31.18 72.85 39.24	6137 42.80
Somewhat Important	968 6.75 15.87 32.89	5130 35.78 84.13 45.02	6098 42.53
Not Important	309 2.16 14.69 10.50	1794 12.51 85.31 15.74	2103 14.67
Total	2943 20.53	11395 79.47	14338 100.00
Statistic	DF	Value	Prob
Chi-Square	2	289.6663	<.0001
Likelihood Ratio Chi-Square	2	287.3025	<.0001
Mantel-Haenszel Chi-Square	1	241.4153	<.0001
Phi Coefficient		0.1421	
Contingency Coefficient		0.1407	
Cramer's V		0.1421	

A-23. Student Diversity by Importance of High School Teachers' Opinions

Importance of Student Diversity by Importance of High School Teachers' Opinions			
Importance of Student Diversity	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	1399 9.75 28.38 47.38	3530 24.59 71.62 30.96	4929 34.34
Somewhat Important	1223 8.52 17.31 41.42	5843 40.70 82.69 51.25	7066 49.22
Not Important	331 2.31 14.03 11.21	2029 14.13 85.97 17.80	2360 16.44
Total	2953 20.57	11402 79.43	14355 100.00
Statistic	DF	Value	Prob
Chi-Square	2	292.0179	<.0001
Likelihood Ratio Chi-Square	2	285.5749	<.0001
Mantel-Haenszel Chi-Square	1	260.8448	<.0001
Phi Coefficient		0.1426	
Contingency Coefficient		0.1412	
Cramer's V		0.1426	

A-24. Net Cost to Family by Importance of High School Teachers' Opinions

Importance of Net Cost to Your Family by Importance of High School Teachers' Opinions			
Importance of Net Cost to Your Family	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Very Important	2285 15.91 23.36 77.35	7497 52.21 76.64 65.74	9782 68.13
Somewhat Important	521 3.63 15.38 17.64	2867 19.97 84.62 25.14	3388 23.60
Not Important	148 1.03 12.46 5.01	1040 7.24 87.54 9.12	1188 8.27
Total	2954 20.57	11404 79.43	14358 100.00
Statistic	DF	Value	Prob
Chi-Square	2	150.3063	<.0001
Likelihood Ratio Chi-Square	2	158.9064	<.0001
Mantel-Haenszel Chi-Square	1	142.9172	<.0001
Phi Coefficient		0.1023	
Contingency Coefficient		0.1018	
Cramer's V		0.1023	

A-25. Cost or Aid Significant? by Importance of High School Teachers' Opinions

Cost or Aid Significant? by Importance of High School Teachers' Opinions			
Cost or Aid Significant?	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Yes	1853 13.79 21.28 68.28	6855 51.01 78.72 63.92	8708 64.80
No	861 6.41 18.20 31.72	3870 28.80 81.80 36.08	4731 35.20
Total	2714 20.19	10725 79.81	13439 100.00
Statistic	DF	Value	Prob
Chi-Square	1	18.0460	<.0001
Likelihood Ratio Chi-Square	1	18.2676	<.0001
Continuity Adj. Chi-Square	1	17.8554	<.0001
Mantel-Haenszel Chi-Square	1	18.0447	<.0001
Phi Coefficient		0.0366	
Contingency Coefficient		0.0366	
Cramer's V		0.0366	

A-26. Total Aid Received by Importance of High School Teachers' Opinions

Total Aid Received by Importance of High School Teachers' Opinions			
Total Aid Received	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Less than \$5,000	1763	6457	8220
	12.20	44.69	56.90
	21.45	78.55	
	59.28	56.28	
\$5,000 to \$9,999	257	1097	1354
	1.78	7.59	9.37
	18.98	81.02	
	8.64	9.56	
\$10,000 to \$14,999	266	1095	1361
	1.84	7.58	9.42
	19.54	80.46	
	8.94	9.54	
\$15,000 to \$19,999	234	978	1212
	1.62	6.77	8.39
	19.31	80.69	
	7.87	8.52	
\$20,000 to \$24,999	166	681	847
	1.15	4.71	5.86
	19.60	80.40	
	5.58	5.94	
\$25,000 to \$29,999	100	454	554
	0.69	3.14	3.83
	18.05	81.95	
	3.36	3.96	
\$30,000 to \$34,999	80	321	401
	0.55	2.22	2.78
	19.95	80.05	
	2.69	2.80	
\$35,000 to \$39,999	38	174	212
	0.26	1.20	1.47
	17.92	82.08	
	1.28	1.52	
\$40,000 to \$44,999	42	140	182
	0.29	0.97	1.26
	23.08	76.92	
	1.41	1.22	
\$45,000 to \$49,999	15	43	58
	0.10	0.30	0.40
	25.86	74.14	
	0.50	0.37	

Total Aid Received by Importance of High School Teachers' Opinions			
Total Aid Received	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
\$50,000 and over	13 0.09 28.26 0.44	33 0.23 71.74 0.29	46 0.32
Total	2974 20.59	11473 79.41	14447 100.00
Statistic	DF	Value	Prob
Chi-Square	10	15.0208	0.1313
Likelihood Ratio Chi-Square	10	14.9649	0.1333
Mantel-Haenszel Chi-Square	1	2.3726	0.1235
Phi Coefficient		0.0322	
Contingency Coefficient		0.0322	
Cramer's V		0.0322	

A-27. Gender by Importance of High School Teachers' Opinions

Gender by Importance of High School Teachers' Opinions			
Gender	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Female	1775 12.98 19.93 63.96	7133 52.16 80.07 65.43	8908 65.14
Male	1000 7.31 20.97 36.04	3768 27.55 79.03 34.57	4768 34.86
Total	2775 20.29	10901 79.71	13676 100.00
Statistic	DF	Value	Prob
Chi-Square	1	2.1059	0.1467
Likelihood Ratio Chi-Square	1	2.0980	0.1475
Continuity Adj. Chi-Square	1	2.0417	0.1530
Mantel-Haenszel Chi-Square	1	2.1058	0.1467
Phi Coefficient		-0.0124	
Contingency Coefficient		0.0124	
Cramer's V		-0.0124	

A-28. *Ethnicity by Importance of High School Teachers' Opinions*

Ethnicity by Importance of High School Teachers' Opinions			
Ethnicity	Importance of High School Teachers' Opinions		
	Very Important	Not Very Important	Total
Frequency Percent Row % Column %			
American Indian/Alaskan Native	18 0.13 22.50 0.65	62 0.46 77.50 0.57	80 0.59
Asian, Asian American, Pacific Islander	207 1.52 25.40 7.50	608 4.47 74.60 5.60	815 5.99
Mexican American or Chicano	109 0.80 25.59 3.95	317 2.33 74.41 2.92	426 3.13
Puerto Rican	30 0.22 26.32 1.09	84 0.62 73.68 0.77	114 0.84
Latin American, South American, Central American, or other Hispanic	136 1.00 26.93 4.93	369 2.71 73.07 3.40	505 3.71
Black or African American	148 1.09 25.47 5.36	433 3.18 74.53 3.99	581 4.27
White	2031 14.93 19.00 73.61	8661 63.65 81.00 79.84	10692 78.58
Other	80 0.59 20.30 2.90	314 2.31 79.70 2.89	394 2.90
Total	2759 20.28	10848 79.72	13607 100.00



Ethnicity by Importance of High School Teachers' Opinions			
Statistic	DF	Value	Prob
Chi-Square	7	57.8700	<.0001
Likelihood Ratio Chi-Square	7	55.2184	<.0001
Mantel-Haenszel Chi-Square	1	38.2251	<.0001
Phi Coefficient		0.0652	
Contingency Coefficient		0.0651	
Cramer's V		0.0652	

*A-29. Percentage w/Bachelors Degrees (Zip Code) by Importance of High*

*School Teachers' Opinions*

Percentage w/Bachelors Degrees (Zip Code) by Importance of High School Teachers' Opinions			
Percentage w/Bachelors Degrees (Zip Code)	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
0-4.999	60 0.47 28.04 2.35	154 1.22 71.96 1.53	214 1.69
5-9.999	389 3.08 26.46 15.27	1081 8.56 73.54 10.72	1470 11.64
10-14.999	618 4.89 23.38 24.25	2025 16.03 76.62 20.08	2643 20.92
15-19.999	486 3.85 21.55 19.07	1769 14.00 78.45 17.54	2255 17.85
20-24.999	360 2.85 17.82 14.13	1660 13.14 82.18 16.46	2020 15.99
25-29.999	300 2.37 16.61 11.77	1506 11.92 83.39 14.93	1806 14.30
30-34.999	201 1.59 14.99 7.89	1140 9.02 85.01 11.30	1341 10.62
35-39.999	100 0.79 14.73 3.92	579 4.58 85.27 5.74	679 5.37
40-44.999	30 0.24 16.22 1.18	155 1.23 83.78 1.54	185 1.46

Percentage w/Bachelors Degrees (Zip Code) by Importance of High School Teachers' Opinions			
Percentage w/Bachelors Degrees (Zip Code)	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
45-49,999	4 0.03 20.00 0.16	16 0.13 80.00 0.16	20 0.16
50 and over	0 0.00 .0.00	0 0.00 . 0.00	0 0.00
Total	2548 20.17	10085 79.83	12633 100.00
Statistic	DF	Value	Prob
Chi-Square	9	121.7604	<.0001
Likelihood Ratio Chi-Square	9	121.6843	<.0001
Mantel-Haenszel Chi-Square	1	111.8418	<.0001
Phi Coefficient		0.0982	
Contingency Coefficient		0.0977	
Cramer's V		0.0982	

A-30. Parent Income by Importance of High School Teachers' Opinions

Parent Income by Importance of High School Teachers' Opinions			
Parent Income	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Less than \$30,000	342	960	1302
	2.99	8.39	11.38
	26.27	73.73	
	14.67	10.53	
\$30,000 to \$39,999	175	514	689
	1.53	4.49	6.02
	25.40	74.60	
	7.51	5.64	
\$40,000 to \$59,999	401	1278	1679
	3.50	11.17	14.67
	23.88	76.12	
	17.20	14.02	
\$60,000 to \$79,999	347	1295	1642
	3.03	11.31	14.35
	21.13	78.87	
	14.89	14.21	
\$80,000 to \$99,999	325	1298	1623
	2.84	11.34	14.18
	20.02	79.98	
	13.94	14.24	
\$100,000 to \$149,999	426	2000	2426
	3.72	17.47	21.20
	17.56	82.44	
	18.28	21.94	
\$150,000 to \$199,999	131	613	744
	1.14	5.36	6.50
	17.61	82.39	
	5.62	6.73	
\$200,000 or higher	184	1156	1340
	1.61	10.10	11.71
	13.73	86.27	
	7.89	12.68	
Total	2331	9114	11445
	20.37	79.63	100.00

Parent Income by Importance of High School Teachers' Opinions			
Statistic	DF	Value	Prob
Chi-Square	7	103.8748	<.0001
Likelihood Ratio Chi-Square	7	105.2018	<.0001
Mantel-Haenszel Chi-Square	1	101.4330	<.0001
Phi Coefficient		0.0953	
Contingency Coefficient		0.0948	
Cramer's V		0.0953	

*A-31. Applied for Financial Aid at School Attending by Importance of High School Teachers' Opinions*

Applied for Financial Aid at School Attending by Importance of High School Teachers' Opinions			
Applied for Financial Aid at School Attending	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Yes	575 11.98 18.00 61.89	2620 54.58 82.00 67.68	3195 66.56
No	354 7.38 22.06 38.11	1251 26.06 77.94 32.32	1605 33.44
Total	929 19.35	3871 80.65	4800 100.00
Statistic	DF	Value	Prob
Chi-Square	1	11.2779	0.0008
Likelihood Ratio Chi-Square	1	11.1005	0.0009
Continuity Adj. Chi-Square	1	11.0194	0.0009
Mantel-Haenszel Chi-Square	1	11.2756	0.0008
Phi Coefficient		-0.0485	
Contingency Coefficient		0.0484	
Cramer's V		-0.0485	

A-32. Schools Applied To by Importance of High School Teachers' Opinions

Schools Applied To by Importance of High School Teachers' Opinions			
Schools Applied To	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
1-5	1856 13.19 21.83 64.69	6648 47.24 78.17 59.33	8504 60.42
6-10	860 6.11 18.51 29.98	3785 26.89 81.49 33.78	4645 33.00
11-15	128 0.91 15.92 4.46	676 4.80 84.08 6.03	804 5.71
16-20	17 0.12 17.35 0.59	81 0.58 82.65 0.72	98 0.70
21 or more	8 0.06 34.78 0.28	15 0.11 65.22 0.13	23 0.16
Total	2869 20.39	11205 79.61	14074 100.00
Statistic	DF	Value	Prob
Chi-Square	4	34.2484	<.0001
Likelihood Ratio Chi-Square	4	34.5646	<.0001
Mantel-Haenszel Chi-Square	1	24.5542	<.0001
Phi Coefficient		0.0493	
Contingency Coefficient		0.0493	
Cramer's V		0.0493	

A-33. Median Family Income (Zip Code) by Importance of High

School Teachers' Opinions

Median Family Income (Zip Code) by Importance of High School Teachers' Opinions			
Median Family Income (Zip Code)	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Less than \$30,000	83 0.66 26.35 3.25	232 1.83 73.65 2.30	315 2.49
\$30,000 to \$39,999	261 2.06 28.65 10.22	650 5.14 71.35 6.44	911 7.20
\$40,000 to \$59,999	1113 8.80 22.20 43.56	3900 30.83 77.80 38.63	5013 39.63
\$60,000 to \$79,999	663 5.24 17.89 25.95	3042 24.05 82.11 30.13	3705 29.29
\$80,000 to \$99,999	258 2.04 16.35 10.10	1320 10.43 83.65 13.07	1578 12.47
\$100,000 to \$149,999	162 1.28 16.15 6.34	841 6.65 83.85 8.33	1003 7.93
\$150,000 to \$199,999	15 0.12 12.82 0.59	102 0.81 87.18 1.01	117 0.92
\$200,000 or higher	0 0.00 0.00 0.00	9 0.07 100.00 0.09	9 0.07
Total	2555 20.20	10096 79.80	12651 100.00



Median Family Income (Zip Code) by Importance of High School Teachers' Opinions			
Statistic	DF	Value	Prob
Chi-Square	7	103.3788	<.0001
Likelihood Ratio Chi-Square	7	103.1041	<.0001
Mantel-Haenszel Chi-Square	1	77.6132	<.0001
Phi Coefficient		0.0904	
Contingency Coefficient		0.0900	
Cramer's V		0.0904	

A-34. Type of High School by Importance of High School Teachers' Opinions

Type of High School by Importance of High School Teachers' Opinions			
Type of High School	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Public	2022 14.86 20.19 73.47	7995 58.77 79.81 73.67	10017 73.63
Independent, Not Religiously Affiliated	246 1.81 20.59 8.94	949 6.98 79.41 8.74	1195 8.78
Independent, Catholic	341 2.51 21.18 12.39	1269 9.33 78.82 11.69	1610 11.83
Other Independent, Religiously Affiliated	143 1.05 18.26 5.20	640 4.70 81.74 5.90	783 5.76
Total	2752 20.23	10853 79.77	13605 100.00
Statistic	DF	Value	Prob
Chi-Square	3	2.8839	0.4099
Likelihood Ratio Chi-Square	3	2.9209	0.4040
Mantel-Haenszel Chi-Square	1	0.0688	0.7931
Phi Coefficient		0.0146	
Contingency Coefficient		0.0146	
Cramer's V		0.0146	

*A-35. College Publications by Importance of High School Teachers' Opinions*

College Publications by Importance of High School Teachers' Opinions			
College Publications	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	253 1.78 20.64 8.68	973 6.85 79.36 8.62	1226 8.63
Used/Considered	2663 18.75 20.52 91.32	10314 72.62 79.48 91.38	12977 91.37
Total	2916 20.53	11287 79.47	14203 100.00
Statistic	DF	Value	Prob
Chi-Square	1	0.0091	0.9239
Likelihood Ratio Chi-Square	1	0.0091	0.9239
Continuity Adj. Chi-Square	1	0.0034	0.9533
Mantel-Haenszel Chi-Square	1	0.0091	0.9239
Phi Coefficient		0.0008	
Contingency Coefficient		0.0008	
Cramer's V		0.0008	

A-36. *College Website by Importance of High School Teachers' Opinions*

College Website by Importance of High School Teachers' Opinions			
College Website	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	123 0.87 19.10 4.22	521 3.67 80.90 4.61	644 4.53
Used/Considered	2792 19.65 20.59 95.78	10771 75.81 79.41 95.39	13563 95.47
Total	2915 20.52	11292 79.48	14207 100.00
Statistic	DF	Value	Prob
Chi-Square	1	0.8325	0.3615
Likelihood Ratio Chi-Square	1	0.8466	0.3575
Continuity Adj. Chi-Square	1	0.7439	0.3884
Mantel-Haenszel Chi-Square	1	0.8325	0.3616
Phi Coefficient		-0.0077	
Contingency Coefficient		0.0077	
Cramer's V		-0.0077	

*A-37. Visit to Campus by Importance of High School Teachers' Opinions*

Visit to Campus by Importance of High School Teachers' Opinions			
Visit to Campus	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	403 2.83 20.74 13.75	1540 10.82 79.26 13.63	1943 13.66
Used/Considered	2527 17.76 20.57 86.25	9758 68.58 79.43 86.37	12285 86.34
Total	2930 20.59	11298 79.41	14228 100.00
Statistic	DF	Value	Prob
Chi-Square	1	0.0301	0.8622
Likelihood Ratio Chi-Square	1	0.0301	0.8623
Continuity Adj. Chi-Square	1	0.0205	0.8860
Mantel-Haenszel Chi-Square	1	0.0301	0.8622
Phi Coefficient		0.0015	
Contingency Coefficient		0.0015	
Cramer's V		0.0015	

A-38. Visit by Admissions Staff at High School by Importance of High

School Teachers' Opinions

Visit by Admissions Staff at Your High School by Importance of High School Teachers' Opinions			
Visit by Admissions Staff at Your High School	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very important	Not Very Important	Total
Not Used/Not Considered	1537	6681	8218
	10.79	46.89	57.68
	18.70	81.30	
	52.44	59.04	
Used/Considered	1394	4636	6030
	9.78	32.54	42.32
	23.12	76.88	
	47.56	40.96	
Total	2931	11317	14248
	20.57	79.43	100.00
Statistic	DF	Value	Prob
Chi-Square	1	41.4889	<.0001
Likelihood Ratio Chi-Square	1	41.2178	<.0001
Continuity Adj. Chi-Square	1	41.2191	<.0001
Mantel-Haenszel Chi-Square	1	41.4859	<.0001
Phi Coefficient		-0.0540	
Contingency Coefficient		0.0539	
Cramer's V		-0.0540	

*A-39. College Sponsored Meetings in Home Area by Importance of High School Teachers' Opinions*

College Sponsored Meetings in Your Home Area by Importance of High School Teachers' Opinions			
College Sponsored Meetings in Your Home Area	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	1755 12.36 18.93 60.23	7514 52.90 81.07 66.56	9269 65.26
Used/Considered	1159 8.16 23.49 39.77	3775 26.58 76.51 33.44	4934 34.74
Total	2914 20.52	11289 79.48	14203 100.00
Statistic	DF	Value	Prob
Chi-Square	1	40.9857	<.0001
Likelihood Ratio Chi-Square	1	40.3805	<.0001
Continuity Adj. Chi-Square	1	40.7068	<.0001
Mantel-Haenszel Chi-Square	1	40.9828	<.0001
Phi Coefficient		-0.0537	
Contingency Coefficient		0.0536	
Cramer's V		-0.0537	

A-40. College Videos or CD ROMS by Importance of High

School Teachers' Opinions

College Videos or CD ROMS by Importance of High School Teachers' Opinions			
College Videos or CD ROMS	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	1760 12.40 18.03 60.46	8000 56.37 81.97 70.91	9760 68.77
Used/Considered	1151 8.11 25.96 39.54	3282 23.12 74.04 29.09	4433 31.23
Total	2911 20.51	11282 79.49	14193 100.00
Statistic	DF	Value	Prob
Chi-Square	1	117.6283	<.0001
Likelihood Ratio Chi-Square	1	114.1521	<.0001
Continuity Adj. Chi-Square	1	117.1423	<.0001
Mantel-Haenszel Chi-Square	1	117.6200	<.0001
Phi Coefficient		-0.0910	
Contingency Coefficient		0.0907	
Cramer's V		-0.0910	



*A-41. Communications About Financial Aid by Importance of High*

*School Teachers' Opinions*

Communications About Financial Aid by Importance of High School Teachers' Opinions			
Communications About Financial Aid	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	296 2.09 15.63 10.15	1598 11.27 84.37 14.19	1894 13.36
Used/Considered	2619 18.47 21.32 89.85	9663 68.16 78.68 85.81	12282 86.64
Total	2915 20.56	11261 79.44	14176 100.00
Statistic	DF	Value	Prob
Chi-Square	1	32.5885	<.0001
Likelihood Ratio Chi-Square	1	34.4793	<.0001
Continuity Adj. Chi-Square	1	32.2408	<.0001
Mantel-Haenszel Chi-Square	1	32.5862	<.0001
Phi Coefficient		-0.0479	
Contingency Coefficient		0.0479	
Cramer's V		-0.0479	

*A-42. Electronic Communication w/College by Importance of High*

*School Teachers' Opinions*

Electronic Communication w/College by Importance of High School Teachers' Opinions			
Electronic Communication w/College	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	366 2.58 17.40 12.56	1737 12.24 82.60 15.40	2103 14.82
Used/Considered	2549 17.96 21.08 87.44	9542 67.23 78.92 84.60	12091 85.18
Total	2915 20.54	11279 79.46	14194 100.00
Statistic	DF	Value	Prob
Chi-Square	1	14.8505	0.0001
Likelihood Ratio Chi-Square	1	15.3570	<.0001
Continuity Adj. Chi-Square	1	14.6260	0.0001
Mantel-Haenszel Chi-Square	1	14.8495	0.0001
Phi Coefficient		-0.0323	
Contingency Coefficient		0.0323	
Cramer's V		-0.0323	

*A-43. On Campus Interview by Importance of High School Teachers' Opinions*

On Campus Interview by Importance of High School Teachers' Opinions			
On Campus Interview	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	1212 8.54 19.17 41.66	5111 36.03 80.83 45.32	6323 44.57
Used/Considered	1697 11.96 21.58 58.34	6167 43.47 78.42 54.68	7864 55.43
Total	2909 20.50	11278 79.50	14187 100.00
Statistic	DF	Value	Prob
Chi-Square	1	12.5014	0.0004
Likelihood Ratio Chi-Square	1	12.5471	0.0004
Continuity Adj. Chi-Square	1	12.3539	0.0004
Mantel-Haenszel Chi-Square	1	12.5005	0.0004
Phi Coefficient		-0.0297	
Contingency Coefficient		0.0297	
Cramer's V		-0.0297	

*A-44. Contact with Faculty by Importance of High School Teachers' Opinions*

Contact with Faculty by Importance of High School Teachers' Opinions			
Contact with Faculty	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	932 6.57 17.18 31.97	4492 31.69 82.82 39.89	5424 38.26
Used/Considered	1983 13.99 22.66 68.03	6769 47.75 77.34 60.11	8752 61.74
Total	2915 20.56	11261 79.44	14176 100.00
Statistic	DF	Value	Prob
Chi-Square	1	61.4469	<.0001
Likelihood Ratio Chi-Square	1	62.5798	<.0001
Continuity Adj. Chi-Square	1	61.1122	<.0001
Mantel-Haenszel Chi-Square	1	61.4425	<.0001
Phi Coefficient		-0.0658	
Contingency Coefficient		0.0657	
Cramer's V		-0.0658	

A-45. Contact with Coaches by Importance of High School Teachers' Opinions

Contact with Coaches by Importance of High School Teachers' Opinions			
Contact with Coaches	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	1832 12.92 19.13 62.93	7744 54.60 80.87 68.70	9576 67.52
Used/Considered	1079 7.61 23.42 37.07	3528 24.87 76.58 31.30	4607 32.48
Total	2911 20.52	11272 79.48	14183 100.00
Statistic	DF	Value	Prob
Chi-Square	1	35.0901	<.0001
Likelihood Ratio Chi-Square	1	34.5210	<.0001
Continuity Adj. Chi-Square	1	34.8277	<.0001
Mantel-Haenszel Chi-Square	1	35.0877	<.0001
Phi Coefficient		-0.0497	
Contingency Coefficient		0.0497	
Cramer's V		-0.0497	

A-46. Contact with Graduates by Importance of High School Teachers' Opinions

Contact with graduates by Importance of High School Teachers' Opinions			
Contact with Graduates	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very important	Not Very Important	Total
Not Used/Not Considered	1453	6470	7923
	10.25	45.62	55.87
	18.34	81.66	
	49.85	57.42	
Used/Considered	1462	4797	6259
	10.31	33.82	44.13
	23.36	76.64	
	50.15	42.58	
Total	2915	11267	14182
	20.55	79.45	100.00
Statistic	DF	Value	Prob
Chi-Square	1	53.9486	<.0001
Likelihood Ratio Chi-Square	1	53.6765	<.0001
Continuity Adj. Chi-Square	1	53.6417	<.0001
Mantel-Haenszel Chi-Square	1	53.9448	<.0001
Phi Coefficient		-0.0617	
Contingency Coefficient		0.0616	
Cramer's V		-0.0617	

A-47. Contact with Students by Importance of High School Teachers' Opinions

Contact with Students by Importance of High School Teachers' Opinions			
Contact with Students	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Not Used/Not Considered	798 5.62 18.76 27.30	3455 24.32 81.24 30.62	4253 29.94
Used/Considered	2125 14.96 21.35 72.70	7828 55.10 78.65 69.38	9953 70.06
Total	2923 20.58	11283 79.42	14206 100.00
Statistic	DF	Value	Prob
Chi-Square	1	12.2040	0.0005
Likelihood Ratio Chi-Square	1	12.3661	0.0004
Continuity Adj. Chi-Square	1	12.0462	0.0005
Mantel-Haenszel Chi-Square	1	12.2031	0.0005
Phi Coefficient		-0.0293	
Contingency Coefficient		0.0293	
Cramer's V		-0.0293	

A-48. Attending School: In-State or Out-of-State by Importance of High

School Teachers' Opinions

Attending School: In-State or Out-of-State by Importance of High School Teachers' Opinions			
Attending School: In-State or Out-of-State	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
In-State	1658 11.48 23.05 55.75	5535 38.31 76.95 48.24	7193 49.79
Out-of-State	906 6.27 16.69 30.46	4523 31.31 83.31 39.42	5429 37.58
Unknown	410 2.84 22.47 13.79	1415 9.79 77.53 12.33	1825 12.63
Total	2974 20.59	11473 79.41	14447 100.00
Statistic	DF	Value	Prob
Chi-Square	2	81.1173	<.0001
Likelihood Ratio Chi-Square	2	82.9234	<.0001
Mantel-Haenszel Chi-Square	1	17.8000	<.0001
Phi Coefficient		0.0749	
Contingency Coefficient		0.0747	
Cramer's V		0.0749	



A-49. Institutional Control Type by Importance of High School Teachers' Opinions

Institutional Control Type by Importance of High School Teachers' Opinions			
Institutional Control Type	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Independent	0 0.00 .00 0.00	0 0.00 .00 0.00	0 0.00
Private, For Profit	0 0.00 0.00 0.00	2 0.01 100.00 0.02	2 0.01
Private, Independent	0 0.00 0.00 0.00	2 0.01 100.00 0.02	2 0.01
Private, Not for Profit	2028 14.49 20.15 70.44	8038 57.42 79.85 72.28	10066 71.91
Public	851 6.08 21.66 29.56	3078 21.99 78.34 27.68	3929 28.07
Total	2879 20.57	11120 79.43	13999 100.00
Statistic	DF	Value	Prob
Chi-Square	3	4.9929	0.1723
Likelihood Ratio Chi-Square	3	5.7679	0.1235
Mantel-Haenszel Chi-Square	1	4.2122	0.0401
Phi Coefficient		0.0189	
Contingency Coefficient		0.0189	
Cramer's V		0.0189	
WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

A-50. Carnegie Classification by Importance of High School Teachers' Opinions

Carnegie Classification by Importance of High School Teachers' Opinions			
Carnegie Classification	Importance of High School Teachers' Opinions		
Frequency Percent Row % Column %	Very Important	Not Very Important	Total
Associates	23 0.16 21.10 0.80	86 0.62 78.90 0.78	109 0.78
Baccalaureate Colleges	794 5.69 18.21 27.68	3567 25.55 81.79 32.15	4361 31.23
Doctoral and Research Universities	542 3.88 17.42 18.90	2569 18.40 82.58 23.15	3111 22.28
Masters Colleges and Universities	1421 10.18 23.43 49.55	4643 33.25 76.57 41.85	6064 43.43
Specialty Schools	88 0.63 27.67 3.07	230 1.65 72.33 2.07	318 2.28
Total	2868 20.54	11095 79.46	13963 100.00
Statistic	DF	Value	Prob
Chi-Square	4	74.1147	<.0001
Likelihood Ratio Chi-Square	4	73.5859	<.0001
Mantel-Haenszel Chi-Square	1	53.5658	<.0001
Phi Coefficient		0.0729	
Contingency Coefficient		0.0727	
Cramer's V		0.0729	

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