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First-Generation College Students at a Selective, Four-Year Institution:

Transition to College, Adjustment in College, and Self-Image

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Education

by

Marisol Arredondo

1999

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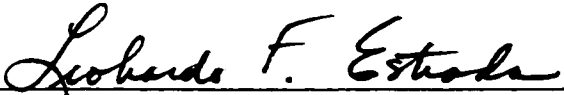
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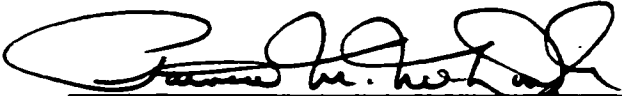
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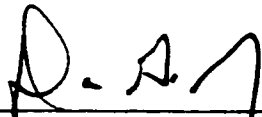
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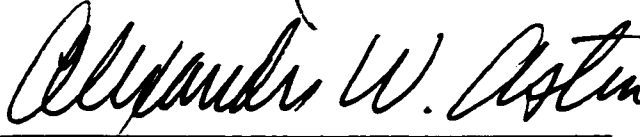
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1999

**A mis padres,
quienes creyeron en mí y me apoyaron.**

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ABSTRACT OF THE DISSERTATION

**First-Generation College Students at a Selective, Four-Year Institution:
Transition to College, Adjustment in College, and Self-Image**

by

Marisol Arredondo

Doctor of Philosophy in Education

University of California, Los Angeles, 1999

Professor Alexander W. Astin, Chair

This study was undertaken with the intention of broadening our knowledge and understanding of first-generation college students by (1) providing a national portrait of who they are and how they compare to children of college graduates; and (2) exploring the factors which facilitate or impede first-generation students' transition to college, academic and social adjustment, and academic and social self-image in a selective research university.

Data from three analyses were used in this study. First, descriptive analyses were conducted on a national sample of first-generation freshmen (n = 36,767) and freshmen children of college graduates (n = 167,483) from the 1997 Freshmen Survey collected by the Cooperative Institutional Research Program (CIRP). Second, multivariate analyses

were conducted on a sample of first-generation students (n = 233) and children of college graduates (n = 324) who had been previously surveyed as entering freshmen (in 1994 or 1995) and resurveyed in the Winter of 1999—four or five years after they first entered college. Finally, qualitative analyses were conducted on first-generation students' responses to open-ended questions obtained from the follow-up survey.

Findings confirm that, nationally, first-generation students do in fact differ extensively from children of college graduates on various pre-college characteristics. Multivariate results reveal that while first-generation status was correlated in the expected direction (i.e., negatively) with all six dependent measures—transition to college, undergraduate GPA, social adjustment, academic adjustment, social self-image, and academic self-image—for three of these variables this relationship was eliminated by controlling for certain input characteristics. Open-ended findings show that first-generation students encounter obstacles which interfere with their involvement (Astin, 1984) and integration (Tinto, 1987, 1993) and thus prevent them from taking full advantage of the college experience. While the open-ended results suggest that participating in special support programs contributes positively to first-generation students' adjustment to college, these positive effects were not replicated in the multivariate analyses.

In short, this study shows that the difficulties that first-generation students experience in college cannot be explained entirely in terms of traditional factors such as academic preparation and income.

CHAPTER ONE

INTRODUCTION

As a first-generation college student, my image of what college would be like was distorted, to say the least. Having had very little exposure to a college campus and limited access to people who knew much about higher education, I had to rely on my imagination, as well as movies such as "Animal House," as my primary sources of information. Consequently, since the images I conjured up were of very smart, white students, I arrived to college already feeling like I did not belong and would not fit in. That is, in my mind college was for "smart" people and I wasn't one of them. Moreover, since I was convinced that I had been admitted by accident even before I set foot on the campus, I arrived questioning whether I was academically prepared to survive at the university.

In short, I arrived at a predominantly white campus frightened and intimidated about what I was about to experience, with very little information about what to expect from the college experience, and questioning whether I belonged and deserved to be at such a prestigious university. Nevertheless, I managed to cut through institutionalized bureaucracy and to graduate in good academic standing and with an aspiration to obtain a graduate degree—a thought that would have seemed impossible, even ridiculous, just four years earlier. However, as I reflect on my own undergraduate experience, it is still not clear to me how I managed to "succeed," or for that matter how many of my first-generation classmates, who shared similar obstacles and feelings of self-doubt, persisted.

Puzzling, as well as disturbing, to me is why some of my fellow first-generation peers, whom I had gotten to know so well at freshman orientation, did not persist.

What are the factors which aid in the transition, adjustment, and academic achievement of first-generation college students? Why do some first-generation college students make it to graduation, while other do not? Does first-generation student status alone put you at a greater risk of not succeeding? How do first-generation college students, whose home lives may conflict with the values and demands of the university, experience college? While the scant literature on this student population may provide partial answers to these questions, to a large extent they still remain a mystery. This study begins to answer these questions by broadening our understanding of first-generation college students at a selective institution.

Statement of the Problem

In the wake of the recent policy changes in affirmative action practices, campus level discussions have revolved around alternative strategies to enhance diversity and counteract the drop in racial/ethnic minorities in higher education (The Education Resources Institute, 1997). While outreach efforts are now being used as the primary means for achieving diversity in some states, efforts to redefine what is meant by "disadvantage" and "disadvantaged circumstances" are also being considered as a means to increase the proportion of underrepresented students in higher education (TERI, 1997, Outreach Task Force, 1997). Not surprisingly, first-generation students are being given increasing attention, not only because many racial/ethnic minority students are also first-

generation students, but also because "first-generation status" does not raise the same red flag among those seeking to eliminate affirmative action as does "race." Moreover, there is reason to believe that first-generation status may have considerable educational importance beyond its association with race (Barahona, 1990).

First-generation student status is thus receiving increasing attention in admissions and outreach efforts, in part because such efforts are seen as a primary tool for achieving racial, ethnic and gender diversity (Outreach Task Force, 1997). Large sums of money are being funneled into outreach efforts to develop or enhance programs which prepare "disadvantaged" youths (Tierney, 1996) for college and ensure their eligibility. This zealous commitment to outreach programs is also evident in the research that is being conducted on these programs, the planning which is being detailed, and the task forces that have been formed—all to ensure that outreach programs continue and remain effective.

While the focus on outreach is necessary, efforts to learn more about this student population through research are not being embraced with the same enthusiasm. Clearly, more attention needs to be directed to the student population that these outreach efforts are targeting—i.e., first-generation students. One way or another, many first-generation students are being captured under the broad indicators which are being used in these outreach programs to identify "disadvantaged" youths, that is, students who are from low income families, who reside in communities with low college-going rates, and who enroll in schools with a limited college preparatory curricula and with below-average SAT/ACT exam scores (Outreach Task Force, 1997). Consequently, since first-generation student

status is a salient defining characteristic of many of these outreach students, it will also be a prominent characteristic among the eligible pool of students seeking to enter American colleges and universities in the future.

While national data have been available for some time now to estimate how many first-generation students enter American colleges and universities each year, such statistics have not been reported on a regular basis. It has been only in the last two years that efforts have been made to determine what percentage of the student population are first-generation students. For example, a recently released publication from the National Center for Educational Statistics (NCES) that focuses exclusively on first-generation students (using 1989-90 Beginning Postsecondary Longitudinal Study data) reported that 43% of the 1989-90 entering freshman cohort were first-generation students (Nunez, Cuccaro-Alamin, and Carroll, 1998). Similarly, the Institute for Higher Education Policy (using National Postsecondary Student Aid data) reported that "first-generation students comprised 45% of all undergraduates in 1995-1996" (TERI, 1997, p. 20). While these two recent publications do not provide trend information to determine how the size of this student population may have changed over time, what is evident from these reports is that this student population is already large, and, if outreach efforts are successful, will continue to grow (TERI, 1997; Terenzini, Springer, Yaeger, Pascarella, and Nora, 1996). They are, in short, "becoming an increasingly significant force in higher education" (Chaffee, 1992, p. 87). What is also clear about this population is that they do differ from the students higher education has traditionally served (Terenzini et al., 1996). However,

since this student population is not well researched, how they are affected by the college environment is still debatable.

Considering the obstacles and barriers they encounter getting into college, first-generation college students—particularly those at selective institutions—are already "successful" in the sense that they have made it further than many would have expected. Yet, to ensure that they make it to graduation, it is necessary to know more about how they perceive the college environment and how they are affected by it. In other words, in order to retain these students it is necessary to know more about the factors in the college environment which facilitate or inhibit their adjustment to college and academic achievement. It is also necessary to examine the intervention programs that have already been established to help first-generation college students excel and succeed. In sum, because first-generation students are expected to become a growing presence, it is important to gain a keener understanding of this subpopulation—that is, an understanding of what they bring with them to college and the difficulties and successes that they encounter along the way (London, 1989).

Background of the Study

One of the problems in studying this population is that being a first-generation student is confounded with other factors that affect the student's success in college: level of academic preparation, income level of the family, race/ethnicity, knowledge of and access to resources, support and encouragement they received from significant others (Billson & Terry, 1982; Barahona, 1990; London, 1996; Terenzini, et. al, 1996; Rendon, 1996, 1992; Richardson and Skinner, 1992), and in some cases language difficulties (Chaffee, 1992; Kiang, 1992). Although it could be argued that the difficulties first-generation students experience in college can be explained in terms of these and other correlated factors, the fact is that we now have evidence suggesting that, independent of all these associated factors, first generation status alone poses a unique disadvantage for the student who is trying to succeed in college (Barahona, 1990). In other words, independent of most other factors that are known to affect college success in their own right, the simple fact that neither parent attended college poses certain substantial obstacles for first-generation undergraduates (Barahona, 1990; Suarez, 1997). However, while it has been established that being a first-generation student does have significant effects, the meaning of these effects is not well understood.

In addition, while being a first-generation student has been found to reduce one's likelihood of attending college (Barahona, 1991), persist in college (Suarez, 1997), and aspire toward a higher degree (Suarez, 1997), very little is known about the personal and sociocultural factors that may be involved in this process. Because these factors (e.g., family support) are rarely considered in longitudinal studies examining the impact of

college on student outcomes, the extent to which these factors may play a role in first-generation students' transition to college and academic and social adjustment is still largely unknown.

Moreover, despite the fact that the experience of physically and mentally making that transition from the home culture to the academic culture is one of the most frequently discussed issues in the literature on first-generation students (Rodriguez, 1982, 1975; Navarrette, 1993; Lara, 1992; Rendon, 1992) and has been noted as one of the "greatest challenges confronting first-generation students" (Mitchell, 1997), empirical research, particularly quantitative research, in this area is non-existent. Although a number of scholars over the past two decades have written about their experiences as first-generation students "living in two worlds" (Rodriguez, 1982, 1975; Navarrette, 1993; Lara, 1992; Rendon, 1992), few studies focus on understanding what it means to be a student on the margins of two worlds and how it may affect college outcomes. This gap in the literature is even more disturbing when one considers that many first-generation students experience difficult and painful transitions when they move from the home culture to the academic culture (London, 1992; Rendon, 1992; Jalomo, 1997). In addition, since being "caught between two worlds" has been linked with feeling "isolated, disconnected, and alienated" (Rendon 1992), or "illegitimate" (Navarrette, 1993), it is also possible that this "two worlds" phenomenon may have an effect on first-generation students' perceptions of their academic competence and academic self-worth (i.e., academic self-image), as well as their social self-image.

Furthermore, there is good reason to believe that these transition and adjustment problems will be exacerbated at a more selective or elite institution (London, 1996). Such institutions tend to be heavily residential in nature and enroll exceptionally well prepared students who come from predominantly college-educated and affluent backgrounds. Given that first-generation students usually come from more modest socioeconomic backgrounds and arrive at the college with very little information about higher education (Billson and Terry, 1982; Terenzini et. al., 1996; York-Anderson & Bowman, 1991), one would expect that their transition from home to a selective or elite college would produce a lot more "culture shock" than would be the case if they were to attend a commuter college or some other college which is not highly selective. For this reason it is of particular interest to understand the factors that affect the educational and personal development of first-generation students in selective institutions. In addition, since much of the research on first-generation students has been conducted at community colleges (Padron, 1992; Jalomo, 1997; TERL, 1997), the experience of first-generation students at selective or elite institutions is an area needing more attention.

More research is also needed on those first-generation students who participate in programs designed specifically to assist them while in college. There is some evidence suggesting that first-generation college students who participate in intervention programs such as student support service (SSS) programs show substantial improvements in a variety of educational outcomes (Muraskin, 1997; Velasquez, 1997). SSS programs, which are part of the federally funded TRIO Programs sponsored by the Department of Education, provide educational services such as academic and personal counseling, peer

counseling, and tutoring to low income, first-generation and disabled students (Muraskin, 1997). However, evaluation studies and other research endeavors focusing on SSS students tend to be "outcome-only assessments" and therefore fail to control for background characteristics that could bias the conclusions (Astin, 1993a).

Purpose of the Study

The purpose of this study was twofold. First, it sought to understand first-generation college students by providing a national portrait of who first-generation students are and how they compare to children of college graduates. Second, it sought to explore the factors which facilitate or impede the transition to college, academic and social adjustment, and academic and social self-image of first-generation college students attending a selective four year institution. Specifically, this study was guided by the following questions:

1. To what extent do first-generation students nationally differ from children of college graduates in their pre-college characteristics? Are there differences in the demographics, secondary school achievements and activities, reasons for college choice, educational and career plans, values, beliefs, and self-concept of these two subpopulations?
2. Do first-generation students feel like they are "caught between two worlds?" If so, to what extent does this feeling influence their adjustment to college?
3. What are the factors which contribute to the development of a social and

academic self-image for first-generation college students?

4. What are the factors which contribute to the social and academic adjustment of first-generation college students at a selective university?
Does SSS participation enhance social and academic adjustment to college for first-generation students?
5. After student background characteristics, which are often confounded with being a first-generation students, are controlled, does first-generation status still put a student at a greater risk of not succeeding academically?

Overall, the central objective of this study was to broaden our knowledge of first-generation college students at selective universities, using the University of California, Los Angeles (UCLA) as a case. Specifically, this study examines the experiences and performances of two first-generation student populations: (1) first-generation students in SSS programs; and (2) first-generation students who did not participate in the SSS programs. A "control group" of children of college graduates were also studied simultaneously for comparison purposes.

Several approaches were utilized to explore the research questions. First, data were obtained from a national data base which collects information every year on a variety of student characteristics from a national sample of over 250,000 freshmen attending different types of institutions all over the United States. Descriptive analyses were conducted on the latest 1997 freshman data in order to explore who first-generation students are nationally and how they compare to children of college graduates. Second, longitudinal survey research was used to collect data and examine students at two

different points in time. Using the follow-up survey (FUS) instrument specifically designed for this longitudinal study, two cohorts of students who were previously surveyed as freshmen (in 1994 or 1995) were surveyed again in the Winter of 1999 four to five years after their freshman year. Two groups of students were sampled: first-generation students and children of college graduates. First-generation students were operationally defined as those who indicated in the freshman survey that both of their parents had a “high school” degree or less. Children of college graduates were identified as those students who indicated on the freshman survey that either of their parents had attended college. Students indicating that their most highly educated parent had “some college” experience (but no bachelor’s degree) were not included in the study. Using identification numbers, data from the freshman survey and the FUS were linked to create a database. Descriptive statistics and multivariate analyses were used to analyze the data. Lastly, qualitative analyses were conducted on first-generation students’ responses to open-ended questions obtained from the FUS. Astin’s (1984) theory of student involvement and Tinto’s (1987, 1993) model of institutional departure were used as guiding theoretical frameworks.

Significance of the Study

Given that many racial/ethnic “minority” students are also first-generation college students, it is necessary in this post affirmative action era to learn more about this population in order to ensure that those who do manage to make it into the university are able to make it to graduation. However, the study is important for several other reasons.

First, it adds to the virtually non-existent literature on first-generation college students at selective institutions. Second, it moves beyond previous research by using a longitudinal design and by controlling for background characteristics to determine the unique effect of being a first-generation student. Moreover, given that many studies of first-generation college students have focused only on the students' first year in college (Terenzini, et. al, 1996; Joseph, 1996; Herbert, 1997), this study enhances our understanding by assessing the impact of the college environment during the four or five years after the students first entered as freshmen. Third, this study distinguishes between first-generation college students who participated the SSS program with those who did not participate, thereby examining the effectiveness of such a program with first-generation college students. Fourth, by identifying the factors (positive and negative) which contribute to the academic achievement and adjustment of first-generation students, this study provides a context for understanding what types of services and programs are needed and how they may best be designed to enhance the persistence and performance of these students. In short, this study was designed with the intention of (1) affecting educational policy and practice; and (2) helping future cohorts of first-generation students by informing policy makers about how to better serve this important subpopulation of students.

CHAPTER TWO

REVIEW OF THE LITERATURE

This review of the literature is divided into three broad areas. First, research on first-generation students is presented in order to provide a better understanding of what is known about this student population. Second, literature on college adjustment is examined, which includes a brief overview of the research focusing on programs developed to assist first-generation students' transition to college and adjustment while in college. And third, two popular theoretical frameworks used to explain the development, academic achievement, and persistence of "traditional" college students are presented and examined for their applicability to first-generation students.

First-Generation College Students

First-generation college students are often identified by researchers as those whose parents never attended a post-secondary institution (Billson and Terry, 1982; Barahona, 1990; Mitchell, 1997; Terenzini, et. al, 1996). A more stringent definition would exclude students with siblings who are currently enrolled in or had previously attended college. By definition first-generation students are pioneers who have "beaten the odds" (Levine and Nidiff, 1996; London, 1989; Richardson and Skinner, 1992). They are also often characterized as having grown up assuming college was not for them (London, 1996), having entered college haphazardly (Rendon, 1992), and/or having entered higher education in search for social mobility (London, 1992). Not surprisingly,

it is these characterizations which have earned this subgroup of students a place under the larger umbrella term, "nontraditional student."

Interest in data on "nontraditional students" has typically focused on ethnic/racial minorities rather than first-generation students (e.g., The Chronicle of Higher Education Almanac Issue, The Digest of Educational Statistics, and The Condition of Education) even though the first-generation student population has increased dramatically since the 1944 G.I. Bill of Rights. Terenzini, et al., (1996) assert that first-generation students "are entering America's colleges and universities in increasing numbers, and can be expected to continue to grow over the next decade both in number and as a proportion of the total undergraduate student population" (p. 20).

A 1997 report by the Institute for Higher Education Policy (TERI, 1997) states that first-generation college students make up about 45% of all undergraduates in the 1995-96 cohort and have the following racial composition: 65% White, 14% Black, 14% Hispanic, 4% Asian/Pacific Islander, 1% American Indian/Alaskan Native, and less than 1% other. The report also concludes that first-generation students, compared to students whose parents have a bachelor's degree, were more likely to: delay enrollment (only 29% of first-generation students enroll in a post-secondary institution immediately after high school graduation, compared to 73% of children of college graduates), enroll on a part-time basis (53% versus 38%), and be overrepresented in the two-year institutions (53% versus 40%), and less likely to enroll in a four-year colleges (25% versus 68%) (p. 18-22). These findings are also consistent with earlier research (Barahona, 1990) which found that "first-generation students, compared to the children of college graduates, are

more likely to enroll in public, two-year, and nonselective institutions" (p. 205) and that "first-generation college goers tend to apply to few schools, whereas middle- and upper-income students apply everywhere, sometimes submitting up to twenty-two applications" (McDonough, 1994, p. 441). In addition, the Institute for Higher Education Policy (TERI, 1997) reported that first-generation students are less likely than are children of college graduates to aspire to a bachelor's degree or higher (36% vs. 78%), take the SAT or ACT (45% vs. 82%), and apply to a four-year institution (26% vs. 71%).

In short, these findings suggest that first-generation students, compared to other college students may arrive at college with a very different set of cultural, economic, social, and educational experiences. Accordingly, the remainder of this section is dedicated to identifying some of the pre-college characteristics and college experiences that are associated with first-generation status.

Pre-College Characteristics

First-generation students tend to come from relatively low-income families (Barahona, 1990; Billson and Terry, 1982; TERI, 1997; Terenzini, et al., 1996). These limited financial resources mean that first-generation students often have less access to resources that facilitate access to a post-secondary education: private tutors, private college counselors, SAT preparatory workshops, Advanced Placement (AP) classes, and a rigorous college preparatory curriculum.

Consequently, it is not surprising to find that first-generation college students, compared to children of college graduates, arrive at college with weaker academic skills (Barahona, 1990; TERI, 1997; Terenzini, et al., 1996; Richardson and Skinner, 1992).

According to the study conducted by the Institute for Higher Education Policy (TERI, 1997), only 35% of first-generation students in the 1995-96 cohort had cumulative high school grade point averages above 2.55, compared to 66% of those whose parents had a bachelor's degree. Other researcher has found that, in addition to poor high school grades and lower test scores, first-generation students are also more likely to arrive to college with weaker cognitive skills in reading, math, and critical thinking (Terenzini et. al.,1996). Others (Rendon, 1992, 1993, 1994) have suggested that some first-generation students arrive at college doubting whether they have the necessary skills and abilities to succeed.

When it comes to relationships with family, first-generation college students (compared to children of college graduates) report receiving less encouragement and support (both emotional and financial) from parents to attend college (Billson and Terry, 1982; Barahona, 1990; Terenzini, et a. 1996; TERI, 1997). In this connection, it has been found that parental encouragement and expectations not only have an impact on the decision to attend college, but also have a continuing influence on student persistence (Trent, 1970).

It has already been noted that first-generation students are less likely apply to a post-secondary institution (McDonough, 1994; TERI, 1997). While this may be due to a multitude of factors, one important reason may be that first-generation students may "lack knowledge of college admissions and financial aid process and need help filling out applications" (TERI, 1997, p. 18). And since by definition the parents of first-generation students have not attended college, it is likely that they are often not able to assist their

children because they are unfamiliar with the process. Brooks-Terry (1988) asserts that, "without personal experience with these institutions, neither parents nor students may know the options that exist, and parents may offer inappropriate advice" (p. 129).

This information and/or knowledge about college and the application process is often referred to as "cultural capital"¹ (McDonough, Korn, and Yamasaki, 1997). Specifically, cultural capital can be defined as "the different sets of linguistic and cultural competencies that individuals inherit from the social location of their families" (Valdez, 1996 cited in Jalomo, 1997, p.2) or as the "general cultural background, knowledge, dispositions, and skills that are passed from one generation to another" (Gandara, 1995, p. 7). Harker (1990) in his review of Pierre Bourdieu's work, notes that "our educational institutions are structured to favour those who already possess cultural capital" (p. 87). Therefore, while all students possess cultural capital, first-generation students, compared to children of college graduates, typically do not possess enough of this "valued" capital, which reduces their chances of participating and succeeding in college (Jalomo, 1997). Gandara (1995) notes that "information about, and ability to manipulate, the cultural forms of the middle and upper classes can be a significant asset to students, and one that is likely to be out of the reach for most low-income minority and immigrant children" (p. 7).

¹"Cultural capital" should not be confused with 'cultural deprivation' theories which emphasis that student failure, particularly those of minority students, is due to a cultural deficiency (Barrera, 1979). Cultural capital differs in that "it does not specify a 'deficiency' in the individual but emphasizes the impact that exposure to and familiarity with a certain amount of 'cultural' information has on the relative success or failure of individuals to achieve and adjust in schools" (Oliver, Rodriguez, and Mickelson, 1985, endnote 1). Therefore, for the purposes of this study, "cultural capital" is also used in this manner.

To summarize, first-generation students are less likely than children of college graduates to arrive at college with the information and/or knowledge that is needed to succeed and persist. Moreover, even when research is able to take into account such background factors as family income and academic preparation, the simple fact of being a first-generation student still poses additional substantial obstacles to college success (Barahona, 1990). In other words, independent of all the associated pre-college characteristics outlined above, being the first person in your family to go to college poses a unique disadvantage for the student who is trying to succeed in college.

Experiences While in College

While pre-college characteristics associated with first-generation status appear to operate as barriers to college access, some literature suggest that once first-generation students make it to a post-secondary institution, they experience additional obstacles which inhibit their likelihood of attaining a college degree. Gardner (1996) notes that "one of the biggest differences between first-generation and other students is their lack of familiarity with the understanding of the culture of the college" (p. 32). This lack of familiarity, which is part of cultural capital, makes it even more difficult for first-generation students to navigate through the institution with ease. Similarly, not knowing the language of the university is another obstacle which probably exacerbates the difficulties encountered by many first-generation students. According to Rendon (1996), unfamiliar terms can be very daunting to a new student. First-generation students, who have not had the chance to become familiar with such terms at home or from peers or school basically have to learn a new language. Their experience is very

different from students whose privileged upbringing affords them the cultural capital to set and realize high expectations. (p.17)

In short, because first-generations students are the first in their family to attend college, many of them are not exposed to the "valued" cultural capital which makes it easier to navigate through the institution (Jalomo, 1997).

It is thus not surprising to find that many first-generation students, compared to children of college graduates, arrive to their college or university not as well prepared to deal with the time demands of college, the economic realities of college life, and the bureaucracy of a large, intimidating, and impersonal institution (Richardson and Skinner, 1992). Large public institutions may exacerbate these difficulties, considering Cope and Hannah's (1975) observation that, "in combination with other matters the bureaucratic atmosphere in large universities causes students to develop negative attitudes toward continuance" (p. 34).

Other college experiences that are less common among first-generation students than many students whose parent are college graduates would include living on campus, being involved in campus organizations, meeting or pursuing their most important friendships on campus, and working on campus (Billson and Terry, 1982). In a study of first-generation students from 23 diverse institutions nationwide, Terenzini et. al. (1996) found that first-generation students were: more likely to report the need to work more hours per week off campus, more likely to report having personally experienced discrimination, and less likely to perceive faculty members as concerned for student development and teaching. Compared to their traditional peers, first-generation students

are also more likely to report that they left school because of the cost (Billson and Terry, 1982).

What is probably the most frequently discussed issue in the first-generation literature is the difficult and painful transitions that many first-generation students experience when they physically and mentally move from the home culture to the academic culture (Rendon 1992; Navarrette, 1993; Lara, 1992; Fiske, 1988). London (1992), in his study of first-generation college students, concludes that,

...for some students, going to college can be an eventful point of departure, one that both prompts and hastens movements into some "other" culture. ..these students live and share in the life and traditions of two distinct cultures, never quite wanting or willing to break with their past, even if permitted to do so, and never fully accepted, because of prejudice, in the culture in which they seek a place (p. 6-7).

According to Jalomo (1997), the transition to college for first-generation students "often means coming to terms with difficult issues such as changing their identity, being perceived as different, leaving old friends behind, separating from their families, breaking cultural ties, and breaking family codes of loyalty and unity" (p. 5). Consequently, it also means dealing with feelings of isolation, loneliness, alienation, illegitimacy, and psychological distress such as self-doubt, guilt, pain, and confusion (Jalomo, 1997; Fiske, 1988; Rendon, 1992; Rodriguez, 1982, 1975; Lara, 1992; London, 1989, 1992; Navarrette, 1993). Jalomo (1997) also asserts that,

Because varying aspects of their [i.e., first-generation student's] cultural capital are not always honored or valued in college, many first-generation and nontraditional students find that they must live between two worlds in order to retain two separate sets of identities, mannerisms and peer associations (Weis, 1985)." (p. 6)

According to London (1996), "on middle-class or elite campuses where most students come from families with a college-going tradition, first-generation students often report a lengthy list of items (some of which by themselves seem trivial) that assume a new prominence: taste and styles in clothing, food, grooming, hairdo, economic consumption patterns, music, recreation, cars, speech (colloquialism, vocal patterns, vocabulary), and self-presentation" (p. 13). Therefore, the perceived need for first-generation students to "live between two worlds" or "juggle two cultures," may be heightened at selective or elite institutions where a large majority of students tend come from college educated families and/or higher income homes, and therefore may be more familiar with the customs and values of college.

According to Brooks-Terry (1988), "the college student living with parents experiences a daily reinforcement of the subculture in which he or she grew up. To the extent that the values and behaviors of the family environment differ from those of the college milieu, the student will feel the stress of dual loyalties on a daily basis" (p. 129). Therefore, this feeling of being "caught between two world" may also be exacerbated for first-generation students living at home and commuting to college. However, this may also be the case for first-generation students with parents who still expect them to come

home every weekend and perform the same responsibilities they had while they lived at home. For example, Brooks-Terry (1988) asserts that,

Living at home results in expectations about household chores, kinship social obligations, and accountability for time that further limit options for campus involvement. Even when first-generation students live on campus they tend to go home on week-ends or whenever there is any kind of family crisis. The obligations to family and work make the first-generation student a marginal member of the campus from the day he or she enters classes." (p. 131)

The literature on first-generation students suggest that these students face additional stressors typically not experienced by children of college graduates, which makes their transition and adjustment a difficult one. While all students experience some anxiety over the transition to college, research suggest that this transition from home to college can be more overwhelming for first-generation students, than for the more traditional students (Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, and Jalomo, 1994). While moving away from home and going to college, a new environment, separates students from their primary support systems (family, friends, and significant others), the role played by the family in the transition and adjustment to college is mixed. There are some who argue that it is necessary for students, particularly minority students or first-generation students, to sever ties with family in order to attain success in college (Rodriguez, 1982). Similarly, there are others who view autonomy and independence as a "right of passage." However, several studies on college adjustment have found that family support is positively related to transition and adjustment (Hurtado, Carter, Spuler,

1996; Kenny and Stryker, 1996; Nora and Cabrera, 1996). What is not clear is whether the effectiveness or importance of such "support" depends on the student's physical proximity to home.

College Adjustment

While college adjustment has not been the object of systematic study (Hurtado, Carter, and Spuler, 1996), the literature on college adjustment extends back for well over two decades. However, before reviewing this literature it is important to understand what is meant by "adjustment" and what it involves. According to the Webster's New World Dictionary (Guralnik, 1984), adjust means "to change so as to fit, conform, make suitable," "to make accurate by regulating," or "to settle or arrange rightly" (p. 17). Therefore, implicit in this definition is that (1) college adjustment involves changing oneself "to fit," "conform," or "suit" the values, customs, traditions, mission, and goals of the university; and (2) those students whose values and customs differ the most from that of the college or university will have the most difficult time adjusting.

When operationalizing adjustment, several studies (Kenny and Stryker, 1996; Hurtado, Carter, and Spuler, 1996; Brooks and DuBois, 1995; Mooney, Sherman, and LoPresto, 1991) have relied on the Student Adaptation to College Questionnaire (SACQ) developed by Baker and Stryk (1984, 1989). The SACQ's popularity may be due in part to the fact that it identifies four broad areas of adjustment: academic, social, personal/emotional, and attachment. Most studies that use this instrument assess the different types of adjustments separately, but total college adjustment is occasionally

assessed by combining results for the four areas. Other ways of operationalizing college adjustment include level of psychological distress and feelings of well-being (Smedley, Myers, and Harrell, 1993). Two other frequently used measures of academic adjustment are the student's college GPA (Oliver, Rodriguez and Mickelson, 1985; Smedley, Myers, and Harrell, 1993; Brooks and DuBoise, 1995) and persistence (Nora and Cabrera, 1996). In short, there are several ways to assess how students' are adjusting to college.

What factors are associated with adjustment to college? In their study on predictors of academic and psychological adjustment (i.e., GPA, academic, social, personal/emotional, attachment and psychological symptoms) of first-year college students, Brooks and DuBoise (1995) examined student demographics (e.g., gender, race/ethnicity, age, family income), individual factors (e.g., ACT score, personality characteristics, problem solving skills, and self-esteem); and environmental variables (e.g., social support, life events, and distance from home). Their results show that individual (i.e., ACT score, problem solving, emotional stability) and environmental (i.e., social support, daily hassles, distance from home) variables were important predictors of college adjustment among their sample of first-year students.

In their study of the college adjustment of women, Mooney, Sherman, and LoPresto (1991) examined the effects of self-esteem, actual and perceived distance from home, and internal academic locus of control as predictors of college adjustment (i.e., personal, academic, social, attachment). They found that female students with high self-esteem and internal academic locus of control reported better adjustment to college. There was no significant relationship with actual geographic distance from home.

Interestingly, it was found that "female students who perceived the distance from home as 'just right' reported a more successful college adjustment than those who perceived the distance and 'too far'" (p. 447).

However, while background variables (such as gender and family income) and environmental variables (such as distance from home) are common in studies of college adjustment, other factors that are considered when studying the college adjustment of minority students include "financial aid" (Oliver, Rodriguez, and Mickelson, 1985), "alienation" (Nora and Cabrera, 1996), "role strain," "minority-status" (Smedley, Myers, and Harrel, 1993), "campus climate" (Hurtado, Carter, and Spuler, 1996), and "social support networks." For example, Kenny and Stryker (1996) studied the impact of social support networks on adjustment to college among racial/ethnic students and white students. They found that overall satisfaction with the social support network is related to social adjustment and academic adjustment for minority students. More interesting however, is the finding that sources of support associated with college adjustment may differ for white students and students of color. Peer support, for example, is more important for white students, whereas family support is more important for minority students.

Hurtado, Carter, and Spuler (1996) examined the college adjustment of Latino students. In addition to student background characteristics (not including first-generation status), they examined college structural characteristics (selectivity, size, college control type), campus climate (perceptions of student-centered faculty, racial/ethnic tension, and discriminatory experiences), and selected student behaviors (interactions with family,

faculty, and friends). While their study yielded several interesting findings, it was revealed that "perceptions of a hostile climate for diversity were negatively associated with all adjustment measures" (p.145) and that interaction with faculty was associated with academic adjustment. Open-ended responses suggested that college peers and family provided the most support during the students' first-year of college. Authors point out that "support from family is clearly key for the transition process" (p. 151).

Similarly, Nora and Cabrera (1996) found that perceptions of prejudice-discrimination negatively affected the adjustment (i.e., persistence) of minority students. And while successful adjustment to college appears to require some students to sever ties with family, friends, and past communities (Rodriguez, 1975, 1982), Nora and Cabrera's (1996) results suggest that "such attachments to significant others are key for the successful transition of students to college" (p. 140). Similar findings were found by Hurtado, Carter, and Spuler, 1996, as well as Kenny and Stryker (1996) who also found family to be important.

So far this review shows (a) that there are several factors which need to be considered when studying the college adjustment of minority and white students, and (b) with the exception of a handful of studies (e.g., Barahona, 1990; Bartels, 1997; Maak, 1998) that first-generation student status is almost never considered. The construct of first-generation status is thus ignored in nearly all studies of college adjustment. As with most studies on college student development and persistence, this construct takes a back seat to race, income, and high school grades. Clearly, future research on student

adjustment to college needs to include data on student background, sociocultural, and environmental factors together with information on the students' first-generation status.

Student Support Programs

Nearly every university that enrolls nontraditional students has a student support program whose purpose is to ease the transition and adjustment of students. Research on programs for "high risk" and "disadvantaged" college students reveals that "high-risk" students, compared to similar students who do not participate in these programs, stay in college longer and obtain better grades (Kulik, Kulik, & Shwab, 1983). Since first-generation students are considered to be an "high risk" population, federally funded educational programs have been designed to assist first-generation students before and during college.

These programs, which are referred to as TRIO programs, were created with the help of the Educational Opportunity Act of 1964 and the Higher Education Act of 1965. They were designed to motivate and support students from disadvantaged backgrounds, particularly low income, first-generation or disabled students. Specifically, the TRIO mission "is to maximize educational opportunities for low-income and first-generation college students, through direct services that provide access to education and encourage retention through the education pipeline. Ultimately, the goal of the TRIO programs is to help students succeed in attaining a post-secondary education and graduating from degree programs" (Department of Education, 1997). Through pre-collegiate intervention programs such as Upward Bound and Talent Search and retention programs such as

Student Support Services and Robert E. McNaire, thousands of first-generation students have been assisted for over 30 years.

Of particular relevance to this study is the Student Support Services (SSS) programs which are designed to assist first-generation students while in college. The SSS programs can be sponsored only by institutions of higher education. Each institution applying for an SSS grant must insure that each accepted participant will be offered sufficient financial aid to meet his/her full financial need. Typically, the SSS programs also offer orientation, professional counseling, peer counseling, tutoring, workshops, labs, and cultural events.

While not all campuses have SSS programs, it seems logical to assume that those campuses that do have these programs are better able to serve and retain their first-generation students. Indeed, research has suggested that SSS program has a positive effect on GPA, credits earned, and retention of students (Maack, 1998; Carlson and Fath, 1998; Velasquez, 1997, Muraskin, 1997; Chaney, Lewis, Farris, Westat Inc., and Greene, 1995; "National Study," 1997).

In short, while limited and scant, there is some evidence suggesting that SSS programs enhance the success of the first-generation students. For example, Richardson and Skinner (1992) conclude that:

All first-generation students are uncertain climbers. Minority students in particular need ladders with every rung in place in order to provide them with a fair opportunity for overcoming incomplete preparation, nonspecific educational objectives, and nontraditional modes of college attendance. The necessary rungs

include early intervention to strengthen preparation and improve educational planning, summer bridge programs, special orientation and registration, tailored financial aid programs, assessment and remediation, tutoring, learning laboratories, mentoring, intrusive academic advising, and career development. (p. 41)

With few exceptions (e.g., Maack, 1998), studies on SSS students are often “outcome only” assessments that fail to take into account pre-college characteristics and that fail to incorporate in their studies other first-generation students who are not SSS participants on their campuses for comparison purposes. In addition, while the persistence of SSS students has been examined (Maack, 1998), the impact that SSS participation has on academic and social adjustment, as well as students' self-image, has not.

Theoretical Frameworks

The impact of the college experience for undergraduates has been studied extensively (Astin, 1977, 1993b; Feldman and Newcomb, 1969; Pascarella and Terenzini, 1991). Researchers have expended much time, energy and resources on trying to determine exactly what it is about the college experience that impacts students. Over the years there have been several models, theories, and frameworks which have been used to understand why students persist, develop, and change while in college. In this section, two popular models, Astin's Theory of Student Involvement and Tinto's Model of

Institutional Departure, are presented and examined for their applicability to first-generation students.

Astin's Theory of Student Involvement

Astin's (1984) theory of student development holds that the amount of learning and personal development that is "associated with any educational program is directly proportional to the quality and quantity of students' involvement in that program" (p. 298). According to Astin (1984), student involvement "refers to the quantity and quality of the physical and psychological energy that students invest in the college experience" (p. 297). In addition, while he acknowledges the importance of motivation, Astin emphasizes that "involvement implies a behavioral component" (p. 298). Simply put, "the greater the student's involvement in college, the greater will be the amount of student learning" (p. 307). Consistent with this theory are the findings that students who reside on campus, participate in honors programs, study frequently, interact with faculty and/or peers, and get involved in social activities and student government will be advance more in their learning and personal development than students who do not (Astin, 1977; 1993b). The involvement theory is directly related to practice, in that sense the efficacy of any educational policy or practice can be judged in terms of the extent to which it enhances student involvement (Astin, 1984).

Tinto's Model of Institutional Departure

Tinto's (1987, 1993) model of institutional departure is widely used to understand student persistence and occasionally criticized (Tierney, 1992). Key to his model is the

notion of academic and social integration which can be defined as (Kraemer, 1997, p. 163):

Academic Integration: The development of strong affiliation with the college academic environment both in the classroom and outside of class. Includes interactions with faculty, academic staff, and peers but of an academic nature (e.g., peer tutoring, study groups).

Social Integration: The development of strong affiliations with the college social environment both in the classroom and outside of class. Includes interaction with faculty, academic staff, and peers but of social nature (e.g., social peer group interactions, informal contact with faculty, and involvement in organizations).

According to this model, background characteristics (i.e., family background, individual attributes, and pre-college schooling) interacts with and influences students' commitment to the goal of graduation which leads to higher grade performance and intellectual development, which in turn leads to academic integration. Background characteristics also interact with commitment to the institution, which is expected to produce peer and faculty interaction, which in turn leads to social interaction. These commitments work in a circular fashion to reinforce and increase commitment (cited in Bean, 1992).

According to Pascarella and Terenzini (1991), "negative interactions and experiences tend to reduce integration, to distance the individual from the academic and social communities of the institution, promoting the individual's marginality and, ultimately, withdrawal" (p. 53).

Applicability to First-Generation Students

These models, as noted by Velasquez (1997) and Oliver, Rodriguez, and Mickelson (1985) dispute the simple notion that students either succeed or fail in the university merely because of the presence or absence of strong academic skills. Moreover, it can be argued that several factors may be involved and be just as important as academic ability (i.e., students' level of involvement and integration). Both models will be used in this study of first-generation students, since involvement and academic and social integration into the college environment can reasonably be considered to be important factors in the successful transition, adjustment, and achievement of first-generation students. Further social and academic adjustment—two key outcome measures to be used in the current study—are closely related to the constructs of social and academic integration.

However, with regard to first-generation students, there may be additional factors that need to be considered for success in college which are not explicit in these models. According to some researchers "first generation college students often bring with them a diverse set of pre-college experiences that are not adequately addressed in existing models of retention" (Jalomo, 1997, p 5).

For example, it may be that first-generation students, need active encouragement in order to become involved. Rendon (1993) believes that developing involvement activities on campuses for first-generation students to participate in is not enough and asserts that:

Expecting students to get involved in college on their own is not going to work for nontraditional students. Merely offering opportunities for involvement will not work for passive students of doubtful students or for those who do not yet know how to take full advantage of the system." (p. 12)

Therefore, first-generation students may need to be actively encouraged (and in some cases required) to get involved. Given that first-generation students tend to be less involved in campus organizations and activities, to live at home with parents, to hold off-campus jobs, and to work longer hours, they will have less time to devote to involvement activities on campus—a situation which may impede their social and structural integration (Billson and Terry, 1982).

In addition, it appears that for first-generation students, faculty-student interaction may not be enough. Rendon (1992, 1993, 1994 1995) points to the importance of "validation" in first-generation students' learning, which she defines as "an enabling, confirming and supportive process initiated by in- and out-of-class agents that fosters academic and personal development" (1994, p. 44). Some examples Rendon provides are: calling students by name, working one-on-one with students, praising students, providing encouragement and support, allowing students to view themselves as capable of learning, treating students with respect and dignity, and providing mechanisms by which students support and praise each other. According to Rendon (1994), faculty have the power to transform "even the most vulnerable students into powerful learners who are excited about learning and attending college" (p. 46).

Therefore, while Astin and Tinto's models will be used as the guiding theoretical frameworks for this study, other factors not captured in these models may prove to be important for first-generation students.

Summary

The purpose of this chapter was to explore the relevant literature in three broad areas (first-generation students, adjustment to college, and theoretical frameworks), with the purpose of laying the foundation for this study. Unanswered questions were revealed and gaps in the literature which need further investigation were uncovered. In short, this review of the literature merits the following conclusions:

- While several identifiable pre-college characteristics such as family income and level of academic preparation may account for part of first-generation students' difficulty with gaining access to college, and persisting and achieving while in college, research suggests that first generation status alone--independently of other attributes--provides a unique disadvantage (Barahona, 1990).
- Once in college, first-generation students appear to face additional stressors such as the frustration that comes with not being familiar with the "academic" language or with how the "system works" (i.e., cultural capital). More research is needed the extent to which on this form of "cultural capital" affects the adjustment, transition, and self-image of first-generation students.
- There is reason to believe that first-generation student's feeling of being

"caught between two worlds" has negative psychological consequences—e.g., feeling lonely, isolated, disconnected, alienated and/or illegitimate. Since these feelings can have a serious negative impact on persistence and adjustment, the possibility that the student may feel "caught between two worlds" needs to be taken into account when assessing first-generation students' self-image, transition to college, and adjustment in college.

- Research on the role played by parents and by parental attachment in the academic achievement and adjustment of first-generation students has produced mixed results. The need to look more directly at the effects of such personal and sociocultural factors is evident.
- Student support service programs are highly regarded and have received much praise as a means of assisting first-generation students to persist and to excel academically. However, since well-controlled studies of students in SSS programs are lacking, there is a need to take a more systematic look at SSS participation and its effect on transition to college, adjustment in college, and self-image.

CHAPTER THREE

METHODOLOGY

This chapter explains the design and method of this study. Hypotheses are presented first, followed by a description of the research design, the site, and the sample. The concluding section presents data collection procedures and methods of analysis.

Hypotheses

Following the research questions described in Chapter One, the study aimed to test six hypotheses. Several of these hypotheses have to do with the assertion that many first-generation students arrive to the institution without the "cultural capital" (as described in Chapter Two) that facilitates informed decision making about college and helps students maneuver through the various challenges of the institution. Therefore, even after background variables such as academic preparation and parental income are controlled, we would still expect to find differences in college outcomes between first-generation students and children of college graduates resulting from differences in their knowledge about, and attitudes toward college and the college experience. In short, the overall rationale driving this study was that growing up in a family where neither parent has experience with college can have a substantial impact on the "cultural capital" that students have at their disposal to enhance their decision about where to attend college and to help them adjust and achieve while in college. The cultural capital expected among first-generation students was predicted to have a direct negative consequences for most

aspects of their higher education experience and decision making. These effects were tested after controlling for the confounding variables. The hypotheses are as follows:

1. Compared to children of college graduates, first-generation students will expect to cover more of their college costs from work, scholarships and loans, will be more concerned about their ability to finance their education, will report having applied to fewer colleges, and will be more likely to attend a college close to home.

Rationale: Given that their parents have no experience with college, first-generation students are less likely than children of college graduates to have access to information about the application process, varieties of institutions, or financial aid, and so on. Since children of college graduates, are likely to have obtained much information from their parents (and possibly friends who also have college educated parents), they will be in a better position to make informed decisions about where to go to college, how to complete applications, how to obtain the best financial aid, how to choose a course of study and so on. In addition to these differences in cultural capital, the more limited economic resources of first-generation students (Billson and Terry, 1982; Barahona, 1990; Terenzini, et. al, 1996; TERI, 1997), make them less able to afford selective and private institutions, to apply to many schools or to move away from home.

2. When noting how important certain factors were in their decision to go to

college, first-generation students (compared to children of college graduates) will be more likely to indicate as very important the following reasons: "to be able to get a better job," "to be able to make more money," and "to prove to others I could succeed."

Rationale: Children of college graduates are more likely to be encouraged by their parents to see the purpose of college in the traditional liberal arts sense—"to get a liberal education and appreciation of ideas"—and as a means of fulfilling more existential needs like "to become a more cultured person." Parents of first-generation students, on the other hand, are more likely to convey a more instrumental view of the importance of going to college. Since first-generation students come from working class backgrounds (London, 1989, 1992, 1996), they will be more concerned with benefiting from "social mobility" college may be able to afford them.

3. First-generation students have a more difficult time with the transition to college than do children of college graduates.

Rationale: Because first-generation students are the first in their family to attend college, many arrive with very little information about college and what to expect (cultural capital) and therefore they are more likely to experience difficulty making that transition. Therefore, they will have additional transitional issues to deal with.

4. Participating in the SSS program eases the process of transition to college among first-generation students.

Rationale: Since one of the goals of the SSS program is to help students with their transition to college, first-generation students who participate in the program are exposed to the kinds of valuable information and advice which they will need in order to maneuver successfully through the various challenges of the college experience. SSS programs not only provide first-generation students with valuable information, but also opportunities to interact with SSS staff and to become more integrated into campus life through involvements in various activities.

5. Being involved in the SSS program enhances the academic and social adjustment of first-generation college students.

Rationale: Similar to rationale given for # 4 (above).

6. Being a first-generation college student will be negatively associated with academic achievement (as measured by college GPA). These effects will be partially attributable to other entering characteristics that are confounded with first-generation status, and partially attributable to other direct effects of the cultural capital associated with being a first-generation student.

Rationale: Previous research (Barahona, 1990) suggests that even when a variety of background characteristics are controlled, first-generation student status still poses a unique negative influence on persistence. This may be true as well for college GPA. The expectation here is that cultural capital, as well as academic preparation enhances academic performance.

Research Design and Background

Research Design

Research questions were explored and the hypothesis were tested using various approaches (descriptive analyses, survey research and open-ended analyses). The use of multiple methods is often referred to as triangulation (Cohen and Manion, 1994).

"Triangulation may be defined as the use of two or more methods of data collection in the study of some aspect of human behavior. By analogy, triangular techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and, in doing so, by making use of both quantitative and qualitative methods" (Cohen and Manion, 1994, p. 233).

In short, there were three phases to this study. First, descriptive analyses were conducted using an existing database on a nationally representative sample of 1997 entering freshmen to explore who first-generation students are nationally and how they compare to children of college graduates. This descriptive analysis also identified many of the entering characteristics that are confounded with first-generation status and provided the background for the main intensive longitudinal study which focused on students in one selective institution. The last phase of this study consisted of an analysis of qualitative data on first-generation students' responses to open-ended questions.

Site

This study was conducted at the University of California, Los Angeles (UCLA). Several reasons made UCLA ideal for this study. First, since UCLA has been a

participant in the national freshman surveys of the Cooperative Institutional Research Program for 29 of the 33 years of its existence (Sax, Astin, Korn, and Mahoney, 1998), there was sufficient pretest data available from the time students entered as freshman which was used as pre-college assessments for this study. Second, UCLA fit the parameters of this study since it is a large selective research university (Sax, Astin, Korn, and Mahoney, 1997) which has become increasingly selective since affirmative action was eliminated (UCLA Office of Academic Planning and Budget, 1998). And third, UCLA served as the ideal site for this study because it has a well established Student Support Service (SSS) program which has been providing services to first-generation college students for over a decade. Since one of the goals of this study was to examine the experiences and performances of two first-generation student populations (those in SSS programs and those who are not), a site where the SSS program was well established was necessary.

Since UCLA's SSS program (also known as the Program Leading to Undergraduate Success –PLUS) is a federally funded program, it has a budget to assist about 200 freshman each academic year. Therefore, SSS administrators are forced to be selective in admitting students into the program. Federally mandated eligibility requirements (low-income, first-generation or disabled) and academic need are considered when making decisions about whom to admit to the program. Along with academic criteria (GPA and SAT scores), high risk factors such as family pressure, outside obligations, financial stresses, and low self-esteem are also considered in the academic needs assessments. Considered first for the program are those students who

meet the federally mandated criteria and are identified as the most “under-prepared.”

These complex selection factors make it imperative that every evaluation of the impact of SSS include longitudinal data with extensive pre-college information on each student.

The primary goals of the SSS program are to assist students in the program "to remain at the university, graduate and, when appropriate, enroll in professional and graduate school." With these goals in mind, the program is designed to ensure that: (1) eligible low-income participants are offered full financial aid to meet their financial need during each quarter; (2) participants remain in good academic standing with a minimum GPA of 2.75 or better; (3) freshman participants are successfully retained to their second year; and (4) SSS participants be offered a program of tutoring, advising, academic instruction to promote a supportive campus climate.

Consequently, there are several programmatic aspects of SSS that are designed to meet these objectives and which help to make the UCLA SSS program unlike any other counseling service on campus (Arredondo, 1998). For example, students in the SSS program are required to sign a contract. By signing this contract, students agree to participate in several activities such as seeing their professional and peer counselor on a regular basis, signing-up for tutoring, and attending at least two academic and/or cultural workshops each quarter. Students are also given preferential enrollment which enables students (particularly the commuters) to take the classes they need. The SSS staff also encourages all their students to get "on-line." Counselors have the ability to provide students with a email/internet account right from their office. The importance of being on-line is that email provides students with another avenue to contact a counselor or other

support resources. Lastly, since most of the student peer counselors on staff are themselves first-generation students who have already been through the program, students have an opportunity to interact with an upper classmate who has successfully made it through the first couple of years.

Population and Sample

In order to ensure that all students had pre-college assessment measures, the target sample of this study was limited to UCLA students who completed the 1994 or 1995 Student Information Forms (SIF) collected by the Cooperative Institutional Research Program (CIRP) at UCLA's Higher Education Research Institute. Furthermore, only those students who gave permission to be followed-up were sampled. The decision to use two cohorts of UCLA students was made with the purpose of maximizing the sample size. However, since these students were followed up during their fourth or fifth year in college, all of them spent sufficient time at UCLA to be able to provide information about their experiences, activities, achievements, and development while in college.

From this sample of students, two subgroups were identified: first-generation students and children of college graduates. For the purposes of this study, students were considered first-generation if they indicated on the SIF that the educational attainment of both parents was a "high school degree" or less. Children of college graduates were identified as those students who indicated on the SIF that at least one of their parents had obtained a bachelor's or higher degree. Students whose father's or mother's educational attainment was "some college" were not included unless the other parent had at least a bachelor's degree. Given these parameters, the total number of students which were

available for this study were 3,469--that is, 654 first-generation college students and 2,815 children of college graduates. However, while all the 654 first-generation students were sampled in this study, in order to reduce costs only 30 percent (848) of the children of college graduates were included. Income, race/ethnicity, and gender were used to match the sample of children of college graduates with first-generation students. In short, 1,502 UCLA students were followed up. The largest racial/ethnic group among the first-generation target sample was Asian-Americans (44%), followed by Mexican Americans (33%). For children of college graduates, the largest racial/ethnic groups for the target sample were Asian-American and Whites (40%).

Data Collection & Method of Analysis

Survey Instruments

The Student Information Form (SIF). The SIF, commonly referred to as the Freshman Survey, has been distributed every fall (since 1966) to entering college freshmen across the United States. The SIF, which is distributed by participating institutions during their orientation programs and/or in the first few weeks of the fall classes, contains questions covering a wide range of student characteristics, including demographics (e.g., race/ethnicity, parental income and education), secondary school achievement and activities (e.g., high school GPA), reason for college choice, financial aid, educational and career plans, values, attitudes, beliefs, and self-concept (see Appendix A). Data obtained from the 1994 and 1995 SIF surveys constituted the first time point of the longitudinal data set created for this study. Data obtained from the 1997 and 1998 SIFs were used to develop a profile of first-generation students.

Follow-up Survey (FUS). The 1998 FUS is a four page survey instrument, consisting of 28 questions designed specifically for this study (see Appendix B). This survey was designed with the goal of gathering information in five broad areas: (1) student background information not included in the SIF (e.g., siblings in college); (2) students' perceptions of their transition to college and their academic and social adjustment to college; (3) students' perception of their academic and social self-image and competence; (4) their educational environment (e.g., participation in SSS, other academic experiences/activities, perceptions of campus climate, and interaction with faculty and with peers); and (5) the personal and sociocultural factors which may have

influenced their transition and adjustment (e.g., work, family interaction/ties, cultural interaction/ties). Unlike previous studies on first-generation students which have been constrained by existing data sets not designed with the purpose of studying first-generation students (e.g., Barahona, 1990; Suarez, 1997), the FUS instrument allows for the exploration of environmental factors which were considered to be important to first-generation students.

Since the FUS was designed in part to post-test items contained in the SIFs, items borrowed heavily from these 1994 and 1995 SIF questionnaires. Additional items from other HERI surveys (e.g., the College Student Survey and the 1989 Follow-up Survey which have been used on national student samples) were also considered when developing the FUS instrument to maximize the construct validity of the FUS items. Other survey instruments, particularly those administered to UCLA students, such as the UCLA Transfer Student's Questionnaire (Laanan, 1998), the UCLA Friendship Group Questionnaire (Antonio, 1998), the UCLA Campus Environment for Diversity Student Survey (Astin, Trevino, and Wingard, 1991), and the College Student Experience Questionnaire (Pace, 1979) were also consulted and used as guides during the developmental stages. For many of the items, likert-scale formats were used for student responses. The last two questions were open-ended thereby, allowing students to provide in their own words which factors they considered to have affected their college adjustment. Data from this survey constitutes the second time point of the longitudinal data set.

Data Collection

With the assistance and cooperation of the Higher Education Research Institute (HERI), students in the target sample were identified by social security numbers (which are obtained during the administration of the SIF) . Information (i.e., current mailing addresses, major, etc.) was then requested from the UCLA Office of Academic Planning and Budget (OAPB).

The FUS was mailed to the sample of UCLA students during the Fall Quarter of the 1998-1999 academic year. A cover letter accompanied each survey explaining that participation was voluntary and information provided would remain confidential (see Appendix C). Participants were given two weeks to complete the questionnaires and return it in the postage-paid envelope that was included with the survey. In order to maximize the number of students included in the study: (1) all students in the target sample who did not respond to the first wave were sent a second questionnaire during the 1999 Winter Quarter; and (2) students who responded by the deadline were entered in a drawing to win a \$100 gift certificate. Once the data from the FUS questionnaires were key-punched into a computer, data from the FUS was linked to SIF data to create a longitudinal data set (see Chapter Five for details).

Descriptive Analyses

Data for the first phase of the study, were obtained from the 1997 and 1998 SIFs (see Appendix A)—however, the 1998 data were provided mainly to demonstrate the consistency of the results. Data for the 1997 analysis were based on the responses of 252,082 students at 464 of the nation's two- and four-year colleges and universities across the United States (Sax, Astin, Korn, and Mahoney, 1997). Data were weighted to approximate the results that would have been obtained if all of the 1.61 million first-time, full-time students entering colleges and universities as freshman Fall of 1997 had completed the survey (Sax, Astin, Korn, and Mahoney, 1997). To define the comparison groups, a "dummy" variable was created—(1) first-generation students versus, (2) children of college graduates—using the same definition as that used for the longitudinal study described earlier. This “dummy” variable was then used to select out first-generation students and children of college graduates and run descriptive analyses of all the items on the 1997 and 1998 SIF surveys. Reports were created (for all students and students in highly selective public universities) comparing first-generations students to children of college graduates on all of the items contained in the survey (see Appendix A). All pre-college characteristics were assessed and compared between first-generation students and children of college graduates. However, given the number of items on the survey, the data was reduced and students were compared with regard to background characteristics, self-concept, academic preparation, degree aspirations, decisions about college, paying for college, activities engaged in during the past year, life goals and future activities, and college major and career goals.

Descriptive statistics were used to analyze the data for the longitudinal portion of the study which was drawn from the 1994 and 1995 SIF and the FUS. Frequencies and crosstabulations were used to describe the final sample and the four subsamples: that is, first-generation students and children of college graduates, as well as first-generation students who participated in the SSS program and those that did not. Crosstabulations were also utilized to compare first-generation students with children of college graduates on a number of involvement/environmental variables and personal and sociocultural measures (see Chapter Five).

Multivariate Analyses

Multivariate analyses were used to address many of the research questions and hypotheses which had to do with the factors contributing to the transition to college, undergraduate GPA, social and academic adjustment, and the development of an social and academic self-image. The section below describes the regression analyses that were conducted and the variables used in the analyses.

Regression Analyses

A series of stepwise multiple regressions were performed to identify variables that were associated with the outcome variables: transition to college, undergraduate GPA, social adjustment, academic adjustment, social self-image, and academic self-image (see Table 3.1). Regression analyses utilized the "Input-Environment-Outcome" (I-E-O) methodological framework to control for confounding variables and examine the impact of several variables on the dependent measures (Astin, 1993a). According to Astin

(1993a), "the basic purpose of the I-E-O design is to allow us to correct or adjust for such input differences in order to get a less biased estimate of the comparative effects of different environments on outputs" (p. 19). Consequently, independent variables were blocked into the regression in a temporal sequence based the presumed order of their effects on the outcome variable under investigation. For the purposes of this set of analyses, first-generation status was considered as a "bridge" variable (Astin, 1993a)—both as an "input" as well as an "environmental" variable—and was accordingly entered in a separate block following the control of the other entering freshman characteristics. The objective of treating first-generation status in this manner was to determine the extent to which it directly effects each dependent variable, independently of other confounded freshman characteristics.

A total of 12 multivariate regression analyses were conducted. For each dependent/outcome variable outlined in Table 3.1, two separate regression analyses were conducted: a combined analysis with all students (first-generation students and children of college graduates) and a separate analyses for first-generation students only. The purpose of the combined analyses was to determine, as mentioned above, the extent to which first-generation status directly affects the student's transition to college, undergraduate GPA, adjustment to college, and self-image, independently of the confounded freshman characteristics which are associated with first-generation status. However, separate analyses were conducted for two reasons: (1) to determine the extent to which SSS participation influenced the various dependent variables (for first-generation students)--a central focus of this study; and (2) to reveal the variables which

predict the transition to college, undergraduate GPA, adjustment to college, and self-image for first-generation students.

Independent variables used in the regressions were blocked and entered in the presumed temporal order of their occurrence. Combined regression analyses were conducted for all outcome measures (see Table 3.1) using first-generation student status as an independent "dummy" variable. In addition to the pre-test (when available), the first-input block included all the confounding variables which were expected to be related to first-generation status such as parental income, high school GPA, and race/ethnicity (see Table 3.2). In the next block, first-generation student status (i.e., dummy variable) was examined to see if its partial regression coefficient was still significant after the confounding variables were controlled (see Table 3.3). Other independent variables such as environmental/involvement measures (see Table 3.4), and personal and sociocultural measures (see Table 3.5) were also included in subsequent blocks in the analysis to see which of these variables mediate² the effect of being a first-generation student. This mediating effect was associated with any variable that weakened the effect of being first-generation when added to the equation. While the number of variables were reduced, for the most part, the separate regression analyses used the same variables, with two exceptions. SSS participation was included only in the first-generation analysis since children of college graduates are not eligible to participate in the program. In addition, since it was found that many first-generation students in the sample also participated in the Academic Advancement Program (AAP), AAP participation was also included in

² "Mediation" in this context would be the equivalent of an "indirect" effect in path analysis.

these separate analyses (see Chapter Five for description of program). AAP and SSS participation were only used in the regression analysis with first-generation students. These variables were introduced in the second block, after all the confounding variables which were expected to be related to first-generation status were controlled.

In short, the combined regression analyses were executed to see whether the coefficient for being a first-generation diminished as these background variables were controlled, while the separate regression analyses were performed to see which variables predicted—with a particularly interest in SSS and AAP participation—the outcomes for first-generation students. Tables 3.2 to 3.5 below shows in more detail the key variables that were used in the 12 regression analyses that were conducted.

Dependent/Outcome Variables

Table 3.1 identifies the specific item(s) which were used to construct each outcome variable: transition to college, social adjustment, academic adjustment, social self-image and academic self-image. Since two of these constructs had been utilized in previous research (Astin, 1993b), confirmatory factor analyses were first run to confirm the item composition of the social and academic self-image composite measures. Cronbach's alphas were also performed to determine the reliabilities of all the scales.

Table 3.1
Dependent/Outcome Variables (Items derived from FUS)

Variable (Mean, SD)	Factor Loading	Alpha	Direct Pretest	Scoring
Transition to College "How much difficulty did you experience in making the transition from home to UCLA?" (2.48, .99)	N/A	N/A	No	Four-point scale: 4=a lot to 1=none.
Undergraduate GPA "Mark the one circle that best describes your grade point average at UCLA so far." (4.21, .99)	N/A	N/A	Yes	Six-point scale: 6=A to 1=C- or less.
Social Adjustment "Adjusting to the social environment at UCLA has been difficult." ¹ (reversed) "I am very involved with the social activities at UCLA." ¹ "At UCLA, how much difficulty have you had making friends?" ² (reversed)	N/A	.62	No	¹ Four-point scale: 4=agree strongly to 1=disagree strongly. ² Three-point scale: 3=a lot to 1=none.
Academic Adjustment "Adjusting to the academic standards at UCLA has been difficult." ¹ (reversed) "I wasn't ready for the academic demands at UCLA." ¹ (reversed) "At UCLA, how much difficulty have you had academically?" ² (reversed)	N/A	.83	No	¹ Four-point scale: 4=agree strongly to 1=disagree strongly." ² Three-point scale: 3=a lot to 1=none.
Social Self-Image Self-confidence (social) Leadership ability Public speaking skills Emotional health	.83 .70 .69 .62	.78	Yes	Five-point scale: 5= highest 10%" to 1=lowest 10%.
Academic Self-Image Mathematical ability Academic ability Self-confidence (intellectual)	.79 .76 .54	.70	Yes	Five-point scale: 5=highest 10%" to 1=lowest 10%.

Independent Variables

All independent variables used in the longitudinal analysis were derived from the SIFs and FUS. The tables below identify the various independent variables which were examined in the regression analyses: background/input variables (Table 3.2); the first-generation status variable or SSS/AAP participation (Table 3.3); environmental/involvement measures (Table 3.4), and campus perceptions/personal and sociocultural measures (Table 3.5).

Table 3.2
Background/Input Variables (Block 1)

Variables	Dependent Variable	Scoring
Pretest: Social self-image (ALPHA=.74) self-confidence (social) leadership ability public speaking skills emotional health	SI	All items on a five-point scale: 5=highest 10% to 1=lowest 10%.
Pretest: Academic self-image: (ALPHA=.57) mathematical ability academic ability self-confidence (intellectual)	AI	All items on a five-point scale: 5=highest 10% to 1=lowest 10%.
Pretest: High School GPA	TR, UG, SA, AA, SI, AI	Eight-point scale: 1=D to =A or A+ .
SAT Composite: Math and Verbal	TR, UG, SA, AA, SI, AI	Ranges from 200-800.
Sex: Female	TR, UG, SA, AA, SI, AI	Dichotomous: 1=no, 2=yes.
Race/Ethnicity: African American/Black	TR	Dichotomous: 1=no, 2=yes
Race/Ethnicity: Mexican American/Chicano	TR, UG, SA, AA, SI, AI	Dichotomous: 1=no, 2=yes
Race/Ethnicity: Asian American/Asian	TR, UG, SA, AA, SI, AI	Dichotomous: 1=no, 2=yes
Race/Ethnicity: White/Caucasian	SA, AA, SI, AI	Dichotomous: 1=no, 2=yes
Parental Income	TR, UG, SA, AA, SI, AI	Fourteen-point scale: 1=less than \$6000 to 14=\$150,000 or more.
College First Choice	UG	Dichotomous: 1=no, 2=yes
US Citizen	UG	Dichotomous: 1=no, 2=yes
Age	UG	Dichotomous: 1=no, 2=yes
Number of siblings in college	TR	Four point scale: 1= none to 4=three or more
When decided to go to college	TR, UG, AI	Five-point scale: 1=junior or senior year of high school to 5=before elementary
College advice/info: Parents: Mother and Father	TR, UG, SA	Four point scale: 1=not applicable to 4=often
College advice/Info: Siblings	TR	Four point scale: 1=not applicable to 4=often
College advice/Info: Family friends	TR, UG	Four point scale: 1=not applicable to 4=often
College advice/Info: HS teachers/counselors	UG	Four point scale: 1=not applicable to 4=often
College advice/Info: Private college counselor	TR	Four point scale: 1=not applicable to 4=often

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Table 3.2-Continued
Background/Input Variables (Block 1)

Variables	Dependent Variable	Scoring
Going to College: Couldn't find job	UG, AA	Three point scale: 1=not important to 3=very important
Going to College: Parents wish	TR	Three point scale: 1=not important to 3=very important
Going to College: Get away from home	UG	Three point scale: 1=not important to 3=very important
Going to College: Learn more about things	SA	Three point scale: 1=not important to 3=very important
Miles from college to home	TR	Six-point scale: 1=5 or less to 6=over 500
SIF Anticipate: Be elected to student office	SI	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Change career choice	AA	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Change major field	TR	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Fail one or more courses	TR, UG	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Graduate with honors	AI	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Need extra time to complete degree	TR	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Participate in demonstration	UG	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Transfer to another college	SI	Four point scale: 1=no chance to 4=very good chance
SIF Anticipate: Work full-time while at college	UG	Four point scale: 1=no chance to 4=very good chance
SIF Goal: Be a community leader	SI	Four point scale: 1=not important to 4=essential
SIF Goal: Make a theoretical contribution to science	UG	Four point scale: 1=not important to 4=essential
Concern about financing college	TR	Three-point scale: 1=none to 3= major
Receive financial any aid from parents/relatives	SA	Dichotomous: 1=no, 2=yes
SIF Hrs per week: Studying or doing homework	TR	Eight-point scale: 1=none to 8=over 20.
SIF Hrs per week: Talking w/teachers outside of class	UG	Eight-point scale: 1=none to 8=over 20

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

**Table 3.2-Continued
Background/Input Variables (Block 1)**

Variables	Dependent Variable	Scoring
SIF Hrs per week: Exercising or sports	SI	Eight-point scale: 1=none to 8=over 20
SIF Hrs per week: Partying	SA	Eight-point scale: 1=none to 8=over 20
SIF Hrs per week: Working for pay	AA	Eight-point scale: 1=none to 8=over 20
SIF Activity: Felt depressed	SA, AA, SI	Three-point scale: 1=not at all to 3=frequently
SIF Activity: Felt Overwhelmed	TR, SA, AA, AI	Three-point scale: 1=not at all to 3=frequently
SIF Activity: Asked teacher for advice	UG	Three-point scale: 1=not at all to 3=frequently
SIF Activity: Performed volunteer work	SA, SI	Three-point scale: 1=not at all to 3=frequently
SIF Self-rating: Physical health	SA	Five-point scale: 5=highest 10% to 1=lowest 10%.
SIF Self-rating: Understanding of others	SA, SI	Five-point scale: 5=highest 10% to 1=lowest 10%.
SIF Self-rating: Competitiveness	AI	Five-point scale: 5=highest 10% to 1=lowest 10%.
SIF Self-rating: Writing Ability	AA	Five-point scale: 5=highest 10% to 1=lowest 10%.
Choose UCLA: Grads go to top graduate/prof schools	AA	Three point scale: 1=not important to 3=very important
Choose UCLA: Offered financial assistance	AA	Three point scale: 1=not important to 3=very important
Choose UCLA: Good social reputation	SI	Three point scale: 1=not important to 3=very important

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Table 3.3
First-generation Status Variable and SSS/AAP Participation (Block 2)

Variables	Dependent Variable	Scoring
College Generation: First-generation student (combined analyses only)	TR, UG, SA, AA, SI, AI	Dichotomous: 1=children of college graduates, 2=first-generation student
SSS Participation (separate regression analyses only)	TR, UG, SA, AA, SI, AI	Dichotomous: 1=non-participant, 2=participant
AAP Participation (separate regression analyses only)	TR, UG, SA, AA, SI, AI	Three point scale: 1=not at all to 3=frequently

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Table 3.4
Environmental/Involvement Measures (Block 3)

Variables	Dependent Variable	Scoring
Lived with parents 1 st 2 years	SA	Dichotomous: 1=no, 2=yes
Lived in the dorms the 1 st 2 years	TR	Dichotomous: 1=no, 2=yes
Faculty Provided: Encouragement to pursue graduate professional school.	UG, SI	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: An opportunity to publish a paper	UG,	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: Emotional support & encouragement	UG,SA,SI,AI	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: A letter of recommendation	AA,SI	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: Honest feedback about your skills and abilities	AA	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: Intellectual challenge & stimulation	AA	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: An opportunity to discuss coursework outside of class	UG	Three-point scale: 1=not at all to 3= frequently
Faculty Provided: An opportunity to talk about personal problems or concerns	SA	Three-point scale: 1=not at all to 3= frequently
FUS Hrs per week: Socializing with friends	SA, AA	Seven-point scale: 1=none to 7=16+
FUS Hrs per week: Working for pay	UG, AA, AI	Seven-point scale: 1=none to 7=16+
FUS Hrs per week: Student clubs/organizations	SA, AA, SI	Seven-point scale: 1=none to 7=16+
FUS Hrs per week: Childcare/baby sitting	UG	Seven-point scale: 1=none to 7=16+
FUS Hrs per week: Commuting to UCLA	UG, SA, AA	Seven-point scale: 1=none to 7=16+
FUS Hrs per week: Classes/labs	UG, SA, AA	Seven-point scale: 1=none to 7=16+
Utilized: Career Center	UG	Three-point scale: 1=not at all to 3= frequently
Utilized: Honors Counseling	UG	Three-point scale: 1=not at all to 3= frequently
Utilized: Letters & Science Counseling	SA	Three-point scale: 1=not at all to 3= frequently
Utilized: Student Psychological Services	UG	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Joined a fraternity or sorority	SA, SI	Dichotomous: 1=no, 2=yes
FUS Activity: Worked full-time while in college	TR	Dichotomous: 1=no, 2=yes
FUS Activity: Taken a remedial course	AA	Dichotomous: 1=no, 2=yes
FUS Activity: Taken an ethnic studies course	SI, AI	Dichotomous: 1=no, 2=yes

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Table 3.4-Continued
Environmental/Involvement Measures (Block 3)

Variables	Dependent Variable	Scoring
FUS Activity: Taken a women's studies course	UG, AI	Dichotomous: 1=no, 2=yes
FUS Activity: Participated in ethnic/racial student org.	SI	Dichotomous: 1=no, 2=yes
FUS Activity: Participated in campus protest/demon.	SI	Dichotomous: 1=no, 2=yes
FUS Activity: Enrolled in honors or advanced courses	UG, AI	Dichotomous: 1=no, 2=yes
FUS Activity: Tutored another student	AI	Dichotomous: 1=no, 2=yes
FUS Activity: Held a leadership position on campus	UG, SA, SI	Dichotomous: 1=no, 2=yes
FUS Activity: Met with an academic counselor	TR, UG, SA, AI	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Used tutoring services	AA, AI	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Participated in intramural sports	UG	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Took interdisciplinary courses	UG	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Studied with other students	SA, SI	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Felt lonely or homesick	TR, SA, AA, SI, AI	Three-point scale: 1=not at all to 3= frequently
FUS Activity: Felt overwhelmed by all you had to do	TR, UG, AA, AI	Three-point scale: 1=not at all to 3= frequently
FUS Rating: Drive to achieve	UG,SA,SI,AI	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Emotional health	AA	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Social self-confidence	SA	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Understanding of others	SA, SI	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Ability to think critically	SA	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Academic ability	AA	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Mathematical ability	AA	Five-point scale: 5=highest 10% to 1=lowest 10%.
FUS Self-rating: Writing ability	AA,AI	Five-point scale: 5=highest 10% to 1=lowest 10%.
Major	UG	Dichotomous: 1=no, 2=yes (biology, engineer, communications, English, history, math, microbiology, physical science, political science, psychobiology, physics, or sociology)

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Table 3.5
Campus Perceptions and Personal and Sociocultural Measures (Block 4)

Variables	Dependent Variable	Scoring
Family Encouragement/Support (ALPHA=.69) Family: Expect me to spend time with them most weekends, even if I have a lot of studying or homework to do." Family: Understand the academic demands that are being paced on me. Family: Support me in my academic/educational pursuits. Family: I cannot talk to my parents about classes because they would not understand	TR, UG SA AA, SI AA	Variables used as a composite variable and alone. All on a four-point scale: 1=disagree strongly to 4=agree strongly
Adjusting to the social environment has been difficult	AI	Four-point scale: 1=disagree strongly to 4=agree strongly
I was not ready for the academic demands	AI	Four-point scale: 1=disagree strongly to 4=agree strongly
It was always assumed by my family that I would go to college	AI	Four-point scale: 1=disagree strongly to 4=agree strongly
How many UCLA professors, administrators or staff members have you encountered who took a personal interest in you and your success?	UG, SA, AA, SI	Four point scale: 1=one to 4=three or more
Faculty at UCLA are very supportive.	UG	Four-point scale: 1=disagree strongly to 4=agree strongly
When you compare your UCLA life with your home life, have you ever felt like you were "caught between two world?"	TR, UG, SA, AA, SI, AI	Four-point scale: 1=disagree strongly to 4=agree strongly
In order to 'fit in' at UCLA, I often feel I have to change my personal characteristics.	SI	Four-point scale: 1=disagree strongly to 4=agree strongly
I feel the need to break away from my family in order to succeed in college	UG, AA, SI	Four-point scale: 1=disagree strongly to 4=agree strongly
I strongly identify with my ethnic culture/heritage.	TR, SA, SI	Four-point scale: 1=disagree strongly to 4=agree strongly
Difficulty: Making friends	TR, AA, SI	Three point-scale: 1=none to 3=a lot
Difficulty: Keeping up academically	TR, SA	Three point-scale: 1=none to 3=a lot
Difficulty: Dealing with the bureaucracy	TR, AA	Three point-scale: 1=none to 3=a lot
Difficulty: Financing your college education	TR, UG, SA, AA, AI	Three point-scale: 1=none to 3=a lot
Difficulty: Fitting into the general environment	UG	Three point-scale: 1=none to 3=a lot
Opinion: Do the values of UCLA reflect your own.	TR, AA	Four-point scale: 1=not at all to 4=a lot

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Table 3.5-Continued
 Campus Perceptions and Personal and Sociocultural Measures (Block 4)

Variables	Dependent Variable	Scoring
Opinion: Do you feel part of the academic community	TR, SA	Four-point scale: 1=not at all to 4=a lot
Campus Perception: A lot of racial tension at UCLA	TR, AA	Four-point scale: 1=disagree strongly to 4=agree strongly
Campus Perception: Faculty underestimate my ability	TR, SA	Four-point scale: 1=disagree strongly to 4=agree strongly
Campus Perception: I experienced "culture shock" when I first came to UCLA	TR, SA, AA	Four-point scale: 1=disagree strongly to 4=agree strongly
Campus Perception: UCLA has changed me in ways I am uncomfortable with	TR, AI	Four-point scale: 1=disagree strongly to 4=agree strongly
Campus Perception: UCLA can be a very alienating place	TR, AI	See Table 3.1
Academic self image (DV)	UG, SA, SI	See Table 3.1
Social self-image (DV)	UG, SA, AI	See Table 3.1

Note: TR= transition to college, UG= undergraduate GPA, SA= social adjustment, AA= academic adjustment, SI= social self-image, AI= academic self-image.

Open-Ended Analyses

The last phase of this study consisted of an analysis of qualitative data on first-generation students' responses to open-ended questions. Since the purpose of this study was to gain a greater understanding of first-generation students at selective institutions, two questions were included on the FUS which allowed students to describe in their own words which factors they felt had affected their adjustment to UCLA. Specifically, these questions asked students to briefly describe "what factors (personal and/or within the campus) helped make your adjustment to UCLA easier" and "what factors (personal and/or within the campus) made your adjustment to UCLA more difficult."

According to Fowler (1993), when respondents answer questions in their own words, the range of answers will not be predictable ahead of time so the "idea is to create categories that group answers that are analytically similar and to differentiate between answers that are different" (p. 126). In addition, Fowler (1993) points out that for "such open-response questions, code development is an interactive process whereby the researcher identifies categories that emerge from the answers, as well as imposing order on the answers that are obtained" (p. 125). Data from the open-ended questions were analyzed using this interactive process. Individual analyses of the surveys were conducted and each survey was reviewed several times in order to identify categories that emerged from the answers. However, to impose some order, the emerging categories were identified for each question.

CHAPTER FOUR

A PROFILE OF FIRST-GENERATION STUDENTS

This chapter provides a profile of current first-generation students. The pre-college characteristics of first-generation students are compared with those students who have a family “tradition” of college attendance—children of college graduates. While the purpose of this chapter is to provide an answer to the first research question: *to what extent do first-generation students nationally differ from children of college graduates in their pre-college characteristics*, results presented in this chapter also illustrate which key variables should be controlled during the multivariate analyses discussed in chapter five.

Data presented in this chapter are derived from two national cohorts of students—1997 and 1998 first-time, full-time freshman. However, while data for these two cohorts of students are presented, to conserve space and avoid excessive redundancy only the 1997 data are discussed in the body of this chapter. Though comparisons can be made between the 1997 and 1998 cohorts, the 1998 data are provided mainly to demonstrate the consistency of the results—and therefore the generalizability of the data being presented. Moreover, since the 1997 and 1998 data are very similar, there is little need for discussion of both.

The 1997 profile is based on the responses of 204,250 students (36,767 first-generation students and 167,483 children of college graduates) and is weighted to reflect the responses of over a million first-time, full-time students who entered college as full time freshman in the Fall of 1997.

This chapter is divided into three sections. In the first section, first-generation students and children of college graduates are first compared with regard to background characteristics, self-concept, academic preparation, degree aspirations, decisions about college, paying for college, activities engaged in during the past year, life goals and future activities, and college major and career goals. Second, in order to better understand the population which is being studied in the longitudinal assessment, the pre-college characteristics of first-generation students and children of college graduates attending highly selective, public universities are examined. Third, a short summary highlighting the major differentiating pre-college characteristics is provided at the end of the chapter.

Background Characteristics

Table 4.1 compares several background characteristics of first-generation students (FGS) with those of children of college graduates (CCG). While not at all surprising—considering the differences in educational preparation of the parents (the defining factor in the two comparison groups)—the most striking difference between first-generation students and children of college graduates is parental income. More than half (56.5 percent) of the parents of children of college graduates make over \$60,000 year or more, compared to only about one-fifth (19.5 percent) of the parents of first-generation students. Large proportion of both the first-generation students (38.0 percent) and children of college graduates (30.5 percent) come from homes with income levels ranging from \$30,000 to \$59,000 a year. Finally, over 10 percent of first-generation students (compared to 2.2 percent of the children of college graduates) have parents

whose combined income is less than \$9,000 a year. In other words, one first-generation student in ten lives below poverty level.

Table 4.1
Parental Characteristics of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in		Difference FGS-CCG	Percent in		Difference FGS-CCG
	1997 FGS	CCG		1998 FGC	CCG	
Parent's Income						
\$60,000 or more	19.5	56.5	-37.0	17.9	56.2	-38.3
\$30,000 to \$59,000	38.0	30.5	+7.5	40.3	30.6	+9.7
\$10,000 to \$29,999	31.8	10.7	+21.1	31.6	11.0	+20.6
Less than \$9,000	10.7	2.2	+8.5	10.2	2.3	+7.9
Parents' Status						
Living with each other	64.7	74.9	-10.2	64.3	75.5	-11.2
Divorced or separate	28.7	21.7	+7.0	29.6	21.2	+8.4
One or both deceased	6.6	3.4	+3.2	6.1	3.4	+2.7
Father's Occupation						
Business (executive)	17.3	31.2	-13.9	15.6	31.0	-15.4
Other	32.4	22.5	+9.9	33.6	23.2	+10.4
Skilled worker	14.4	5.3	+9.1	15.4	5.4	+10.0
Unskilled worker	8.1	1.1	+7.0	8.0	1.0	+7.0
Education (secondary/elementary)	.4	6.7	-6.3	.5	7.0	-6.5
Semi-skilled worker	8.0	1.7	+6.3	8.3	1.8	+6.5
Engineer	4.4	9.9	-5.5	3.8	10.0	-6.2
Unemployed	5.4	1.6	+3.8	6.3	1.4	+4.9
Doctor (MD or DDS)	.1	3.8	-3.7	.1	3.5	-3.4
Lawyer	.1	3.2	-3.1	.1	2.9	-2.8
Farmer or forester	4.8	2.8	+2.0	4.2	2.6	+1.6
Mother's Occupation						
Education (secondary/elementary)	3.8	22.6	-18.8	3.5	23.2	-19.7
Other	31.0	18.2	+12.8	31.3	18.3	+13.0
Nurse	4.3	11.8	-7.5	3.6	11.9	-8.3
Unskilled worker	5.6	.4	+5.2	5.3	.4	+4.9
Semi-skilled worker	5.1	1.1	+4.0	4.7	.9	+3.8
Homemaker (full-time)	13.6	9.9	+3.7	14.0	9.7	+4.3
Unemployed	7.9	4.2	+3.7	9.3	3.6	+5.7
Business (clerical)	8.3	6.0	+2.3	7.7	6.4	+1.3
Business	13.0	13.5	-.5	13.3	13.4	-.1
Lawyer	.1	.6	-.5	.1	.6	-.5

In addition to parents' educational attainment, the differences in income levels may also be explained by two additional findings revealed in Table 4.1: the larger proportion of first-generation students coming from single parent homes, and differences in parental occupations. As can be seen in Table 4.1, only 64.7 percent of first-generation students, compared to 74.9 percent of children of college graduates, report having both parents living with each other. About twice as many first-generation students (6.6 percent compared to 3.4 percent) report having at least one or both parents deceased. In all likelihood, more first-generation students than children of college graduates are reporting the income of only one parent.

Parents' occupation is the other factor that may be contributing to the differences in income levels. As can be seen in Table 4.1, the parents of first-generation students are more likely to be unemployed: 5.4 percent of the fathers of first-generation students and 7.9 percent of their mothers are unemployed, as compared to 1.6 and 4.2 percent, respectively, of the parents who are college graduates. In addition, first-generation students report that 13.6 percent of their mothers are homemakers, compared to 9.9 percent of children of college graduates. Considering the differences in parental education, it is also no surprise that the parents of first-generation students tend to be overrepresented in lower-paying jobs, and that the parents who are college graduates tend to be in the higher-paying professional fields. For example, 31.2 percent of the fathers of children of college graduates are business executives, compared to only 17.3 of the fathers of first-generation students. For mothers, the largest gap is in careers in

education: 22.6 percent of the mothers of children of college graduates, compared to only 3.8 of mothers of first-generation students, have careers in education.

Table 4.2 displays differences in personal characteristics between first-generation students and children of college graduates. First-generation students are more likely than children of college graduates to be from underrepresented racial/ethnic groups, older, and non-native English speakers and non-citizens. As can be seen in Table 4.2, 84.5 percent of the children of college graduates are “White/Caucasian,” compared to 75.4 percent of the first-generation students. If one considers the history of many racial/ethnic groups

Table 4.2
Personal Characteristics of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in 1997		Difference FGS-CCG	Percent in 1998		Difference FGS-CCG
	FGS	CCG		FGC	CCG	
Student's Race/Ethnicity						
White/Caucasian	75.4	84.5	-9.1	78.1	85.9	-7.8
African American/Black	13.0	7.5	+5.5	10.9	6.7	+4.2
Mexican American/Chicano	2.4	1.0	+1.4	3.7	1.3	+2.4
Puerto Rican	1.6	.7	+9	1.5	.7	+8
American Indian	3.3	2.7	+6	2.2	1.7	+5
Asian American*	5.3	5.9	-6	3.6	4.8	-1.2
Other Latino	2.0	1.5	+5	2.0	1.2	+8
18 years old or younger	59.7	70.5	-10.8	62.5	71.3	-8.8
Native English speaker	90.7	94.7	-4.0	92.1	96.0	-3.9
Citizenship status						
Permanent res. (green card)	4.5	2.1	+2.4	3.4	1.8	+1.6
US citizen	95.0	96.7	-1.7	96.0	97.3	-1.3
Political Orientation						
Middle of the road	60.2	51.2	+9.0	62.1	53.2	+8.9
Conservative or far right	17.6	22.8	-5.2	16.0	21.8	-5.8
Far left or Liberal	22.2	26.0	-3.8	22.0	24.9	-2.9

*broken down further in 1997

with regard to access to a post-secondary education, it is not surprising to see the overrepresentation of African American, Latinos, and American Indian students among first-generation students. Though first-generation students are less likely to be native English speakers or US citizens, the differences are small.

With regard to political orientation, more of the first-generation students (60.2 percent) than of children of college graduates (51.2 percent) consider themselves “middle of the road.” On balance, both groups tend to lean slightly toward the liberal side of the political spectrum

Self-Concept

Table 4.3 compares the self-ratings of first-generation students and children of college graduates. The most notable finding is that first-generation students rate themselves lower than children of college graduates on every one of the 18 self-ratings. In other words, first-generation students appear to be less confident than children of college graduates with regard to their abilities and skills.

By far, the largest difference between these two groups is in their self-rating on academic ability. Over 60 percent of the children of college graduates rate themselves as “above average” or in the “top 10%” (compared with the average person their age), while only about 40 percent of first-generation students rated themselves as highly. As can be seen in more detail in the next section, first-generation students may be less confident in their skills and abilities because they enter college less well prepared academically than children of college graduates.

Table 4.3
Self-Ratings of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

Self-Rating*	Percent in 1997		Difference FGS-CCG	Percent in 1998		Difference FGS-CCG
	FGS	CCG		FGC	CCG	
Academic ability	40.7	64.2	-23.5	42.3	64.1	-21.8
Writing ability	30.5	46.4	-15.9	32.4	45.7	-13.3
Mathematical ability	29.3	43.5	-14.2	31.2	43.5	-12.3
Public speaking ability	21.9	35.1	-13.2	23.5	35.2	-11.7
Self-confidence (intellectual)	45.1	58.2	-13.1	46.1	58.1	-12.0
Creativity	42.1	55.2	-13.1	43.8	56.2	-12.4
Leadership ability	46.4	58.3	-11.9	47.5	58.3	-10.8
Self-understanding	45.9	57.7	-11.8	47.1	56.8	-9.7
Emotional health	45.2	56.2	-11.0	46.4	55.6	-9.2
Understanding of others	56.0	65.7	-9.7	56.1	64.8	-8.7
Physical health	49.3	58.5	-9.2	48.3	58.5	-10.2
Artistic ability	20.1	29.1	-9.0	20.5	30.2	-9.7
Competitiveness	47.7	56.2	-8.5	49.1	55.4	-6.3
Popularity	34.0	42.3	-8.3	31.9	40.7	-8.8
Spirituality	36.0	44.1	-8.1	37.4	45.5	-8.1
Drive to achieve	59.4	66.9	-7.5	61.8	67.0	-5.2
Self-confidence (social)	43.5	51.0	-7.5	44.2	50.5	-6.3
Cooperativeness	64.2	71.3	-7.1	64.6	70.1	-5.5

*Above average or Highest 10%

Academic Preparation and Degree Aspirations

Table 4.4 displays the academic preparation and degree aspirations of first-generation students and children of college graduates. First-generation students, compared to children of college graduates took more remedial courses in high school, got lower grade point averages in high school, and are more likely to feel they will need more remedial work during college, and less likely to aspire to graduate degrees.

One of the largest differences evident from Table 4.4 is in students' high school GPA. While 60 percent of the first-generation students come to college with a "B" average or less, most children of college graduates arrive with "B+" or higher.

Table 4.4
 Academic Preparation and Degree Aspirations of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in		Difference FGS-CCG	Percent in		Difference FGS-CCG
	1997 FGS	CCG		1998 FGC	CCG	
High School GPA						
A or A+	9.8	18.9	-9.1	10.4	18.6	-8.2
A-	12.0	18.8	-6.8	13.0	19.2	-6.2
B+	18.4	19.6	-1.2	19.3	20.6	-1.3
B	26.9	21.6	+5.3	25.7	22.0	+3.7
B-	13.4	10.0	+3.4	12.5	9.6	+2.9
C+ or less	19.7	11.2	+8.5	19.0	9.9	+9.1
Had Remedial Work In*						
Reading	7.4	4.7	+2.7			
English	7.6	5.2	+2.4			
Social studies	5.1	3.1	+2.0			
Science	5.8	4.6	+1.2			
Mathematics	12.1	12.6	-.5			
Will Need Remedial Work In*						
Mathematics	32.7	23.2	+9.5			
English	14.8	8.3	+6.5			
Reading	7.7	3.7	+4.0			
Science	13.1	9.2	+3.9			
Social studies	4.9	2.3	+2.6			
Foreign language	11.9	9.7	+2.2			
In Planning for College*						
Took SAT/ACT prep. course	28.4	36.3	-7.9			
Sought HS counselor's advice	65.0	63.1	+1.9			
Hired private college counselor	1.2	2.4	-1.2			
Degree Aspirations						
Vocational certificate or A.A.	12.8	3.2	+9.6	14.3	3.4	+10.9
Bachelor's (B.A., B.S.)	30.6	21.6	+9.0	33.4	24.9	+8.5
Ph.D. or Ed.D.	10.7	17.7	-7.0	9.7	15.4	-5.7
Master's (M.A., M.S.)	35.0	41.4	-6.4	32.0	41.4	-9.4
M.D., D.O., D.D.S., D.V.M.	5.3	9.7	-4.4	4.4	8.5	-4.1
LL.B. or J.D. (law)	2.1	4.0	-1.9	1.7	3.7	-2.0

*Only asked in 1997.

The biggest gap, however, appears to be in the "A or A-" category, where almost twice as many children of college graduates (18.9 percent) than first-generation students (9.8 percent) arrive with "A or A-" grade point averages. Considering the differences in GPA,

it is not surprising that first-generation students have had and anticipate taking more, remedial courses.

With regard to planning for college, it appears that first-generation students (65.0 percent) seek out advice from high school counselors almost as much as do children of college graduates (63.1 percent). However, first-generation students are less likely to rely on private assistance in planning for college. For example, while 36.6 percent of the children of college graduates reported having taken an SAT/ACT prep course, only 28.4 percent of the first-generation students reported having taken such a course. Similarly, twice as many children of college graduates reported having hired a private college counselor in planning for college. Considering the differences in income between these two groups, it is not surprising that children of college graduates are more likely to take advantage of these other opportunities (usually only available for a fee) in preparing for college.

First-generation students are also less than children of college graduates to aspire doctoral and medical degrees. For example while 17.7 percent of the children of college graduates aspire to doctorates, only 10.7 percent of the first-generation students had such an aspiration. In addition, almost twice as many children of college graduates, compared to first-generation students, aspire to medical or law degrees. Though there is still a larger percentage of children of college graduates aspiring for Master's degrees (41.0 percent), it is clear that many first-generation students also aspire for Master's degrees (35.0 percent).

It is important to keep in mind that when one considers the family history of college attendance for first-generation students and the probable limited exposure to people holding various types of graduate degrees, the aspirations of first-generation students are high. In other words, by going to college and aspiring for a Bachelor's or Master's degree, they have already gone further than many of their family members.

Decisions About College

There are several critical decisions that must be made as part of the college choice process. Table 4.5 displays some of these decisions for first-generation students and children of college graduates. Probably the first basic decision is whether one will attend college at all. This decision is often based on a number of reasons (Trent, 1970).

As can be seen in Table 4.5, slightly more first-generation students, than children of college graduates report financial reasons for attending college. For example, two of the top reasons reported by first-generation students as being very important in their decision to attend college are "to get a better job" and "to make more money". In addition, twice as many first-generation students (10.4 percent) as children of college graduates (5.1 percent) report that they "could not find a better job" as a reason why they were in college. This suggests one first-generation student in ten would not be in college if they could have found a better job.

Considering that it costs more to attend a college away from home than to commute, it is not surprising that children of college graduates (19.7 percent) are more likely than first-generation students (15.2 percent) to report that they "wanted to get away from home" as a very important reason for going to college.

Table 4.5
The College Choices of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in		Difference FGS-CCG	Percent in		Difference FGS-CCG
	1997 FGS	CCG		1998 FGC	CCG	
Reasons Noted for Going to College*						
To prove to others I could succeed	48.7	35.8	+12.9	43.9	32.9	+11.0
To be able to get a better job	80.1	71.6	+8.5	81.6	73.8	-7.8
To be able to make more money	78.0	70.1	+7.9	78.8	71.7	+7.1
To improve reading & study skills	45.2	38.8	+6.4	44.6	40.0	+4.6
I could not find a job	10.4	5.1	+5.3	9.3	6.0	+3.3
Role model/mentor encouraged me	16.7	13.2	+3.5	17.9	14.4	+3.5
My parents wanted me to go	37.7	35.3	+2.4	37.8	40.0	-2.2
Wanted to get away from home	15.2	19.7	-4.5	13.3	19.2	-5.9
To learn more about things	72.8	75.4	-2.6			
To become a more cultured person	31.9	38.4	-6.5			
Reasons Noted in Selecting Their Own College*						
Wanted to live near home	27.9	17.0	+10.9	28.5	17.2	+11.3
Low tuition	35.1	26.8	+8.3	36.3	24.2	+12.1
Offered financial assistance	37.7	30.6	+7.1	34.6	29.8	+4.8
Good academic reputation	50.7	56.2	-5.5	43.7	51.3	-7.6
Graduates go to top grad schools	28.3	33.2	-4.9	24.5	29.6	-5.1
Rankings in national magazines	6.5	10.9	-4.4	5.0	9.1	-4.1
Size of college	31.6	35.9	-4.3	29.7	33.7	-4.0
Advice of HS guidance counselor	10.7	6.9	+3.8	9.9	6.3	+3.6
Offers special programs	24.3	20.7	+3.6	19.8	18.6	+1.2
Teacher advised me	6.5	3.4	+3.1	5.7	3.4	+2.3
Relatives wanted me to come	11.0	8.7	+2.3	9.6	9.0	+0.6
Graduates get good jobs	49.3	51.6	-2.3	42.4	47.7	-5.3
Religious affiliation/orientation	5.0	6.9	-1.9	4.7	7.0	-2.3
Good social reputation	25.2	26.1	-0.9	22.1	24.7	-2.6
Colleges Applied to for Admissions Other than the One Attending						
Five or more	8.4	17.3	-8.9	7.3	17.0	-9.7
Two to Four	33.5	39.5	-6.0	33.4	40.7	-7.3
One	14.4	13.9	+0.5	15.1	13.5	+1.6
None	43.7	29.2	+14.5	44.2	28.9	+15.3
Acceptances Received						
No other	21.7	11.0	+10.7	20.7	11.6	+9.1
Four or more	14.7	24.9	-10.2	13.7	24.3	-10.6
One	26.3	23.4	+2.9	29.3	22.7	+6.6
Three	15.6	18.1	-2.5	14.7	19.4	-4.7
Two	21.7	22.6	-0.9	21.6	22.0	-0.4
College was Student's First Choice	70.5	69.3	+1.2	73.6	71.1	+2.5

*Reasons noted as "very important."

The largest difference between these two groups regarding reasons for attending college is wanting “to prove to others I could succeed,” with 48.7 percent of the first-generation students noting it as very important compared to 35.8 percent of the children of college graduates. Considering that first-generation students often have more obstacles to face (e.g., fewer financial resources, poorer academic preparation) and are breaking away from their family tradition of non-college attendance, it is not surprising that they would want to prove to others that they can succeed.

Another set of choices concerns the type of college attended. More than half of both groups noted having a “good academic reputation,” as being very important to their college choice. However, it appears that financial reasons continue to be much more pressing for first-generation students than for children of college graduates. For example, 35.1 percent of the first-generation students, compared to only 26.8 percent of the children of college graduates, note low tuition as an important reason for choosing their specific college. In addition, first-generation students are more likely to report having been “offered financial assistance” as an important reason for selecting their college. The largest difference is in “wanting to live near home:” 27.9 percent of the first-generation students noted this as an important factor, while only 17 percent of the children of college graduates felt the same. However, given the expense of attending a college away from home, living at home may also be a cost related factor for these students.

First-generation students were also more likely to report encouragement from others (i.e., teacher, relatives, HS guidance counselor) as very important in their decision to attend their specific college, while children of college graduates were more likely to

cite institutional and reputational factors such as rankings in national magazines, the size of the college, and whether their graduates get good jobs once they graduate or if they go to top graduate schools. A large proportion of first-generation students (43.7 percent versus 29.2% for children of college graduates) apply to only one college—the one they are currently attending, while the majority of children of college graduates (56.8 percent, compared to only 41.9 percent for first-generation students) apply to two or more other colleges.

Table 4.6 displays the differences for first-generation students and children of college graduates in miles from home to college and where students plan to live during their freshman year in college. First-generation students are more likely to attend a college closer to home: nearly three-fourths (74.1 percent) attend a college which is within 100 of their home, compared to a little over half (53.2 percent) of the children of college graduates.

Table 4.6
Other College Choices of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in 1997			Percent in 1998		
	FGS	CCG	Difference FGS-CCG	FGC	CCG	Difference FGS-CCG
Miles from College						
10 or less	21.8	14.0	+7.8	23.6	13.5	+10.1
11 to 100	52.3	39.2	+13.1	54.4	42.4	+12.0
101 to 500	21.2	33.6	-12.4	18.5	32.8	-14.3
More than 500	4.8	13.2	-8.4	3.4	11.3	-7.9
Planning to Live in the Fall						
College dormitory	43.6	69.4	-25.8	43.8	70.5	-26.7
With parents or relatives	38.7	21.6	+17.1	43.5	23.3	+20.2
Other private home, apt, room	13.3	6.3	+7.0	10.2	3.8	+6.4

It is no surprise that many more first-generation (38.7 percent) than children of college graduates (21.6 percent) live with parents or relatives while attending college (38.7 percent). The largest gap, however, is in the number of student who live in the college dormitories: 69.4 percent of the children of college graduates compared to only 43.6 percent of the first-generation students plan to live in a college dormitory. One obvious reason for this difference is that many first-generation students may not be able to afford to live in the dorms. Another reason may be that more first-generation students live near enough to enable them to commute. Still another reason may be that many more first-generation students are attending less selective colleges, which are less likely to have college dormitories. Finally, it may be that more first-generation students are discouraged by their families from moving away from home.

Paying for College

Table 4.7 displays the sources of financial aid and concerns about financing college among first-generation students and children of college graduates. While over 50 percent of the first-generation students and children of college have “some concern” about their ability to finance their college education, it is clear that first-generation students are much more concerned about how they are going to pay for college. Only 26.7 percent of the first-generation students report feeling confident that they will have sufficient funds to finance their college education (compared to 38.6 percent of the children of college graduates) which means that close to 75 percent of the first-generation students have some or a major concern. Considering that many first-generation come from low income homes, it is not surprising that twice as many (21.6 percent versus 11.4

percent) have major concerns about how they will finance their college education.

Table 4.7
Sources of Financial Aid First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in		Difference FGS-CCG	Percent in		Difference FGS-CCG
	1997 FGS	CCG		1998 FGC	CCG	
Concerns about Paying for College						
Major	21.6	11.4	+10.2	18.9	10.1	+8.8
Some	51.7	50.0	+1.7	54.0	49.4	+4.6
None	26.7	38.6	-11.9	27.2	40.5	-13.3
Received Any Aid from:						
Pell Grant	32.8	13.9	+18.9	33.2	13.7	+19.5
Parental or family aid	66.8	82.6	-15.8	65.0	83.9	-18.9
Part-time job off campus	30.4	20.3	+10.1	31.7	20.4	+11.3
Other college grant	23.1	29.4	-6.3	24.1	31.5	-7.4
Stafford/Guaranteed Student Loan	28.5	22.4	+6.1	27.3	23.1	+4.2
Savings from summer work	42.8	48.7	-5.9	44.9	50.4	-5.5
Other savings	25.4	31.3	-5.9	26.5	33.1	-6.6
Supp Educational Oppty Grant	7.7	4.2	+3.5	8.2	4.4	+3.8
State scholarship or grant	18.9	15.4	+3.5	18.4	15.7	+2.7
Full-time job while in college	5.4	2.3	+3.1	7.1	2.8	+4.3
Perkins Loan	10.1	7.6	+2.5	10.6	7.9	+2.7
Other loan	7.9	6.2	+1.7	7.9	6.7	+1.2
Other private grant	8.9	10.4	-1.5	8.8	11.5	-2.7
Other college loan	11.6	10.1	+1.5	9.4	10.1	-.7
Spouse	2.1	.8	+1.3	2.0	.8	+1.2
College Work-Study Grant	12.0	10.7	+1.3	11.9	10.8	+1.1
Part-time job on campus	20.4	21.2	-.8	20.6	21.7	-1.1
Received \$1,500 or more						
Parental or family aid	35.2	63.6	-28.4	33.1	63.6	-30.5
Other college grant	12.2	19.8	-7.6	11.9	20.0	-8.1
Pell Grant	9.4	4.0	+5.4	11.7	4.4	+7.3
Other savings	4.8	9.2	-4.4	4.6	9.3	-4.7
Savings from summer work	5.9	9.7	-3.8	6.4	10.1	-3.7
Stafford/Guaranteed Student Loan	13.5	12.0	+1.5	13.2	12.3	+.9
Full-time job while in college	2.0	.8	+1.2	2.0	.9	+1.1
Other private grant	2.7	3.4	-.7	2.6	3.9	-1.3
Part-time job on campus	2.2	2.8	-.6	2.0	3.0	-1.0
Part-time job off campus	3.0	2.4	+.6	3.2	2.4	+.8
Supp Educational Oppty Grant	1.5	.9	+.6	1.6	1.0	+.6
State scholarship or grant	4.8	4.4	+.4	4.5	4.6	-.1
Spouse	.6	.2	+.4	.4	.2	+.2
Other Loan (incl. Perkins Loan)	13.8	13.2	+.4	12.7	13.3	-.6
College Work-Study Grant	1.8	1.8	.0	1.8	1.9	-.1

As can be seen in Table 4.7, first-generation students and children of college graduates both expected to cover some of their first year's education expenses from aid received from parents or family, as well as money they saved from a summer job. These were the top two sources marked for both groups, though a larger percentage of children of college graduates expect to finance their college education from aid received from parents/family and savings from a summer job. Not surprisingly, since Pell grants are awarded based on financial need, 32.8 percent of the first-generation students reported expecting to cover some of their first year's educational expenses from the money they receive from a Pell grant, as opposed to only 13.9 percent of the children of college graduates. In addition, compared to children of college graduates, more first-generation students also expected to use loans to pay for at least some of their educational expenses.

Table 4.7 also displays the percent of students reporting that they will be receiving \$1,500 or more from the various sources listed. These results demonstrate clearly that children of college graduates are relying much more heavily on their parents or family for financial assistance: 63.6 percent expected to obtain at least \$1,500 to pay for their educational expenses, while only 35.2 percent of the first-generation students expected to get as much from their parents or family. This finding is once again consistent with the fact that children of college graduates are more likely to come from higher income families. A larger percentage of first-generation students also expected to borrow at least \$1,500 to pay for their college expenses.

Activities Engaged in the Past Year

Table 4.8 displays and compares the various activities in which first-generation students and children of college graduates participated during the year prior to entering college. Displayed as well are the hours per week spent on certain activities by these two groups.

Using a personal computer produced the biggest difference between first-generation students and children of college graduates: 64.2 percent of the children of college graduates reported using a personal computer frequently in the past year, compared to only 44.0 percent of first-generation students. Children of college graduates were also more likely than first-generation students to report having played a musical instrument (42.3 percent versus 28.7 percent). These differences may be partially explained by the fact that personal computers and musical instruments are expensive.

With the exception of three activities—participating in demonstrations, feeling depressed, and smoking cigarettes—a larger percentage of children of college graduates reported having participated in the activities listed in Table 4.8. Most of these differences, however, tend to be small (less than 10 percent).

As can be seen in Table 4.8, 54.7 percent of first-generation students report spending at least some time on volunteer work, compared to 64.9 percent of the children of college graduates. In addition, when compared to children of college graduates, first-generation students also spend less time per week studying or doing homework: 38 percent of the children of college graduates report that they spend 6 or

Table 4.8
 Activities Engaged in for First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in			Percent in		
	1997		Difference	1998		Difference
	FGS	CCG	FGS-CCG	FGC	CCG	FGS-CCG
Activities						
Used a personal computer**	44.0	64.2	-20.2			
Played a musical instrument	28.7	42.3	-13.6	26.4	41.9	+15.5
Tutored another student	38.8	51.1	-12.3	41.3	50.9	-9.6
Performed volunteer work	66.3	77.2	-10.9	66.9	78.0	-11.1
Socialized w/different ethnic group*	55.9	65.8	-9.9	57.2	62.9	-5.7
Attended a religious service	75.2	84.1	-8.9	76.8	84.2	-7.4
Discussed politics*	7.8	16.6	-8.8	8.9	16.5	-7.6
Was bored in class*	30.2	38.7	-8.5	33.3	40.1	-6.8
Voted in student election*	17.0	23.6	-6.6	16.6	23.5	-6.9
Studied with other students	79.7	86.3	-6.6	78.4	85.9	-7.5
Drank wine or liquor	52.4	57.8	-5.4	52.0	56.7	-4.7
Was a guest in a teacher's home	25.3	30.4	-5.1	23.4	29.2	-5.8
Drank beer	50.4	54.8	-4.4	49.0	53.4	-4.4
Participated in demonstrations	44.9	40.8	+4.1	47.5	44.1	+3.4
Worked in political campaign+	5.7	9.4	-3.7			
Asked teacher for advice*	19.9	23.1	-3.2	18.5	23.0	-4.5
Felt overwhelmed*	27.2	28.8	-1.6	28.5	29.7	-1.2
Felt depressed*	10.0	8.7	+1.3	9.8	8.8	+1.0
Smoked cigarettes*	16.9	15.8	+1.1	17.8	15.3	+2.5
Hours per week Spent on						
Volunteer work (some)	54.7	64.9	-10.2	55.4	67.2	-11.8
Studying or doing homework (6+)	28.2	38.0	-9.8	27.1	37.2	-10.1
Working for pay (6+)	67.8	59.3	+8.5	69.2	60.5	+8.7
Exercising or sports (6+)	44.2	52.6	-8.4	43.7	52.6	-8.9
Student clubs and groups (3+)	24.5	31.9	-7.4	24.9	31.5	-6.6
Socializing with friends (6+)	73.1	79.9	-6.8	72.5	80.6	-8.1
Housework/Childcare (6+)	14.7	8.4	+6.3	15.2	9.4	+5.8

* Percent reporting "frequently" only. Results for other items in this groups represent the percentages responding "frequently or occasionally."

+ Not asked in 1998

6+ Percent reporting spending 6 or more hours per week

3+ Percent reporting spending 3 or more hours per week.

Some: Percent reporting spending at least some time per week volunteering.

more hours a week studying or doing homework compared to only 28.2 percent of the first-generation students. First-generation students also report spending less time

exercising or playing sports, participating in student clubs or groups, and socializing with friends.

One possible reason why first-generation students spend less time volunteering, studying, exercising, participating in student clubs or groups, and socializing with friends could be the competitive demands of work, housework, and childcare duties. For example, 67.8 percent of first-generation students report spending 6 hours or more a week working for pay, compared to 59.3 of the children of college graduates. In addition, only 8.4 of the children of college graduates, compared to 14.7 percent of the first-generation students spend 6 or more hours per week on childcare or household duties. Clearly working for pay and performing household duties may leave first-generation students with less time to spend on other activities such as volunteer work and studying.

Life Goals and Future Activities

Table 4.9 displays the activities that the entering freshman expect to participate in during college and the life goals they consider to be essential or very important. The largest difference in life goals occurs with “keeping up to date with political affairs:” only 20.2 of the first-generation students see this as an essential or very important life goal, compared to 30.5 percent of the children of college graduates. First-generation students were also slightly less likely to report as an essential or important life goal “influencing the political structure.” Taken together, these two results suggest that compared to children of college graduates, first-generation students enter college more politically disengaged.

Table 4.9
Objectives and Estimates of First-Generation Students (FGS) and Children of College Graduates (CCG)
who were First-Time, Full-time Freshman in 1997 or 1998

	Percent in		Difference FGS-CCG	Percent in		Difference FGS-CCG
	1997			1998		
	FGS	CCG		FGC	CCG	
Essential or Very Important Objectives						
Keep up to date with politics	20.2	30.5	-10.3	19.8	29.0	-9.2
Develop philosophy of life	36.3	43.4	-7.1	37.0	43.2	-6.2
Be successful in own business	45.4	39.1	+6.3	41.0	37.6	+3.4
Be very well off financially	78.5	72.7	+5.8	78.2	71.5	+6.7
Be a community leader	28.2	32.5	-4.3	26.9	31.2	-4.3
Achieve in a performing art	10.6	13.8	-3.2	10.3	13.9	-3.6
Have admin responsibility	40.3	37.3	+3.0	38.0	36.2	+1.8
Become authority in my own field	60.9	63.7	-2.8	58.1	60.5	-2.4
Participate in cmtly action pgm	20.9	23.6	-2.7	20.1	22.7	-2.6
Obtain recognition from colleagues	50.9	53.2	-2.3	48.3	50.2	-1.9
Raise a family	71.3	73.6	-2.3	72.1	73.6	-1.5
Write original works	12.6	14.8	-2.2	11.8	14.1	-2.3
Influence political structure	15.1	17.2	-2.1	14.5	16.7	-2.2
Create artistic work	13.2	14.7	-1.5	11.8	14.5	-2.7
Theoretical contribute to science	16.5	17.8	-1.3	14.3	15.6	-1.3
Influence social values	36.9	37.6	-.7	34.6	36.9	-2.3
Be involved in environ clean-up	19.1	19.7	-.6	18.3	18.9	-.6
Promote racial understanding	31.4	31.6	-.2	29.0	29.3	-.3
Very Good Chances that						
Get bachelor's degree	55.2	72.2	-17.0	55.5	71.4	-15.9
Make at least "B" average	41.7	54.0	-12.3	41.9	51.8	-9.9
Partic in volunteer/cmtly svc	13.3	21.9	-8.6	12.8	22.0	-9.8
Join social fraternity/sorority	11.3	18.0	-6.7	10.4	16.5	-6.1
Graduate with honors	15.2	20.1	-4.9	13.8	19.0	-5.2
Work full-time while attending	9.0	4.3	+4.7	10.5	4.6	+5.9
Change career choice	9.5	14.0	-4.5	8.3	13.1	-4.8
Be satisfied with college	45.0	49.2	-4.2	45.6	48.2	-2.6
Change major field	10.5	14.5	-4.0	8.9	13.6	-4.7
Play varsity/intercol athletics	14.6	16.6	-2.0	14.0	16.1	-2.1
Marry while in college	5.6	4.2	+1.4	6.5	5.2	+1.3
Transfer to another college	11.3	10.1	+1.2	11.9	11.5	+4
Need extra time for degree	8.0	6.9	+1.1	8.1	6.3	+1.8
Participate in student protests	3.6	4.7	-1.1	3.1	4.5	-1.4
Seek personal counseling	6.0	5.0	+1.0	4.0	4.7	-.7
Be elected to student office	2.8	3.6	-.8	2.9	3.2	-.3
Drop out permanently	1.2	.6	+6	.9	.6	+3
Fail one or more courses	1.6	1.2	+4	1.3	1.1	+2
Drop out temporarily	1.3	.9	+4	1.0	1.1	-.1

First-generation students are slightly more likely than children of college graduates to value the life goals of “being very well off financially,” and “being successful in my own business,” results which may be attributable to the fact that they tend to come from lower income homes. Overall, however, the differences between these two groups on most other life goals were not substantial. It thus appears that first-generation students and children of college graduates have very similar values when they enter college.

Larger differences between first-generation students and children of college graduates were observed in their expected activities during college. The largest difference is in the belief that they will get a bachelor’s degree: 72.2 percent of the children of college graduates believe that there is a very good chance that they will get a bachelor’s degree, compared to only 55.2 percent of the first-generation students. The second largest difference is in the expectation of making at least a “B” average in college. Again, first-generation students (41.7 percent) were less likely than children of college graduates (54.0 percent) to report that there was a very good chance that they would make at least a “B” average. These two findings are consistent with earlier results showing that first-generation students are less academically confident, have lower aspirations, and come to college less well prepared academically than children of college graduates.

While over twice as many first-generation as children of college graduates planned to work full-time while attending college, more children of college graduates were planning to get involved in extra-curricular activities (volunteer or community

action programs, social fraternity or sorority, varsity or intercollegiate athletics, holding student office). Again, considering first-generation students' greater concern about paying for college and their greater need to work, it is not surprising that they are less likely to expect to be participating in social activities.

College Major and Career Goals

Table 4.10 displays the probable majors for first-generation students and children of college graduates. The most popular majors for first-generation students and children of college graduates were in the professional³ and business fields, with slightly more first-generation students were selecting these fields of study.

Table 4.10
College Majors of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

Probable Major Field of Study	Percent in 1997		Difference FGS-CCG	Percent in 1998		Difference FGS-CCG
	FGS	CCG		FGC	CCG	
Arts or Humanities	6.8	11.4	-4.6	6.6	11.7	-5.1
Professional	17.5	14.0	+3.5	17.3	13.9	+3.4
Education	12.0	9.0	+3.0	13.2	9.7	+3.5
Technical	6.0	3.0	+3.0	6.2	3.8	+2.4
Biological Sciences	4.7	7.5	-2.8	4.1	6.5	-2.4
Other Fields	12.7	10.1	+2.6	12.0	9.9	+2.1
Business	17.5	15.4	+2.1	19.0	15.6	+3.4
Engineering	7.7	9.8	-2.1	6.4	9.5	-3.1
Undecided	6.4	8.3	-1.9	6.1	8.0	-1.9
Social Sciences	6.9	8.5	-1.6	7.6	8.8	-1.2
Physical Sciences	1.7	2.6	-.9	1.5	2.4	-.9

Also, evident from Table 4.10 is that first-generation students were also more likely to plan to major in education fields and technical fields, while children of college

³ "Professional" major fields include architecture or urban planning, home economics, health technology, library or archival science, nursing, pharmacy, pre-dental, pre-medicine, or pre-veterinarian, and therapy.

graduates were more likely to prefer majors in the arts or humanities, biological science, social science and physical science.

Table 4.11
Career Goals of First-Generation Students (FGS) and Children of College Graduates (CCG) who were First-Time, Full-time Freshman in 1997 or 1998

Probable Career	Percent in 1997		Difference FGS-CCG	Percent in 1998		Difference FGS-CCG
	FGS	CCG		FGC	CCG	
Nurse	5.4	2.2	+3.2	5.5	2.3	+3.2
Physician	3.6	6.5	-2.9	2.8	5.6	-2.8
Undecided	10.3	12.9	-2.6	9.9	12.7	-2.8
Other career	11.8	9.4	+2.4	12.4	9.2	+3.2
Engineer	6.3	8.2	-1.9	5.8	8.1	-2.3
Teacher/admin (elementary)	6.8	5.0	+1.8	7.1	5.6	+1.5
Accountant or actuary	4.0	2.4	+1.6	4.4	2.6	+1.8
Lawyer (attorney) or judge	2.2	3.6	-1.4	2.2	3.3	-1.1
Skilled trades	2.5	1.1	+1.4	3.2	1.4	+1.8
Business (clerical)	1.8	.6	+1.2	2.1	.7	+1.4
Computer programmer or analyst	5.3	4.1	+1.2	5.0	4.6	+.4
Writer or journalist	1.2	2.4	-1.2	1.3	2.4	-1.1
Social, welfare, recreation worker	2.0	1.0	+1.0	1.8	1.3	-.5
Scientific researcher	1.3	2.2	-.9	.8	1.9	-1.1
Law enforcement officer	2.2	1.4	+.8	2.4	1.4	+1.0
Policymaker/government	.3	1.0	-.7	.6	.9	-.3
Lab technician or hygienist	.9	.3	+.6	.4	.3	+.1
Military service (career)	.3	.9	-.6	.3	.8	-.5
Musician (performer, composer)	.9	1.5	-.6	1.1	1.5	-.4
Actor or entertainer	1.0	1.5	-.5	.7	1.6	-.9
Business executive (management)	7.3	7.8	-.5	7.8	8.1	-.3
Business owner or proprietor	2.6	3.1	-.5	2.3	2.6	-.3
Foreign service (incl. diplomat)	.2	.6	-.4	.2	.6	-.4
Artist	1.5	1.9	-.4	1.4	2.0	-.6
Teacher/admin (secondary)	3.9	3.6	+.3	4.4	3.7	-.7
Architect or urban planner	1.6	1.4	+.2	1.4	1.6	-.2
Clinical psychologist	1.3	1.5	-.2	1.6	1.6	0.0
College teacher	.3	.5	-.2	.3	.5	-.2
Pharmacist	.9	1.1	-.2	.9	1.0	-.1
School counselor	.4	.2	+.2	.3	.2	+.1
Homemaker (full-time)	.3	.1	+.2	.5	.2	+.3
Dentist (including orthodontist)	.6	.8	-.2	.5	.7	+.2
Conservationist or forester	.6	.7	-.1	.6	.5	+.1
Dietitian or home economist	.2	.3	-.1	.5	.3	+.2
Farmer or rancher	.8	.7	+.1	.8	.6	+.2
Interior decorator (incl. design)	.2	.3	-.1	.4	.5	-.1
Veterinarian	1.3	1.4	-.1	1.1	1.3	-.2
Therapist (phys, occup, speech)	3.9	3.9	0.0	3.7	3.8	-.1

Children of college graduates are also slightly more likely than first-generation students to arrive at college undecided.

Table 4.11 displays the students' career goals. Most students enter college with a career goal in mind: only 10.3 percent of the first-generation students and 12.9 percent of the children of college graduates are undecided about their career goal when they enter college. More first-generation students aspire to careers in nursing (5.4 percent versus 2.2 percent), while more children of college graduates aspire to careers as physicians (6.5 percent versus 3.6 percent). Children of college graduates are more likely to select careers that require an advanced degree—lawyer, scientific researcher, clinical psychologist, college teacher, and pharmacist—while first-generation students are more likely to select careers that do not require an advance degree: law enforcement officer, skilled trades, and lab technician or hygienist. The major exception is in performing arts careers (i.e., musician, actor or entertainer, and artist), where children of college graduates were more likely to choose those types of professions.

Students in Selective Universities

This section briefly highlights the differences between first-generation students and children of college graduates among students attending highly selective public universities. For the purposes of this study, a highly selective institution is one where the mean score of entering freshmen on the SAT (Verbal and Math) is > 1100 (Sax, Astin, Korn, and Mahoney, 1998). While there are many different ways you can compare these data, the question under investigation here is whether the differences already discussed

are replicated among students attending highly selective, public universities. Findings will be discussed in the same areas: background characteristics, self-ratings, academic preparation, degree aspirations, decisions about college, paying for college, activities engaged in the past year, life goals, future activities, college major, and career goals. (Tables displaying the percent differences for first-generation students and children of college graduates attending selective universities can be found in Appendix D)

Background Characteristics. First-generation students attending selective universities are still more likely to come from lower income homes than are children of college graduates, but the gap is even wider: 72 percent of the children of college graduates who attend selective universities report that their parents make \$60,000 or more, compared to only 23.1 percent of the first-generation students. The higher incomes among children of college graduates in selective universities may be explained by the fact that a larger percentage of their fathers are in occupations that pay very well (e.g., engineers, doctors, or lawyers).

Self-ratings. Despite the fact that they are attending highly selective universities, first-generation students in these types of institutions still have less confidence in their skills and abilities than do children of college graduates. However, differences in self-rated academic and mathematical abilities are somewhat smaller among students in selective public universities. Otherwise the comparative differences are quite similar.

Academic Preparation and Degree Aspirations. When it comes to high school grades, differences are similar to differences observed with students in general, except when it comes to grades below “B” minus, where the gap shrinks from 8.5 to 1.6 percent.

This convergence is not surprising, considering that these are selective universities. Even more convergence occurs with degree aspirations with nearly equal percentages in the selective universities having graduate degree aspirations. With regards to remedial work the gaps are slightly smaller, but, the pattern is the same: more first-generation students report that they have taken a remedial course and that they expect to take more remedial courses.

Decisions about College. The differences remained about the same for first-generation students and children of college graduates with respect to reasons noted for going to college, attending their first-choice college, and reasons noted for selecting their own college (for the most part). However, the gap widened considerably for students reporting that they were attending their university because they were “offered financial assistance.” Twice as many of the first-generation students (35.6 percent) as children of college graduates (17.5 percent) report offers of financial assistance as a reason for attending their own institutions.

Gaps in the number of colleges applied and where students plan to live in the fall narrowed somewhat. This latter finding may be attributed to the widespread use of required residency for freshman in selective universities.

Paying for College Gaps in concern about paying for college widened considerably in highly selective universities: three times as many first-generation students than children of college graduates report that they have a major concern about how they are going to pay for college. In addition, the gap widens even more for students “no concern” about being able to finance their college education, doubled from 11.9

percent among freshman in general to 23.1 among freshman in selective universities. Larger differences also appear in the types of sources first-generation students and children of college graduates report they expect to use to cover their first-year's education expenses. For example, the gap widens considerably in reliance on Pell grants, Stafford/Guaranteed Student Loans, state scholarships or grants, Perkins Loans, college work-study grants, and money from part time jobs on campus. The gap also widened with respect to reliance on parent's and family.

Activities Engaged in the Past Year. While most of the differences between first-generation students and children of college graduates became slightly smaller on activities engaged in the past year, the largest gaps continued to be in using a personal computer and playing a musical instrument (children of college graduates reporting such activities more frequently). Children of college graduates were also more likely than first-generation students to report drinking beer, wine, or liquor in the past year.

Life Goals and Future Activities. Generally speaking, first-generation students and children of college graduates attending highly selective, four year universities have very similar life goals, with most of the gaps between the two groups becoming smaller than what we observed for students in general.

College Major and Career Goals. First-generation students and children of college graduates in highly selective four year universities select similar majors when entering college. About the same proportion of students selected the same types of majors. With regard to careers, differences between first-generation students and children of college graduates became smaller or in some cases disappeared. About the

same proportion of students from both groups aspire to careers in medicine, engineering, or law.

Summary

First-generation freshman compared to freshman with parents who are college graduates tend to come from lower income homes, are more likely to be from underrepresented racial/ethnic groups, are less well prepared academically, have lower graduate degree aspirations and less confidence in their skills and abilities, and expect to take more remedial courses once they enter college. In addition, first-generation students apply to fewer colleges, attend colleges closer to home, and have greater concern about how they are going to pay for college. Lastly, first-generation students are less likely to have used personal computer and have spent less time volunteering, studying, exercising, participating in student clubs or groups, and socializing with friends. They also spend more time than children of college graduates working and doing housework or childcare.

Most of these same differences appear among freshman at selective universities, although differences in academic preparation, degree aspirations, and career aspirations are somewhat smaller. However, the income gap between these two groups is even wider in selective universities, as are the differences in concern about how they will finance their college education. In addition, it appears that many more first-generation students in highly selective universities tend not to be native English speakers or U.S. citizens.

Findings presented in this chapter are consistent with data collected on first-generation students who enrolled in a post-secondary institution during the 1989-90 academic year (Nunez, Cuccaro-Alamin, and Carroll, 1998). Specifically, this report

shows that first-generation students, in comparison to their non-first-generation peers, are more likely to be older, have lower incomes, be married, have dependant children, be enrolled on a part-time basis, attend public 2-year institutions, attend private for-profit institutions, and other-less than-4-year institutions. In addition, first-generation students were more likely to say that being very well off financially was important to them personally and to say that finances were an important consideration in their decision to attend their particular institution (p. iii).

In addition to providing a profile of first-generation students and demonstrating how first-generation students differ nationally from children of college graduates, this chapter also reveals that there are several factors that need to be considered when studying this population. As revealed from this chapter, from the moment first-generation students enter college, there are already several characteristics which differentiate them from children of college graduates. Since these differences are likely to lead to different college experiences and eventually different outcomes, they must be controlled in any study of the college experience of first-generation students. To take a simple example: if we are interested in assessing the effect of any special intervention program on the first-generation student's college GPA or retention chances it would be important to control for the several entering characteristics—high school grades, self-rated academic ability, work status, etc.—that would be expected to affect these outcomes.

In addition, since income is the largest differentiating factor between first-generation students and children of college graduates—regardless of institutional type, it

is important to control for income to in any analyses in order to decipher whether differences between these two groups of students are related to income or income related factors or to first-generation student status. The next section, begins this exploration by controlling for several correlating factors in order to determine whether this first-generation effect remains once other confounded variables are controlled on various outcomes.

CHAPTER FIVE

RESULTS

This chapter presents the results of the longitudinal portion of this study and is divided into four main sections. Since original data were collected, the results of this effort are presented first. In the second section, results of descriptive analyses are presented. The third section reports results of the 12 regression analyses proposed in Chapter 3. The fourth and last section presents, for first-generation students only, the results from the open-ended questions which focused on positive and negative factors contributing to the student's adjustment to UCLA.

Results of Data Collection

Data collection began during the Fall quarter of the 1998-99 academic year. Approximately 1,502 students were mailed the UCLA Follow-up Survey (FUS) in the last weeks of the Fall quarter. During the first few weeks of the Winter quarter a second mail out of the survey was sent to students who did not respond to the first wave. This two-wave administration resulted in 565 responses, or a response rate of 38 percent. Eight surveys are not included in any of the analyses because they were received several weeks after the second wave deadline and after the data had been keypunched. The final sample for analysis consisted thus of 557 respondents (212 men and 345 women).

Data were keypunched by hand using Microsoft Access for windows. With this software program, I was able to reduce errors creating validation rules to minimize the

possibility of entering a wrong number. The raw access data file was then saved as an “SPSS sav” file and merged with the data from the 1994 and 1995 CIRP Freshmen Survey to create a longitudinal data base. What resulted is a data file with 440 variables and 1,502 cases, 557 of which had follow-up data.

Correcting for Response Bias

In order to correct for response bias, a weighting factor was created using data available from the Freshman Survey. Based on the multitude of data available on students’ pre-college characteristics, regression analyses were conducted for men and women separately, using responding to the survey as a dependent variable (i.e., a “dummy” variable where 0 = did not respond and 1 = responded). Variables which have been shown in other follow-up research (Higher Education Research Institute, 1992) to predict responding to a follow-up survey—e.g., gender, ethnicity, high school GPA, academic self-ratings, goals, and activities—were included in the regressions.

These two predictive equations were used to calculate men’s and women’s probabilities of returning the FUS. The reciprocal of each estimated probability served as a weighting factor that was applied to the data for each person who responded to correct for bias due to non-response. Weighted data are noted in the next section on descriptive results. Regression analyses were not weighted.

Non-Respondents

The predictive equations described above revealed several variables that differentiated non-respondents from respondents. For men these variables included: self-rating: stubbornness (-), self-rating: competitiveness (-), pre-college activity: not

completing homework (-), pre-college activity: drinking wine or liquor (-), choosing to attend UCLA because they wanted to live near home (-), miles from college to home (-), pre-college future belief that one would transfer to another college (-), the future goal to be a community leader (-), pre-college activity: drinking beer (+), pre-college activity: performing volunteer work (+), choosing to attend UCLA because of low tuition (+), Race: White (+), and receiving any financial aid from spouse (+).

For women, on the other hand, these variables included: Race: African American (-), the future goal of having administrative responsibility (-), pre-college activity: played a musical instrument (+), choosing their institution because of its good academic reputation (+), pre-college future belief that one would change career choice (+), and the view that marijuana should be legalized (+).

Descriptive Results

This section first describes the student sample and the various subsamples: first-generation students, children of college graduates, first-generation students who participated in the SSS program, and those who did not participate. Next, first-generation students and children of college graduates are compared with respect to their decisions about college, levels of involvement in college, academic and social integration, feelings of “fitting in,” and family support of academic pursuits.

The Sample

Overall, as can be seen in Table 5.1, the sample consist mostly of women,

Table 5.1 Sample Description (N = 557)

	First-Generation Students (N = 233)		Children of College Graduates (N = 324)		All (N=557)	
	N	%	N	%	N	%
Men	83	35.6	129	38.9	212	38.1
Women	150	64.3	195	60.1	345	61.0
Freshman in						
1994	133	57.0	163	50.3	269	53.1
1995	100	42.9	161	49.6	261	46.9
SSS Participation	60	25.7	24*	7.4	84	15.1
Race/Ethnicity+						
White/Caucasian	73	31.3	31	9.5		
African American/Black	5	2.1	18	5.5		
American Indian	3	1.2	14	4.3		
Asian American/Asian	107	45.9	170	52.4		
Mexican American/Chicano	72	30.9	63	19.4		
Other Latino	20	8.5	43	13.2		
Other	8	3.4	8	2.4		

*This study defines first-generation students in the strictest way possible. The federal government definition in which the TRIO programs operate is less stringent than what I used to define my sample. This may explain why there are CCG who participated in SSS.

+Note: Percents for race/ethnicity add to more than 100 because students could check more than one.

children of college graduates, and students who were freshmen in 1994. In addition, Asian American/Asian students make up the largest percentage of students for both groups.

Specifically, first-generation students make up about 42 percent of the sample (n = 233). Approximately 64.3 percent (n = 150) of the first-generation students are women (compared to 60% of the children of college graduates) and one-fourth (25.7 percent, n = 60) of first-generation students report having participated in a Student Support Service (SSS) program compared to less than 8 percent of the children of college graduates. First-generation students in this sample are made up of mostly Asian Americans (45.9 percent), followed by White/Caucasian (31.3 percent) and Mexican American (30.9 percent) students.

Decisions About College

As can be seen in Table 5.2, during high school first-generation students overall received less information or advice about college from all sources except high school teachers/counselors. Children of college graduates were substantially more likely than first-generation students were to obtain information or advice from their fathers or mothers. This finding is not surprising, considering that first-generation students' parents would be expected to have limited information about college to give to their children. Table 5b also suggest that the siblings, other relatives, school friends, and family friends of first-generation students, in comparison to those of children of college graduates, are also less likely to have experience with college. The only exception to this trend is that first-generation students are more likely than are children of college graduates—but only

Table 5.2 Decisions about College

	Percent among		Difference
	FG	CCG	
Provided you with Advice or Information About College ^a			
Father	10.7	41.2	-30.5
Mother	14.8	40.2	-25.4
Brothers and/or sisters	11.7	25.4	-13.7
High school friends	21.6	30.7	-9.1
Other relatives (cousins, uncle, etc.)	4.4	9.6	-5.2
Friends of the family	6.3	11.5	-5.2
High school teachers or counselors	35.7	33.6	+2.1
When did you make your Decision to Go to College?			
Before elementary school	11.0	22.0	-11.0
Elementary school	28.9	30.2	-1.3
Jr. high/middle school	36.1	15.2	+20.9
Freshman or sophomore year of high school	12.0	16.0	-4.0
Junior or senior year of high school	12.0	16.1	-4.1
Reasons Noted for Going to College ^b			
Improve study skills	65.3	48.6	+16.7
Get better job	82.0	66.0	+16.0
Make more money	76.6	61.8	+14.8
Parents wish	29.8	38.9	-9.1
Reasons Noted in Selecting UCLA ^b			
Offered financial assistance	35.1	16.7	+18.4
Good social reputation	25.5	37.5	-12.0
Graduates get good jobs	73.3	65.6	+7.7
Advice of Teacher	6.7	2.7	+4.0
Good academic reputation	84.0	81.7	+2.3

^a "often"

^b "very important"

Note: Data shown are weighted.

slightly more—to have been provided with advice or information about college from high school teachers or counselors. If you consider that many first-generation students do not or cannot get this information from other significant adults and peers, it is not surprising to find that they are at least as likely as children of college graduates to have sought advice or information from high school teachers and counselors, who for many may be the only people they know who have college degrees.

Results presented in Table 5.2 also show that fewer first generation students (39.9 percent) than children of college graduates (52.2 percent) make the decision to attend college during elementary school or before. In fact, findings presented here show that most first-generation students do not make the decision to attend college until Junior High or later.

Compared to children of college graduates, first-generation students are more likely to say they are attending college to get a better job, make more money, or improve their studies skills and less likely to say that it was because of their parents' wishes. First-generation students and children of college graduates in this study are about equally as likely to report that they are attending UCLA because of its good academic reputation but first-generation students appear to be less interested in UCLA's social reputation when making their decision. On the other hand, first-generation students are over twice as likely to report that they are attending UCLA either because they were offered financial assistance or because of advice from a teacher. This again is not surprising, considering that first-generation students (a) come from low income homes and therefore need more financial assistance; and (b) are more likely to obtain information and advice regarding college from high school counselors and teachers than from any other source (children of college graduates, on the other hand, rely on their parents as their primary source of advice regarding college).

Level of College Involvement

This section compares first-generation students and children of college graduates in terms of interaction with faculty and hours per week spent on academic and non-

academic activities. As can be seen in Table 5.3, the largest time allocation differences between first-generation students and children of college graduates have to do with hours spent on academic activities. Approximately 39 percent of first-generation students (compared to only 30.1 percent of the children of college graduates), report spending eleven or more hours per week studying or doing homework. On the other hand, 58.9 percent of the children of college graduates report spending eleven or more hours per week in classes or labs, compared to only 50.3 percent of the first-generation students. While there are certainly many explanations, one possible explanation for these differences is that first-generation students, being less-well prepared academically, may find themselves taking lighter course loads and studying more to keep up academically.

With regard to non-academic activities, first-generation students are also more likely than children of college graduates to spend time commuting to UCLA and socializing with family and friends, and less time on household responsibilities, student clubs or organizations, child care or baby sitting, and working for pay.

With regard to interacting with faculty, the largest difference between first-generation students and children of college graduates is in the extent they feel faculty provided them with emotional support and encouragement. While 63.8 percent of the children of college graduates report that the faculty provide them with emotional support “occasionally or frequently,” only 37.9 percent of the first-generation students report the same. First-generation students are also less likely to report that faculty provide them with respect.

Table 5.3 Levels of Involvement

	Percent among		Difference
	FG	CCG	
Hours Per Week Spent On			
Studying/homework (11+)	39.0	30.1	+8.9
Commuting to UCLA (6+)	19.4	11.5	+7.9
Socializing with family (11+)	9.3	5.8	+3.5
Socializing with friends (11+)	32.2	31.3	+9
Working for pay (16+)	33.8	36.0	-2.2
Childcare/baby sitting (3+)	2.5	5.2	-2.7
Student clubs/organizations (6+)	11.5	16.2	-4.7
Household responsibilities (6+)	9.1	17.1	-5.9
Classes/labs (11+)	50.3	58.9	-8.6
Faculty Provided ^a			
Advice and guidance about your educ. program.	50.5	35.0	+15.5
A letter of recommendation	58.3	43.3	+15.0
Encouragement to pursue graduate/prof. school	56.3	44.5	+11.8
Assistance to improve your study skills	47.7	41.5	+6.2
Honest feedback about your skills and abilities	71.2	66.8	+4.4
Opportunity to work on a research project	39.3	35.1	+4.2
Opportunity to publish a paper	11.8	12.1	-3
Opportunity talk about personal problems/concerns	25.6	27.0	-1.4
Intellectual challenge and stimulation	81.6	86.4	-4.8
Opportunity to discuss coursework outside of class	80.4	85.5	-5.1
Respect (treated you like a colleague)	65.6	81.8	-16.2
Emotional support and encouragement	37.9	63.8	-25.9

^a "occasionally or frequently"

Note: Data shown are weighted.

On the other hand, when it comes to specific types of faculty support such as providing advice or guidance about their educational program, writing a letter of recommendation, encouragement to pursue graduate or professional study, or assistance to improve study skills, more first-generation students than children of college graduates report having received such support.

First-generation students are also more likely than children of college graduates to say that they received honest feedback about skills and abilities or that they worked on a research project and less likely to report that faculty discussed coursework with them

outside of class or provided them with intellectual stimulation. First-generation students and children of college graduates are equally as likely to report having had an opportunity to talk about personal problems and concerns and the opportunity to publish a paper with a faculty member.

Academic and Social Integration and “Fitting In”

Table 5.4 shows several items which, taken together, reveal the extent to which students feel academically and socially integrated and that they feel they “fit in” at UCLA. These results are consistent and suggest that first-generation students, when compared to children of college graduates, are less likely to feel academically and socially integrated or like they “fit in.” For example, 90 percent of the first-generation students report having had “some” or “a lot” of difficulty keeping up academically, compared to only 78.6 percent of the children of college graduates. In addition, while 58.4 percent of the first-generation students agree “somewhat” or “strongly” that “adjusting to the social environment had been difficult,” only 35.7 percent of the children of college graduates feel this way. Finally, when asked if they had ever felt “caught between two worlds,” 48.5 percent of first-generation students report feeling this way “many times,” compared to only 22.2 percent of the children of college graduates. Similarly, when asked if they had “difficulty fitting into the general environment,” first-generation students are almost twice as likely as children of college graduates to say they did have “some” or “a lot” of difficulty. In short, there were substantial differences on most of the items having to do with environmental “fit.”

Table 5.4 Academic and Social Integration and Fitting In

	Percent among		Difference
	FG	CCG	
Academic Integration			
Difficulty keeping up academically ^a	90.0	78.6	+11.4
Do you feel part of the academic community ^b	10.5	18.8	-8.3
Adjusting to the academic standards has been difficult ^c	73.2	67.6	+5.6
I wasn't ready for the academic demands ^c	61.1	55.3	+5.8
Social Integration			
Adjusting to the social environment has been difficult. ^c	58.4	35.7	+22.7
Difficulty making friends ^a	55.4	37.6	+17.8
Do you feel part of the social community ^b	13.0	17.4	-4.4
I am involved in social activities ^c	44.6	48.8	-4.2
Fitting In			
When you compare your UCLA life with your home life, have you ever felt like you were "caught between two worlds?" ^d	48.5	22.2	+26.3
Difficulty fitting into the general environment ^a	63.6	37.5	+26.1
I experienced "culture shock" when I first came to UCLA ^c	43.6	22.1	+21.5
UCLA can be a very alienating place ^c	72.1	51.3	+20.8
In order to 'fit in' at UCLA, I often feel I have to change my personal characteristics ^c	41.0	24.3	+16.7
Do the values of UCLA reflect your own ^b	7.6	21.0	-13.4

^a "some or a lot"

^b "a lot"

^c "agree somewhat or agree strongly"

^d "many times"

Note: Data shown are weighted.

While the difficulties experienced by first-generation students in fitting into the UCLA environment are consistent with the difficulties they experience in social and academic integration, it should be noted that the differences for children of college graduates tend to be smaller in academic integration than in social integration or "fit." These differences are not surprising considering that (a) the first-generation student's parents did not attend college and, (b) first-generation students, as noted earlier, received

less information and advice about college before entering. In other words, because first-generation students' families and friends do not have a tradition of college attendance and given that they are less well informed about college when they actually enroll, they will be less likely than children of college graduates to know what to expect from the college experience and more likely to feel alienated.

Family Support of Academics Pursuits

Table 5.5 contains several items which attempt (in various ways) to measure the extent of emotional support that students feel they receive from their parents or family. Almost all of the first-generation students (93.1 percent) and children of college graduates (96.1 percent) agree “somewhat or strongly” with the following statement: “My parents/family support me in my academic/educational pursuits.” In addition, 72.3 percent of the first-generation students and 76.5 percent of the children of college graduates feel that their parents understand the academic demands that are being placed on them—which one would assume can only help parents to be supportive.

However, when it comes to parental understanding (as opposed to mere “support”), first-generation students and children of college graduates differ substantially. Considering that the parents of first-generation students have never attended college, it is not surprising that first-generation students would be significantly more likely than children of college graduates to report that they cannot talk to their parents about classes because “they would not understand.” This lack of understanding can apparently affect parental expectations, since first-generation students are slightly more likely (35.8 percent) than are children of college graduates (28.9 percent) to report that their “parents

Table 5.5 Family Support of Academics Pursuits

	Percent among		Difference
	FG	CCG	
My parents/family support me in my academic/educational pursuits. ^a	93.1	96.1	-3.0
My parents/family understand the academic demands that are being paced on me. ^a	72.3	76.5	-4.2
My parents/family expect me to spend time with them most weekends, even if I have a lot of studying or homework to do. ^a	35.8	28.9	+6.9
I feel the need to break away from my family in order to succeed in college. ^a	47.9	31.6	+16.3
I cannot talk to my parents about classes because they would not understand. ^a	60.9	37.5	+23.4

^a “agree somewhat or agree strongly”

Note: Data shown are weighted.

expect me to spend time with them most weekends, even if I have a lot of homework or studying to do.” Hossler, Schmit, and Vesper (1999) make a similar distinction with regards to parental encouragement and support during the college choice process. Specifically, they distinguish between parents’ encouraging their son or daughter to attend college and parents engaging in “action-oriented activities that support the students search” (p. 63). With regards to this study, this same perceived lack of parental understanding or visible support may also help to explain why first-generation students are substantially more likely than children of college graduates to feel the need to “break away from my family in order to succeed in college.”

Multivariate Results

This section presents the results of the multivariate analyses involving six dependent measures: transition to college, undergraduate GPA, social adjustment to college, academic adjustment to college, social self-image, and academic self-image. Regression results for all students are presented first, followed by the regression results for the first-generation students only. While the first set of analyses are focused on exploring the first-generation effect, the next set are focused on examining the effect of SSS participation on all six dependent measures.

Regression Analyses: All Students

Since one of the main purposes of these set of regressions is to see whether first-generation status has any effect on the dependent measures, results for this key independent variable are discussed first for all regressions. It should be kept in mind that the effects of first-generation status are assessed only after background variables such as parental income, high school grade point average, and other entering freshman characteristics have been controlled. Tables summarizing the results at key points in the analysis are presented here for each dependent variable. More complete tables showing the standardized regression coefficients for entering variables at each step of the analysis for all dependent variables can be found in Appendices E.1-E.6.

Predicting Difficulty in Making the Transition to College

The dependent variable, difficulty in transition to college, measures students' response to the following question: "How much difficulty did you experience in making the transition from home to UCLA?" Students were asked to rate themselves using a four

point scale ranging from “None” to “A lot.” In addition to the background and involvement variables included in this regression, another set of variables (obtained from the follow-up survey), which could be described as measuring the “types of difficulty” students experienced while making that transition from home to UCLA, were also included in this analysis. Since these variables would be able to reveal specific conditions that make one’s transition more difficult, I thought it was important to include them in the regression. However, since they are really components of the dependent measure, they were included in the last two block of variables so that the importance of the other (antecedent) variables could be judged first.

Sixteen independent variables—including the five “types of difficulty” variables—entered the regression equation significantly with the criterion for entry set at $p < .05$. These 16 variables accounted for 37 percent of the variance in transition to college (adjusted R-squared = .3545, Multiple R = .6114). In order to address the multicollinearity issue introduced by including the “types of difficulty” variables, the results below are discussed through the 11th step, when the last involvement variable enters the regression. These 11 variables account for 27 percent of the variance in the dependent variable (adjusted R-squared = .28455, Multiple R = .54952). Table 5.6 displays the beta coefficients at selected steps for the variables that entered the equation. The variables which enter in the last block are also displayed but only up to step 11 when the last involvement variable enters.

Table 5.6 Identifying the Factors which make the Transition to College from Home Difficult (n = 535)

Step	R-sq	Variables in the Equation	Simple r	Beta	Beta	Beta	Beta
				After 1 st Step 1	After Inputs 7	After FG 8	After Involvement 11
1	.06	SAT Composite	-.24	-.24***	-.25***	-.22***	-.15***
2	.08	Parental income	-.16	-.14***	-.14***	-.10*	-.08*
3	.09	Miles from college to home	.07	.08*	.12**	.13**	.08*
4	.10	College Advice: private counselor	.10	.08	.10*	.11**	.08*
5	.10	Race: African American/Black	-.07	-.10**	-.10*	-.09*	-.08*
6	.11	SIF Self-rating: Emotional health	-.09	-.10**	-.10*	-.09*	-.01
7	.12	SIF Anticipate: Change major field	-.08	-.08*	-.09*	-.09*	-.08*
8	.13	College Generation: FG	.20	.14***	.10*	.10*	.10*
9	.23	FUS Activity: Felt lonely or homesick	.38	.36***	.34***	.34***	.28***
10	.26	FUS Activity: Felt overwhelmed with all you have to do	.32	.30***	.27***	.27***	.17***
11	.27	FUS Activity: Worked full time in college	.12	.11**	.11**	.11**	.09*
12	.30	Caught between 2 worlds	.36	.33***	.32***	.31***	.19***
13	.30	Difficulty: Dealing w/bureaucracy	.13	.17***	.14***	.14***	.09*
14	.35	Experienced culture shock	.36	.33***	.32***	.31***	.25***
15	.36	Difficulty: Making friends	.21	.23***	.23***	.23***	.15***
16	.37	Difficulty: Keep up academically	.32	.29***	.25***	.25***	.16***

***p ≤ .001, **p ≤ .01, *p ≤ .05

First-Generation Effect

First-generation status enters the regression with a significant weight (Beta = .10, $p \leq .05$), even after the other student input variables are controlled, which suggests that being a first-generation student does—as hypothesized—make the transition to college more difficult. This effect remains significant (Beta = .10, $p \leq .05$) until the last involvement variable enters. The simple correlation of first-generation status with the dependent variable was substantially larger ($r = .20$) than the beta coefficient associated with it when it entered (Beta = .10), which means that a major part of the effect of first-generation status can be accounted for by the effect of other input variables. In other words, because the simple correlation is much larger than the “beta in,” a portion of the simple correlation is attributable to other input variables. The next section will focus on the particular student background variables which caused the coefficient for first-generation status to shrink by half.

Background Characteristics

Seven background variables entered the regression with significant weights. Since a pretest measure was not available for this outcome variable, an attempt was made to control for students’ “disposition” when they entered UCLA by including their self-ratings on emotional health (obtained from the Freshman Survey) in the first block of variables. The student’s emotional health enters the regression at the 6th step and continues to be significant until the first involvement variable—felt lonely or homesick—enters the equation and eliminates its predictive power. In other words, what this means is that self-rated emotional health at the time of college entry predicts

difficulty in transition primarily because students who rate themselves poorly on emotional health are more likely to experience loneliness or homesickness after they arrive at college.

The SAT score, a composite measure combining the student's Math and Verbal scores, is the first entering variable and has a correlation of $-.24$ with the dependent measure, "difficulty experienced making the transition from home to college." There is no substantial reduction in the size of the Beta coefficient for this measure after the other six input variables enter, which suggests a minimal degree of multicollinearity with these other variables. However, the Beta for SAT composite is reduced (from $-.25$ to $-.22$, $p \leq .001$) when first-generation status enters the equation, indicating that part of the reason why first-generation students experience difficulty transitioning from home to college has to do with the fact that they come to college less-well-prepared academically. This same effect becomes even more obvious upon observing that the simple correlation between the dependent variable and first-generation status is reduced substantially (from $.21$ to $.14$, $p \leq .001$) when SAT composite enters. It should be pointed out that it is possible that the difficulty experienced by first-generation students may not be only a matter of academic under-preparation, but also a consequence of the students' knowledge that their SAT scores are "low" when compared to those of their peers at the university. Nevertheless, because this is a single college, we cannot know whether it is the real gap or perceived gap that the first-generation student experiences between his or her preparation and those of the peers that is at issue here and it would be an interesting thing to test in future research.

The second background variable to enter the equation is income. Students from low income families apparently have a more difficult time adjusting to UCLA than do students from high income families. This variable remains significant until the second involvement variable enters. Similar to SAT composite, the coefficient for income is not substantially reduced by the entry of the other background variables. As expected, the first-generation coefficient shrinks when income enters the equation, a result which reflects the fact that first-generation status is correlated with income. In other words, part of the relationship between first-generation status and difficulty in making that transition to college is a function of the fact that first-generation students come from lower income homes. Although there are several possible explanations, this difficulty may be explained by the fact that first-generation students who come from low income homes will probably have less money to spend on socializing, going out, or other extra-curricular activities which may make the transition from home to college a little easier.

The remaining background variables which enter the equation—miles from home to college, advice in high school from a private counselor, Race: African American/Black, emotional health, and anticipating changing major field—did not appear to reduce the beta coefficient substantially for first-generation status. In short, once SAT composite and income are controlled, the effect of first-generation status on transition to college does not change much and remains significant until the final step.

Only two of these additional background variables remain significant until the last step: miles from college to home and change in major field. Miles from college is positively associated with difficulty in transitioning to college, while plans to change

major field is negatively related. What this means is that students who live further away from home while in college or who do not anticipate changing their major field while in college are more likely to have a more difficult time making the transition from home to UCLA. Since the Beta coefficient for miles from college to home is greatly reduced (from .13 to .06) when feeling lonely or homesick (one of the involvement variables) is controlled, it appears that students who live far from college are more likely to experience difficulty in transitioning to college primarily because they are more likely to feel lonely or homesick after they enroll. This is a classic example of an “indirect” effect: distance contributes to feeling lonely or homesick, which in turn contributes to students’ difficulties in making the transition from home to college.

Involvement

Three involvement variables entered the regression with significant positive weights: felt lonely or homesick, felt overwhelmed with all I had to do, and worked full time while in college. These results suggest that problems in making that transition from home to college are likely to be exacerbated by working full-time while in college or feeling lonely, homesick or overwhelmed. Felt lonely or homesick has the strongest simple correlation ($r = .38$) with the dependent measure and is tied for the largest coefficient (Beta = .23, $p \leq .001$) after all the variables in the equation enter. When this variable enters the equation it attenuates the coefficients for feeling overwhelmed and feeling caught between two worlds. As with miles from college, this finding suggests that the effects of feeling overwhelmed and of being caught between two worlds on the dependent measure are in part attributable to the fact that students who feel this way are

also more likely to feel lonely or homesick. Indeed, there may be a bit of redundancy or even circularity here, in the sense that some students may equate homesickness or feeling lonely with “difficulties” in making the transition.

Types of Difficulty

This last set of variables served the purpose of dissecting the dependent variable further by revealing the specific difficulties which are associated with overall difficulty in transitioning from home to college. Results suggest that overall difficulty in transition is most closely associated with culture shock, feeling caught between two worlds, difficulties in dealing with the bureaucracy at UCLA, difficulties in making friends, and keeping up academically. Another way to express these findings would be to say that students will have a relatively easy time with the transition from home to UCLA if they do not experience culture shock or feel caught between two worlds, are able to make friends, do not experience bureaucratic hassles, and can keep up academically.

However, what is interesting is that the variable “caught between two worlds”—“When you compare your UCLA life with your home life, have you ever felt like you were ‘caught between two worlds’?”—remains a strong predictor (Beta = .19, $p \leq .001$) even after all other variables in the equation are controlled. It is clear that feeling caught between two worlds directly increases the difficulties that students experience in making the transition from home to college. In addition, while not shown in Table 5.6, the Beta for this variable is reduced when “experienced culture shock” enters the equation, but still remains significant at .14 ($p \leq .001$) after the last (“difficulty”) variable is controlled (see Appendix E.1).

Predicting Undergraduate GPA

The dependent variable, undergraduate GPA, measures the student's response to the following statement: "Mark the one circle that best describes your grade point average at UCLA so far." Students reported their GPAs using a six-point scale ranging from "A (3.75 or higher)" to "C- or less (below 1.75)."

Twenty-four independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$. These 24 variables accounted for 48 percent of the variance in undergraduate GPA (adjusted R-squared = .4539, Multiple R = .6922). Table 5.7 displays the beta coefficients at selected steps for the variables that entered the equation, as well as for the first-generation status variable which did not enter.

First-Generation Effect

As expected, first-generation status has a negative correlation ($r = -.16$) with undergraduate GPA--the dependent measure. However, unlike what was hypothesized, it does not enter the regression equation. The Beta for the first-generation status variable is reduced (Beta = $-.14$, $p \leq .001$) when high school GPA enters at step 1, and then loses its significance when SAT composite enters at step 2. This finding suggests that first-generation status does not have a direct effect on the student's undergraduate GPA and that the negative correlation between first-generation status and undergraduate GPA is for

Table 5.7 Predicting Undergraduate GPA (N = 520)

Step	R-sq	Variables in the Equation	Simple r	Beta After 1*	FG lost Signif.	Beta After Inputs	Beta After Involvements	Beta After Personal/ Socio- cultural
				1	2	10	22	24
1	.10	High School GPA	.32	.32***	.26***	.26***	.18***	.18***
2	.16	SAT Composite	.31	.24***	.24***	.21***	.12**	.11**
3	.18	Goal: Make theoretical contribution to science	-.15	-.18***	-.16***	-.13***	-.11***	-.10**
4	.20	Participate in demonstrations	.07	.10*	.11**	.17***	.12***	.12***
5	.21	Future Activity: Work full time while in college	-.19	-.16***	-.14***	-.12**	-.05	-.04
6	.23	Going to college to get away from home	-.12	-.10**	-.12**	-.13***	-.06	-.05
7	.24	Going to college because couldn't find a job	-.12	-.13***	-.12**	-.09**	-.06	-.06
8	.25	Citizen: Yes	-.09	-.07	-.06	-.14***	-.13***	-.14***
9	.26	Parental income	.11	.12**	.09*	.12***	.07	.04
10	.26	Age	-.08	-.09*	-.08*	-.08*	-.04	-.05
11	.32	FUS Rating: Drive to achieve	.30	.26***	.27***	.24***	.13***	.14***
12	.36	FUS Activity: Enrolled in honors courses	.36	.30***	.27***	.24***	.14***	.14***
13	.37	Faculty provided: Encouragement to pursue grad/prof school	.29	.25***	.25***	.21***	.12***	.12***
14	.39	FUS HPW: Working for pay	-.23	-.19***	-.17***	-.13***	-.11***	-.09**
15	.40	FUS Activity: Intramural sports	-.10	-.11**	-.12**	-.11***	-.17***	-.18***
16	.41	FUS Activity: Felt Overwhelmed with all	-.15	-.15***	-.13**	-.09*	-.11**	-.09*
17	.43	Utilized: Career Center	.15	.13***	.13***	.13***	.10**	.11**
18	.44	FUS HPW: Commuting to UCLA	-.17	-.17***	-.14***	-.14***	-.10**	-.10**
19	.44	Academic Self-Image	.36	.30***	.25***	.22***	.11**	.10*
20	.45	Utilized: Student Psychological Services	-.11	-.11**	-.10**	-.07	-.09**	-.08*
21	.46	FUS Activity: Took interdisciplinary course	.25	.22***	.20***	.16***	.06	.06
22	.46	Major: Communications	.15	.15***	.13**	.11**	.07*	.07*
23	.47	Need to break away to break away from family to succeed	-.17	-.16***	-.16***	-.13***	-.12***	-.12***
24	.48	Difficulty: Financing college education	-.23	-.22***	-.18***	-.14***	-.09*	-.08*
Not in the Equation								
		College Generation: FG	-.16	-.14***	-.07	-.05	-.02	-.01

***p ≤ .001, **p ≤ .01, *p ≤ .05

the most part accounted for by the fact that first-generation students tend to be less-well prepared academically than are children of college graduates. Once their lower high school grades and lower SAT scores are taken into account, first-generation students do just as well academically as do children of college graduates.

Background Characteristics

Not surprisingly, high school GPA—the pretest—proved to be the strongest predictor of undergraduate GPA (simple $r = .32$, Final Beta = $.18$, $p \leq .001$). The other results suggest that students from high income families and students who have participated in demonstrations in high school tend to do relatively well academically in college. On the other hand, lower grades are associated with being a citizen, attending college because the student couldn't find a job, going to college to get away from home, planning to work full-time while in college, and wanting to make a theoretical contribution to science. This last negative effect may reflect the more difficult grading standards that students encounter in science courses.

Involvement

Of the eleven involvement variables that entered the regression with significant weights, three of the strongest predictors are negative: participating in intramural sports (Beta = $-.18$, $p \leq .001$), commuting to UCLA (Beta = $-.10$, $p \leq .01$), and working for pay (Beta $-.09$, $p \leq .01$). In all likelihood these activities take time away from academic activities such as studying and doing homework. The two strongest positive predictors of undergraduate GPA are self-ratings on drive to achieve (Beta = $.14$, $p \leq .001$) and enrolling in an honors course (Beta = $.14$, $p \leq .001$).

In short, these findings suggest that college grades are enhanced by a strong drive to achieve, a positive academic self-image, enrolling in honors or advanced courses, utilizing the career center, and receiving faculty encouragement to pursue graduate study; by not commuting, working for pay, or participating in intramural sports, and by not feeling overwhelmed or utilizing the student psychological services. This last variable, of course, might be a result, rather than a cause, of poor grades.

Other Personal and Sociocultural Factors

Two other environmental variables of interest here are “needing to break away from family in order to succeed in college” (Beta = $-.12$, $p \leq .001$) and “difficulty in financing college education” (Beta = $-.08$, $p \leq .05$), both of which also remained significantly negative to the final step. It is not surprising to find that students who have difficulty financing their college education will be more likely to have poorer grades since dealing with financial problems (e.g., finding a job, working, etc.) is likely to take time away from their studies. Along the same lines, students who feel the need to break away from family in order to succeed in college may be more likely to feel that being with their family distracts them from their studies as well.

Predicting Social Adjustment

Social adjustment to college is a composite measure composed of 3 items from the follow-up survey: (1) “Adjusting to the social environment at UCLA has been difficult” [Four point scale: “disagree strongly”(score = 4) to “agree strongly” (score = 1)]; (2) “I am very involved with the social activities at UCLA” [Four point scale: “disagree strongly”(score = 1) to “agree strongly” (score = 4)]; and (3) “At UCLA, how

much difficulty have you had making friends?" [Three point scale: "none" (score =3) to "A lot" (score = 1)]. The internal consistency (alpha) for this composite measure is .62.

Nineteen independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$. These 19 variables accounted for 49 percent of the variance in social adjustment to college (adjusted R-squared = .4663, Multiple R = .6973). Table 5.8 displays the beta coefficients at selected steps for the variables that entered the equation, as well as for the first-generation status variable which did not enter.

First-Generation Effect

As expected, first-generation status is negatively associated ($r = -.11$) with social adjustment to college. However, contrary to what was hypothesized, it does not enter the regression equation. The effect of first-generation status at the first step is reduced (Beta = $-.10$, $p \leq .05$) when the first background variable—social self-confidence—enters the equation and then becomes non-significant when receiving financial aid from parents or family enters at the next step. This suggests that first-generation status does not have a direct effect on the student's social adjustment. Financial aid from parents or relatives in particular has a substantial negative correlation with first-generation student status ($r = -.36$), which explains why controlling this variable eliminates the statistical significance of first-generation status in the equation. In short, the poorer social adjustment of first-generation students in college is entirely attributable to their lower level of social self-confidence and their lower level of financial support from parents.

Table 5.8 Predicting Social Adjustment (n = 510)

Step	Rsq	Variables in the Equation	Simple r	Beta	FG lost	Beta	Beta	Beta After
				After 1 st Step	Signif.	After Inputs	After Involve- ments	Personal/ Socio- cultural
				1	2	5	16	19
1	.08	SIF Self-rating: Social self-confidence	.28	.28***	.29***	.22***	.08*	.08*
2	.10	Aid Source: Parents or relatives	.15	.16***	.16***	.14***	.09**	.09**
3	.12	SIF Act: Performed volunteer work	.15	.12**	.12**	.12**	.05	.04
4	.13	SIF Self-rating: Emotional health	.22	.14**	.13**	.13**	.02	.00
5	.14	College Advice: Parents	.15	.13**	.10*	.10*	.04	.01
6	.22	FUS Self-rating: Social self-confidence	.40	.35***	.34***	.31***	.24***	.24***
7	.28	FUS HPW: Student clubs/org	.31	.29***	.28***	.27***	.16***	.16***
8	.34	FUS Act: Felt lonely/homesick	-.29	-.26***	-.26***	-.25***	-.26***	-.23***
9	.38	Live with parents 1 & 2nd years	-.20	-.21***	-.21***	-.20***	-.19***	-.19***
10	.40	Professor/admin/staff took a personal interest in your success	.27	.24***	.23***	.21***	.11**	.10**
11	.41	FUS Activity: Studied w/other students	.28	.26***	.25***	.23***	.08*	.08*
12	.42	FUS Activity: Joined frat/sorority	.21	.17***	.16***	.16***	.10**	.10**
13	.43	FUS Activity: Held leadership position	.26	.24***	.24***	.22***	.12**	.11**
14	.44	HPW: Socializing with friends	.23	.21***	.19***	.17***	.09**	.09**
15	.44	FUS Self-rating: Understanding of others	.11	.06	.06	.03	-.09*	-.09**
16	.45	Faculty Provided: Emotional support/encouragement	.22	.19***	.17***	.15***	.08*	.07
17	.47	Experienced culture shock	-.21	-.21***	-.21***	-.18***	-.16***	-.15***
18	.48	Opinion: Feel part of the academic community	.29	.25***	.24***	.21***	.12***	.11**
19	.49	Strongly Identify with culture	.13	.10*	.12**	.11**	.09**	.08*
Not in the Equation								
		College Generation: FG	-.11	-.10*	-.05	-.01	.04	.06

***p ≤ .001, **p ≤ .01, *p ≤ .05

Background Characteristics

Five background variables entered the regression with a significant weight. Since a direct pretest measure was not available for this outcome variable, an attempt was made to control for how students felt about their social ability by including their self-rating on social self-confidence (obtained from the Freshman Survey) in the first block of variables. As noted earlier, social self-confidence enters significantly at the first step (Beta = .28, $p \leq .001$) and continues to be significant until the final step.

In addition to the freshman rating of social self-confidence and receiving aid from parents or relatives, three other background variables entered the regression with significant positive weights: performing volunteer work during high school, self-rating on emotional health, and receiving advice (during high school) about college from parents.

Involvement

Given the fact that the dependent variable (social adjustment) mixed together perceptual items with a behavioral item, involvement variables such as studying with other students, joining a fraternity or sorority, and hours per week spent socializing with friends cannot really be considered as necessarily antecedent to the dependent variable or causally related to it. They were included in any case, along with other variables, on an exploratory basis to see what other students experiences in college might related be to social adjustment in college. However, causal inferences will be difficult to draw with any certainty because of the obvious possibility of circularity in the causation.

Nevertheless, data reveal that students who are well adjusted socially to the UCLA experience tended to spend time in student clubs/organizations and in socializing with other students, study with other students, rate themselves high on social self-confidence and on understanding of others, report either that faculty provided them with emotional support and encouragement or that a professor, administrator or staff member took a personal interest in them, and were more likely to join a fraternity or sorority or to hold a leadership position. Students who reported relatively poor social adjustment were more likely to live with parents during their first two years of college and to report feeling lonely or homesick during college. Clearly, social adjustment appears to be enhanced by getting involved with student activities and organizations and by receiving support and encouragement from faculty and staff.

Personal and Sociocultural

This last set of variables served the purpose of examining which types of personal and sociocultural variables might influence social adjustment to college. Three of these variables entered the regression and remained significant until the last step. The strongest predictor was experiencing “culture shock” when first coming to UCLA, which was negatively associated with social adjustment (Beta = - .15, $p \leq .001$). The other two variables that were positively associated with social adjustment are: feeling part of the academic community (Beta = $p \leq .01$) and strongly identifying with one’s own ethnic culture/heritage (Beta = .08, $p < .05$). In short, this pattern suggests that students will be more likely to adjust socially to college if they do not experience culture shock when they first come to UCLA, if they feel part of the academic community, and if they identify

strongly with their ethnic culture or heritage. While it could be argued that identifying strongly with one's culture might interfere with social adjustment by alienating students from other groups, these results suggest the opposite. Perhaps having such an identification promotes social adjustment by giving the student a greater sense of self-confidence.

Predicting Academic Adjustment

The dependent variable, academic adjustment to college, is a composite measure composed of 3 items from the follow-up survey: (1) "Adjusting to the academic standards at UCLA has been difficult" [Four point scale: "disagree strongly (score =4)" to "agree" (score =1)]; (2) "I wasn't ready for the academic demands at UCLA" [Four point scale: "disagree strongly (score =4)" to "agree" (score =1)]; and (3) "At UCLA, how much difficulty have you had academically?" [Three point scale: "none" (score =3) to "A lot" score = 1)]. The internal consistency (alpha) for this composite measure is .83.

Twenty-four independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$. These 24 variables accounted for 48 percent of the variance in academic adjustment to college (adjusted R-squared = .4496, Multiple R = .6897). Table 5.9 displays the beta coefficients at selected steps for the variables that entered the equation.

First-Generation Effect

After all student input variables are controlled, first-generation status enters the regression with a significant negative weight (Beta = - .10, $p \leq .05$). Apparently, being a

Table 5.9 Predicting Academic Adjustment to College (n = 507)

Step	Rsqr	Variables in the Equation	Simple r	Beta After 1 st Step	Beta After Inputs	Beta After FG	Beta After Involvements	Beta After Personal/Socio-cultural
				1	12	13	19	24
1	.06	Race: White/Caucasian	.24	.24***	.06	.06	.02	.02
2	.09	SIF Self-rating: Academic ability	.22	.18***	.07	.06	.00	.02
3	.12	Choose UCLA: Grads go to top graduate schools	-.17	-.15***	-.20***	-.20***	-.16***	-.15***
4	.14	SIF Activity: Felt overwhelmed	-.19	-.17***	-.16***	-.16***	-.06	-.04
5	.16	SIF Self-rating: Writing ability	.19	.15***	.13**	.12**	.07*	.10**
6	.18	SIF Anticipate: Change career choice	.12	.10*	.13***	.13***	.11**	.09**
7	.19	SAT Composite	.22	.18***	.16***	.13**	.04	.01
8	.21	SIF Self-rating: Emotional Health	.15	.13**	.13***	.12**	.06	.04
9	.22	SIF HPW: Working for pay	-.13	-.13**	-.10**	-.10**	-.07*	-.07
10	.22	Race: Asian American/Asian	-.09	.00	-.12**	-.12**	-.05	-.07
11	.23	High School GPA	.16	.15***	.12**	.13**	.12**	.10**
12	.24	Going to college: Couldn't find a job	-.14	-.12**	.09*	-.09*	-.07	-.04
13	.25	College Generation: FG	-.18	-.16***	-.10*	-.10*	-.07*	-.04
14	.35	FUS Activity: Felt Overwhelmed	-.45	-.42***	-.36***	-.36***	-.31***	-.27***
15	.39	FUS Self-rating: Academic Ability	.37	.34***	.25***	.25***	.19***	.19***
16	.40	Prof./Admin./Staff took a personal interest in their success	.19	.18***	.16***	.16***	.10**	.06
17	.41	FUS Activity: Taken Remedial course	-.16	-.15***	-.11**	-.11**	-.12***	-.11**
18	.42	Faculty provided: Honest Feedback	.23	.20***	.15***	.15***	.10**	.09*
19	.43	FUS HPW: Student clubs/org.	-.14	-.12**	-.12**	-.12**	-.09*	-.08*
20	.44	Experienced culture shock	-.22	-.21***	-.15***	-.14***	-.14***	-.12***
21	.46	Difficulty: Financing college education	-.29	-.27***	-.22***	-.21***	-.12***	-.11**
22	.46	Faculty underestimate ability	-.22	-.22***	-.16***	-.16***	-.11**	-.08*
23	.47	Need to break away from family in order to succeed	-.25	-.23***	.18***	-.17***	-.10**	-.08*
24	.48	Opinion: Values of UCLA reflect your own	.14	.14***	.14***	.14***	.10**	.08*

***p < .001, **p < .01, *p < .05

first-generation student does—as hypothesized—have a direct negative effect on academic adjustment to college. The largest declines in the size of the coefficient for first-generation status occurred when two other input variables—academic ability self rating (step 2) and SAT composite (step 7)—entered the regression. What this means is that part of the reason why first-generation students experience greater difficulty in adjusting academically to UCLA is the fact that, compared to other students, they begin college with a lower level of SAT scores and with lower self-confidence in their academic abilities. Only one other involvement variable—feeling overwhelmed with all I have to do—produced a reduction as large as .02 in the size of the Beta coefficient for first-generation status. This would suggest that part of the difficulty experienced by first-generation students in adjusting academically is the sense of being overwhelmed by all the things they have to do.

Background Characteristics

Twelve background variables entered the regression with a significant weight. Since a direct pretest measure was not available for academic adjustment to college, an attempt was made to control for students' academic preparation and feelings about their preparation by including high school grades, SAT scores, and self-rating on academic ability (obtained from the Freshman Survey) in the first block of variables.

Seven background variables were positively associated with academic adjustment to UCLA: being white; academic preparation (high school grades and SAT composite); self-ratings on academic ability, writing ability and emotional health; and intending to change one's career choice. The five negative predictors of academic adjustment include

feeling overwhelmed with all I had to do (from high school), working for pay, attending college because the student couldn't find a job, picking UCLA because many of its graduates go to top graduate schools, and being Asian-American/Asian. These last two variables are somewhat puzzling and suggest no obvious explanation. Perhaps the negative effect of being Asian-American may have something to do with the types of courses Asian American students choose to take. Another possible explanation for this difficulty may be that Asian American students may be less likely to feel that they are meeting academic standards or expectations because they have set relatively high standards for themselves. This may well be a cultural expectation which cannot be examined here.

Involvement

Given the fact that the dependent variable is a perceptual variable, the direction of causation with some of these other involvement variables is not entirely clear. Consequently, the reader needs to keep in mind that some of these associations in the involvement area might be the result of poor academic adjustment rather than the cause of it.

Six involvement variables entered the regression with significant weights. Students with good academic adjustment tend to rate themselves highly on academic ability, report that they have received honest feedback about their skills and abilities from faculty, and that a faculty, administrator, or staff member took a personal interest in them. Students with poorer academic adjustment are likely to have taken remedial courses, participated in student clubs/organizations, and feel overwhelmed with all they have to

do. It should be noted that feeling overwhelmed appears to explain the effects of several of the other variables in the analysis, including the pretest, feeling overwhelmed in high school, and the self-rating on emotional health from the freshman survey, not to mention the effect of hours spent participating in student clubs or organizations, difficulty in financing college (see below), and feeling the need to break away from home in order to succeed (see below).

Personal and Sociocultural

Five of the personal and sociocultural variables entered the regression with significant weights and remain significant. The strongest predictor of academic adjustment was experiencing “culture shock” when first coming to UCLA, followed by having difficulty financing one’s college education, the belief that most faculty underestimate the student’s ability, the belief that one needs to break away from home in order to succeed in college, and noting that the values of UCLA reflect those of the student. Since all but the last personal and sociocultural variable were negatively related to academic adjustment, these findings suggest that students will be most likely to have difficulty adjusting academically if they experience “culture shock” when they first arrive to UCLA, have difficulty financing their college education, and believe either that most faculty underestimate their ability or that one needs to break away from one’s family in order to succeed in college. While the causation is not clear, it is not surprising to find that students who believe that faculty underestimate their abilities will have trouble adjusting to UCLA academically. What is more puzzling is that students who feel the need to break away from their families in order to succeed in college will be more likely

to have trouble adjusting academically. Perhaps this item reflects the degree to which the student feels obliged to devote time and energy to the family and the corresponding sense that this felt obligation makes academic adjustment more difficult.

Predicting Social Self-image

The dependent variable, social self-image, is a composite measure composed of 4 items from the follow-up survey: social self-confidence; leadership ability; public speaking skills; and emotional health. Students were asked to rate themselves on these traits as compared to the average person their age using a five point scale ranging from “lowest 10%” to highest 10%.” The internal consistency (alpha) for the composite measure was .78.

Fifteen independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$, accounting for 61 percent of the variance in social self-image (adjusted R-squared = .5955, Multiple R = .7792). Table 5.10 displays the beta coefficients at selected steps for the variables that entered the equation.

First-Generation Effect

After all student input variables are controlled, first-generation status enters the regression with a significant weight (Beta = $-.08$, $p \leq .05$), demonstrating that first-generation status does—as hypothesized—have a direct negative effect on the student’s social self-image. This effect remains significant (Beta = $-.07$, $p \leq .05$) through the final step. The simple correlation of first-generation status with the dependent variable was twice as large ($r = -.14$) as the beta coefficient associated with it when it

Table 5.10 Predicting Social Self-image (n = 520)

Step	R-sq	Variables in the Equation	Simple r	Beta After 1 st Step	Beta After Inputs	Beta After FG	Beta After Involve- ments	Beta After Personal/ Socio- cultural
				1	5	6	12	15
1	.31	Pretest: Social self-image	.55	.55***	.55***	.54***	.38***	.34***
2	.33	Sex: Female	-.14	-.15***	-.12***	-.12***	-.07*	-.08**
3	.34	SIF Anticipate: Transfer to another college	-.15	-.11**	-.09**	-.09**	-.01	-.01
4	.34	Race: Asian American/Asian	-.13	-.07*	-.11**	-.10**	-.05	-.03
5	.35	SAT Composite	.01	.08*	.09*	.06	-.05	-.05
6	.35	College Generation: FG	-.14	-.10**	-.08*	-.08*	-.07*	-.07*
7	.47	FUS Self-rating: Drive to achieve	.44	.36***	.34***	.34***	.20***	.18***
8	.52	FUS Self-rating: Understanding of others	.43	.31***	.30***	.30***	.18***	.18***
9	.55	Academic self-image	.45	.38***	.39***	.38***	.24***	.23***
10	.56	FUS Activity: Held leadership position	.26	.17***	.17***	.17***	.13***	.13***
11	.58	FUS Activity: Taken an ethnic studies course	.14	.09*	.13***	.14***	.13***	.10***
12	.59	FUS Activity: Felt lonely/homesick	-.20	-.14***	-.10**	-.10**	-.11***	-.08**
13	.60	Difficulty: Making friends	-.33	-.20***	-.19***	-.18***	-.11***	-.10***
14	.60	There is a lot of racial tension	.16	.12***	.12***	.12***	.08**	.10***
15	.61	To "fit in" have to change personal characteristics	-.21	-.10**	-.10**	-.10**	-.07*	-.07*

***p ≤ .001, **p ≤ .01, *p ≤ .05

entered, which means that a good part of that correlation can be accounted for by the effect of other input variables.

Of these background variables, the effect of first-generation status is weakened somewhat by the entry of the pretest (social self-image as a freshman) at step one: the simple correlation ($r = -.14$) between first-generation status and the dependent measure is reduced when freshmen social self-image enters (Beta = $-.10$, $p \leq .01$). This finding suggests that the effect of first-generation student status on social self-image four or five years after college entry can be explained in part by the fact that first-generation students' social self-image is already relatively low when they enter college. The effect of first-generation status is reduced again (Beta = $-.06$, $p \leq .01$) at the 9th step when academic self-image enters. It thus appears that part of the reason why first-generation students' social self-image is poor is because they tend to have poor academic self-images.

Background Characteristics

Five background variables entered the regression with significant weights. A direct pretest was available for social self-image and not surprisingly, it proved to be highly correlated with the outcome variable ($r = .55$). The pretest remains significant through the final step (Beta = $.34$, $p \leq .001$) and proves to be the strongest predictor of students' social self-image four or five years later. The other entering background variables were Sex: Female, anticipating transferring to another college before graduating, Race: Asian American/Asian, and SAT composite. However, besides the pretest, only the negative coefficient for Sex: Female remained significant until the final

step, which suggests that the gender gap in social-self image that already exists among entering freshman tends to widen during the college years.

Involvement

Again, given the fact that these involvement measures were assessed at the same time as the items which make up the dependent variable, it is necessary to read these results with caution. Some of these variables were included on an exploratory basis to see what other variables from the follow-up questionnaire were related to the social self-image.

Six involvement variables entered the regression with significant weights. Social self-image at the time of the follow-up is positively associated with self-ratings on drive to achieve and understanding of others, academic self-image, having held a leadership position, and having taken an ethnic studies course. On the other hand, social self-image is negatively related to feeling lonely or homesick. However, since direct causation cannot be concluded, it is not known whether feeling lonely or homesick is negatively related to social-self image because students who are lonely or homesick may be less likely to get involved socially, or because having a poor social self-image tends to exacerbate feelings of loneliness. Smaller classes and the opportunity they provide for student interaction may in part explain why students who take an ethnic studies course may develop better social self-images.

Personal and Sociocultural

Of the personal and sociocultural variables, three entered the regression with significant weights and remained significant through the final step. Two of these were

related to a poor social self image: difficulty making friends and the belief that in order to “fit in” at UCLA it is necessary to change one’s own personal characteristics. Why believing that there is a lot of racial tension at UCLA should be positively related to social self-image is not clear. Perhaps students who see a lot of racial tension at UCLA are more likely to be social activists. Such students would also be developing their leadership and public speaking abilities—two of the items which make up the dependent variable, social self-image.

Predicting Academic Self-image

The dependent variable, academic self-image, is a composite measure composed of 3 self-ratings from the follow-up survey: intellectual self-confidence; academic ability; and mathematical ability. Students were asked to rate themselves on these traits as compared to the average person their age using a five point scale ranging from “lowest 10%” to highest 10%.” The internal consistency (alpha) for this composite measure is .70.

Thirteen independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$. These 13 variables accounted for 57 percent of the variance in students academic self-image (adjusted R-squared = .5588, Multiple R = .7549). Table 5.11 displays the beta coefficients at selected steps for the variables that entered the equation, as well as for the first-generation status variable which did not enter.

Table 5.11 Predicting Academic Self-image (n = 516)

Step	R-sq	Variables in the Equation	Simple r	Beta	FG	Beta	Beta	Beta
				After 1 st Step	lost Signif.	After Inputs	After Involve- ments	After Personal/ Socio- cultural
				1	2	6	12	13
1	.27	Pretest: Academic self image	.52	.52***	.45***	.38***	.31***	.30***
2	.31	SAT composite	.37	.23***	.23***	.23***	.21***	.19***
3	.34	Sex: Female	-.31	-.20***	-.17***	-.17***	-.12***	-.12***
4	.36	When decision was made to go to college	.22	.16***	.10**	.12**	.07*	.07*
5	.37	Race: Asian American/Asian	.02	-.04	-.14***	-.11**	-.06*	-.05
6	.37	SIF Self-rating: Competitiveness	.23	.08	.11**	.09*	-.07*	-.06
7	.48	FUS Self-rating: Drive to Achieve	.44	.34***	.36***	.36***	.26***	.25***
8	.53	Social self-image	.45	.37***	.38***	.35***	.24***	.25***
9	.54	FUS Activity: Taken women's studies course	-.20	-.11**	-.08*	-.05	-.10**	-.09**
10	.55	FUS Self-rating: Writing ability	.33	.26***	.24***	.22***	.11**	.08*
11	.55	Faculty provided: Emotional support/encouragement	.03	.00	.01	.01	-.07*	-.08**
12	.56	FUS Activity: Tutored another student	.18	.11**	.10**	.10**	.06*	.06*
13	.57	Not ready for the academic demands	-.28	-.20***	-.17***	-.16***	-.13***	-.13***
Not in the Equation								
		College Generation: FG	-.19	-.12**	-.06	-.04	-.03	-.02

***p ≤ .001, **p ≤ .01, *p ≤ .05

First-Generation Effect

As expected, first-generation status has a negative correlation ($r = -.19$) with the post-test academic self-image. However, contrary to the hypothesis, it does not enter the regression equation. The effect of first-generation status is substantially reduced (Beta = $-.12$, $p \leq .01$) when the first background variable—the pretest academic self-image—enters and eventually loses its significance when the second background variable, SAT composite, enters. This finding suggests that first-generation status does not have a direct effect on academic self-image after the student enters college. Rather, the negative correlation between the posttest measure of academic self-image and first-generation status can be explained by the fact that first-generation students are more likely than other students are to come to college with poorer academic self-images and lower SAT scores.

Background Characteristics

Not surprisingly, students' academic self image when they enter college—the pretest—is the most powerful predictor of academic self-image four years later (simple $r = .52$, Final Beta $.30$, $p \leq .001$). In addition, four other background variables are also associated with a positive academic self-image: SAT composite, making an early decision to go to college, being Asian American/Asian, and self-rated competitiveness. The only variable which was associated with a poor academic self-image was Sex: Female. In other words, those freshman whose academic self-image tends to improve after they enter college tend to be men, Asian American/Asian, to have high SAT scores, and to have made an early decision to go to college.

Involvement

Six involvement variables entered the regression with significant weights and remained significant until the final step. Positively related to academic self-image were self-ratings on drive to achieve, social self-image, and writing ability; and having tutored another student. Two variables were found to be associated with a poor academic self-image: having taken a women's studies course or having had a faculty member provide emotional support and encouragement. As with the other analyses, causal inferences from these relationships should be made with caution.

Personal and Sociocultural

Only one of the personal and sociocultural variables entered the regression, in this case with a negative significant weight: "I wasn't ready for the academic demands of UCLA." While it seems reasonable that not being ready for the institution's academic demands would impact negatively one's academic self-image, we should recognize that the causation in this case could also work in the other direction.

Summary of Results for All Regressions

The purpose of the regressions just discussed was to see whether first-generation status has any effect on the six dependent measures under investigation: transition to college, undergraduate GPA, social adjustment to college, academic adjustment to college, social self-image, and academic self-image. For all six analyses the effect of first-generation status was assessed only after entering freshman characteristics were controlled. While first-generation status was correlated in the expected direction (i.e.,

negatively) with all six dependent measures, for three of these variables this relationship was eliminated by controlling for certain other input characteristics. In other words, for these three variables, their correlations with first-generation status were mediated entirely by other entering characteristics.

With regard to difficulty in making the *transition to college*, first-generation status enters the regression and remains significant until the last involvement variable enters. Part of the reason why first-generation students have a more difficult time making the transition to college is that they come from less affluent families and have lower SAT scores. These transition difficulties are exacerbated by the fact that first-generation students, once in college, are more likely to experience culture shock, to feel that they are caught between two worlds, to have difficulty in making friends and in dealing with the bureaucracy at UCLA, and to keep up academically.

The negative correlation of first-generation status with *undergraduate GPA* can be explained by the fact that first-generation students, compared with children of college graduates, enter UCLA with lower SAT scores and lower high school averages. Other factors that negatively impact on college grades include a felt need to break away from family in order to succeed in college and having difficulty paying for college expenses.

The negative correlation of first-generation status with *social adjustment to college* can be explained by two other entering freshman characteristics: the first-generation student's lower level of social self-confidence and lower level of financial support from parents. It was also found that students will be more likely to adjust socially to college if they do not experience culture shock when they first come to UCLA,

if they feel part of the academic community, and if they identify strongly with their ethnic culture or heritage.

First-generation status does have a direct negative effect on *academic adjustment to college*, although part of its simple correlation with academic adjustment can be explained by the fact that first-generation students' enter college with lower SAT scores and poorer self-concepts. It was also found that the difficulty experienced by first-generation students in adjusting academically can also be partially attributed to their feeling of being overwhelmed by all the things they have to do once they enroll in college. It was also found that students will be most likely to have difficulty adjusting academically if they experience "culture shock" when they first arrive to UCLA, have difficulty financing their college education, and believe (1) that most faculty underestimate their ability and (2) that one needs to break away from one's family in order to succeed in college.

First-generation status also has a direct negative effect on the student's *social self-image* while in college, but part of its simple correlation with social self-image can be attributed to the fact that first-generation students' social self-image and academic self-image are both already relatively low when they enter college. Difficulty making friends and the belief that in order to "fit in" at UCLA it is necessary to change one's own personal characteristics were also found to be related to a poor social self image, while the belief that there is a lot of racial tension at UCLA was positively related to social self-image.

The negative correlation of first-generation status with the student's *academic self-image* can be explained by the fact that first-generation students are more likely than other students to come to college with lower academic self-images and lower SAT scores. The variable "I wasn't ready for the academic demands of UCLA" also entered the equation negatively, suggesting that students base their academic self-images in part on whether they felt prepared for the academic demands of UCLA.

Regression Analyses: First-Generation Students & SSS participation

The purpose of this set of regression analyses is to determine if participating in the Student Support Service (SSS) program has an effect on the six dependent measures—transition to college, undergraduate GPA, social adjustment to college, academic adjustment to college, social self-image, and academic self-image—for first-generation students. However, since data revealed that 75 percent of the first-generation students ($n = 175$) in this sample utilized the Academic Advancement Program (AAP) "frequently" or "occasionally," I decided to include this program variable in the analyses as well to see if utilizing AAP also affected the dependent measures. AAP, which is UCLA's Education Opportunity Program, is the nation's largest undergraduate multi-racial and multi-cultural program working to promote academic excellence and to retain historically underrepresented and low-income students. As with the SSS program, AAP also offers its students academic counseling, tutoring, and peer counseling.

Two FUS questions were utilized to identify first-generation students who had participated in the Student Support Service Program at UCLA. Students were identified

as having participated in SSS if they either marked “yes” to the question, “Were you ever (or are currently) involved in any of the following TRIO program: Student Support Service (e.g., PLUS)” or marked “frequently” or “occasionally” to the question which asked them “How often did you utilize the services offered by the Program Leading to Undergraduate Success (PLUS).” AAP students were identified as those students who answered “frequently” or “occasionally” to the following question: “How often did you utilize the services offered by the Academic Advancement Program (AAP).”

Only first-generation students were included in these six separate regression analyses. Since these programs tend to target low income students and students considered to be “at risk” academically, academic preparation, income, and other potentially confounding background variables were controlled in the first block. The two program variables were included in the block following the input variables. In order for any independent variable to enter the regression equation it had to meet the criterion for entry which was set at $p < .05$.

Table 5.12 displays the effect of the two program variables for each dependent measure and shows the simple correlation and the Beta after inputs for SSS and AAP program participation only. As can be seen in Table 5.12, out of the six dependent measures, only one of the program variables entered an equation. With the exception of academic self-image, it appears that participating in SSS or AAP does not have an effect on any of the student outcomes.

Table 5.12. The Effect of SSS and AAP Participation Among First-generation Students (N = 233)

Dependent Variable	SSS Program Participation			AAP Participation		
	Simple r	Beta After Inputs	Entered Equation	Simple r	Beta After Inputs	Entered Equation
Difficult transition from home to college	.15	.07	NO	.18**	.09	NO
Undergraduate GPA	.01	.09	NO	-.03	.12	NO
Social adjustment to college	.04	-.02	NO	-.01	.00	NO
Academic adjustment to college	-.09	-.03	NO	-.18**	-.06	NO
Social self-image	.03	-.06	NO	.06	.05	NO
Academic self-image	-.10	.00	NO	-.04	.19**	YES

**p < .01

While it may be argued that the positive effects of AAP and SSS participation did not emerge because of the small sample size (i.e., Type II error), data revealed in table 5.12 suggests otherwise. Most of the (nonsignificant) correlations between SSS and the posttest measures were negative. Nevertheless, there may be effects on other dependent variables, that are not reflected with these dependent variables, which future research may be able to reveal.

Nevertheless, results suggests that first-generation students who utilize the services of AAP are more likely to raise their academic-self image than first-generation students who do not participate, in spite of the fact that the simple correlation between these two variables is non-significant and negative (-.04). Table 5.13 displays the particular student background variables that caused the coefficient for AAP participation to change signs and become significant. As can be seen in Table 5.13, once the first

Table 5.13. The Effect of AAP on Academic Self-Image

Step	Mediating Input Variable Entering	"Beta In" for AAP	p-value
1	Pretest: Academic self-image	+.07	NS
2	SAT Composite	+.21	.001
3	Sex: Female	+.20	.001
4	Race: Asian American/Asian	+.20	.001
5	When decision was made to go college	+.19	.002

variable enters—the students’ pretest academic self-image as freshmen—the coefficient changes direction and becomes positive. However, the coefficient does not become statistically significant until the second variable, SAT composite, enters the equation. When SAT enters, the coefficient increases to .21 ($p < .001$). In other words, once first-generation students’ pretest academic self-image and SAT scores are controlled, participating in AAP shows a positive influence on students’ academic self-image. Since first-generation students who utilized AAP tend to have lower SAT scores ($r = -.45$) than do students who do not participate, once you control for SAT scores the positive effect of participating in AAP academic self image is revealed. What we are seeing here are two “suppressor” effects (Astin, 1991), where the true effect of an independent variable (AAP participation) is “masked” by other independent variables. That is, since AAP participants have lower SAT scores and poorer freshman (pretest) academic self-images than non-participants do, it is not until these two input variables are controlled that the “true” effect of AAP participation can be observed.

The coefficient for AAP is relatively unchanged by the entry of the other three input variables—Sex: Female, Race: Asian American/Asian, and when the decision was made to go to college. By the time utilizing AAP enters at the 6th step, the coefficient is reduced only slightly to .19 ($p < .002$). In short, these findings suggest that participating in UCLA’s AAP programs tends to strengthen first-generation students’ academic self-image.

It should be pointed out, however, that there is a possibility that the “effect” of participating in AAP on the dependent measure, academic self-image, may be due to

chance. Since the two programs variables were allowed to enter in six different regression analysis, making a total of 12 opportunities to enter with the criterion for entry set at $p < .05$, it might be expected that one of these program variables would enter the regression equation significantly by chance (one in 20 would be exactly chance). Consequently, this finding should be taken with caution. (Note, however that the final p value for the effect is well beyond .05, i.e., .002.)

Other Findings from Separate Regressions for First-Generation Students

While the purpose of the set of regression analyses above was to determine if participating in the SSS program has an effect on the six outcome measures for first-generation students, they also revealed some of the other factors that contribute to students' development as reflected in these same six dependent variables. Therefore, this section briefly discusses the other variables which entered the regressions and demonstrated their predictive power over the six dependent variables—transition to college, undergraduate GPA, social adjustment to college, academic adjustment to college, social self-image, and academic self-image.

Predicting Difficulty in Making the Transition to College

Nine independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$, accounting for 37 percent of the variance in transition to college ($N = 218$, Multiple $R = .6042$). This analysis revealed that first-generation students with high SAT scores and those who feel that the values of UCLA reflect their own will tend to have an easier time making that transition from home to college. On the

other hand, students who live further away from home; feel lonely, homesick, or overwhelmed; work full-time while in college; experience difficulty dealing with the bureaucracy; experience culture shock; or have difficulty keeping up academically tend to have a more difficult time making the transition from home to UCLA. All of these variables except “the values of UCLA reflect my own,” also entered the regressions using the all students (i.e., first-generation students and children of college graduates). While there may be many possible explanations, it may be that first-generation students who feel that the values of UCLA do not reflect their own will have a difficult time with the transition because they are more conscious of the fact that most if the other students come from college educated families.

Undergraduate GPA

Fourteen independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$. These 14 variables accounted for 44 percent of the variance in students undergraduate’ GPAs ($N = 214$, Multiple $R = .6628$). This analysis revealed that first-generation students will tend to get poorer grades if they are attending college either because they cannot find a job or to get away from home; are not US citizens; spend more hours per week commuting, working for pay, doing childcare/babysitting, or participating in intramural sports, and who feel the need to break away from their family in order to succeed.

The only negative predictor which did not also enter the GPA regression for all students is hours per week spent on childcare/babysitting. This result is consistent with the finding that many first-generation students report having to continue performing their

family responsibilities at home while attending college (see next section where the open-ended results are discussed). Sadly, many of these first-generation students also commented that these family obligations often had negative academic consequences.

On the other hand, first-generation students will tend to get better GPAs if they have good high school grades, high SAT scores, a strong drive to achieve, utilize the career center, enroll in honors courses, and receive encouragement from faculty to pursue a graduate degree. (These last two variables, of course, could be the result of good academic performance rather than causes of it.) All of these same variables also entered the GPA regression for all students.

Social Adjustment to College

Thirteen independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$, accounting for 48 percent of the variance in student's social adjustment to college ($N = 214$, Multiple $R = .6938$). This analysis revealed that first-generation students who experience difficulty adjusting socially to UCLA are more likely to live with parents during the first two years of college, feel lonely or homesick, and experience difficulty academically.

On the other hand, first-generation students who are better adjusted socially to the UCLA experience tend to come to college with a positive view of themselves socially and emotionally, performed volunteer work in high school, and received advice about college from their parents. Once in college, they spend more time in student clubs/organization or socializing with friends, talk to faculty about personal problems, meet often with an academic counselor, utilize Letters and Science counseling, and had a

college official take a personal interest in their success. Interestingly, the two variables that did not enter the regression for all students were “met with an academic counselor” and “utilized Letters and Science Counseling.” This result suggest that academic counseling is of special importance for first-generation students. Considering that first-generation students receive relatively little advice about college before they enroll (see Chapter 4), this result is not surprising.

Academic Adjustment to College

Twelve independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$, accounting for 43 percent of the variance in the student’s academic self-image ($N = 214$, Multiple $R = .6539$). The negative predictors for first-generation students’ academic adjustment include being female, picking UCLA because many of its graduates go to top graduate schools, going to college because “I could not find a job,” “feeling overwhelmed with all I have to do,” taking a remedial class, hours per week spent commuting, having experienced culture shock, and feeling like faculty underestimate one ability. On the other hand, first-generations students tend to have an easier time adjusting academically to UCLA if they have good high school grades, rate themselves highly on writing ability in high school or on academic ability while in college, and feel that they values of UCLA reflect their own. Most of these positive and negative predictors also entered the academic adjustment regression for all students.

Social Self-image

Nine independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$. These 9 variables accounted for 60 percent of the variance in the student's academic self-image ($N = 219$, Multiple $R = .7753$). For first-generation students, a poor social self-image is related to being a woman, being Asian-American, and having a difficult time making friends. Freshman variables that predict having a positive social self-image in college include self-ratings on social self-image, drive to achieve, academic self-image, and understanding others. College variables associated with a positive self-image include hours per week spent on clubs/organizations and taking an ethnic studies course. The only variable that did not enter the regression for all students was hours per week spent on clubs/organizations. Since first-generation students are more likely to commute and live off campus, such organizations may represent their only opportunity to interact socially with other students.

Academic Self-image

Thirteen independent variables entered the regression equation significantly with the criterion for entry set at $p < .05$, accounting for 63 percent of the variance in the student's academic self-image ($N = 217$, Multiple $R = .7943$). Freshman predictors of a positive academic self-image include self-ratings on academic self concept, social self-image, drive to achieve, and writing ability, as well as SAT scores, and making an early decision to attend college. (Participating in AAP, as already indicated, was also a positive predictor.) A negative academic self-image for first-generation students is related to being female, being an Asian American, taking a women's studies course,

using tutoring, having a faculty member provide emotional support, and feeling one “was not ready for the academic demands of UCLA.”

Open-Ended Results

This section focuses on first-generation students' responses to the two open-ended questions located on the last page of the FUS (see Appendix B). Specifically, these questions asked students to briefly describe "what factors (personal and/or within the campus) helped make your adjustment to UCLA easier" and "what factors (personal and/or within the campus) made your adjustment to UCLA more difficult." According to Fowler (1993), when respondents answer questions in their own words, the range of answers will not be predictable ahead of time so the "idea is to create categories that group answers that are analytically similar and to differentiate between answers that are different" (p. 126). In addition, Fowler (1993) points out that for "such open-response questions, code development is an interactive process whereby the researcher identifies categories that emerge from the answers, as well as imposing order on the answers that are obtained" (p. 125).

Data from the open-ended questions were analyzed using this interactive process. Individual analyses of the surveys were conducted and each survey was reviewed several times in order to identify categories that emerged from the answers. However, to impose some order, the emerging categories were identified for each question. Therefore, this section focuses on the more salient categories of common answers and is divided into factors which made first-generation students adjustment more difficult, followed by those factors which made their adjustment to UCLA easier. While 233 first-generation students responded to the survey, only 211 provided responses to these questions.

Consequently, the following analysis is based on the responses of 211 first-generation students.

Adjustment Difficulties

While first-generation students' responses varied in length and in content, there were many common answers that several students identified as having made their adjustment to UCLA much harder. The categories that emerged were lack of knowledge, academic preparation, family responsibilities, commuting, financial difficulties or working, and lack of diversity.

Lack of Knowledge. Not surprisingly, many first-generation students (FG) noted that one of the factors which made their adjustment to UCLA more difficult was the lack of information or knowledge about college. For example, one student comments that his/her adjustment was made more difficult by the "lack of knowledge—the inside track—from lack of experience." This lack of information is also referred to by other first-generation students as not knowing the "the ropes" or "ins and outs" of college. For example,

FG: "I didn't know the ropes. I didn't know about dropping classes, or that I could be on a wait list and most likely get into the class. I took classes that were difficult because they were the only ones still open that would satisfy GE's. I had no interest in them, and since I was having financial difficulties (therefore working 35-40 hours) I did really bad."

FG: “Other things like all the bureaucracy and trying to figure out the ins and outs of the system. I felt overwhelmed at all the things I had to learn in the quarter system, which was different from the semester system in high school.”

While many students point out that having to deal with the “bureaucracy” at UCLA made their adjustment to UCLA more difficult, it is clear that for students with limited knowledge about college and how the “system works,” having to deal with the bureaucracy can be even more overwhelming. Moreover, while adjustment difficulties are associated with this lack of knowledge or “not knowing what to expect,” it appears that they are also a result of “not knowing when and how to ask for help.”

Interestingly, very few students connect this “lack of knowledge” to their first-generation status. According to one student, however, his/her adjustment to UCLA was made more difficult by “being the first in my family to go to a 4 year university” because in his words “I had many questions and no one to turn to, especially adults and counselors because it was just so difficult to get an appointment to see them.”

Academic Preparation. Another factor frequently cited by first-generation students is their level of academic preparation. As can be seen by the comments below, many students—particularly those who attend public high schools—felt that they had a more difficult time adjusting to UCLA because their high schools had not prepared them academically for college.

FG: “coming from the inner city LA where schools are less academically challenging.”

FG: “My high school did not prepare me for this challenge.”

FG: "Inadequate public school system."

FG: "I wasn't prepared like other students to attend college."

FG: "lack of academic preparedness"

FG: "I wasn't very prepared for college."

FG: "I feel that elementary, junior high school, and high school had not prepared me well for college."

FG: "It was hard to adjust to the demands of UCLA science courses solely based on my high school foundation."

FG: "Lack of intellectual challenge in high school; didn't prepare me academically."

However, it appears that for at least one student this lack of academic preparation resulted in lowering his or her academic self-confidence as well. This person writes: "[I didn't feel my high school prepared me well enough academically. I felt less intelligent than my peers my freshman year." While indirectly, other students demonstrated this lack of academic self-confidence by commenting that they felt like they were admitted to UCLA by mistake or revealing a fear of having to compete academically with other students at UCLA. It appears that students who feel they entered college less-well-prepared academically may suffer not only academically, but emotionally as well.

Family Responsibilities. One of the more interesting factors mentioned by first-generation students was having to deal with family "responsibilities," "obligations," or "commitments." Whether students lived at home while attending college or were obligated to "come home every weekend," this sense of responsibility or obligation to the

family seemed to make their adjustment to UCLA more difficult—particularly (as can be seen from the comments below) because it distracted them from school.

FG: “The factors that have made it most difficult have been living at home in Montebello and commuting. It is very hard to prioritize school when at home you have such a crucial role. Some of my duties would be cleaning, attending family functions, and working full-time to help mom. No matter how supportive mom is she still expects me to fulfill at least the working and cleaning part. And although she is not as forceful about family functions my cousins and uncles do not let me live it down. So usually I still feel pressured to attend.”

FG: “Going home to a single parent and two siblings (younger) every weekend, though the latter take up most of my time and frequently worry me with family/growing up issues. I am very close to them and do not regret my choices (though it has affected me academically).”

FG: “Strong ties to family. The idea that I have to help with family responsibilities in order for family to continue forth. Breaking away from family responsibilities and the guilt made it a more difficult experience.”

FG: “Home life—background had many undesired results. Family—my obligations had my heart at home and my mind in school.”

These comments show that many first-generation students feel a strong sense of obligation to their families while they are attending college—so much so that the full experience of “going away to college” may not be possible for some of these students. As one student points out, not being able to give school a high priority can have serious

academic consequences. These comments also demonstrate how some first-generation students have to regularly step into two worlds—their home world and their academic world—both of which place heavy demands on them.

Commuting. Besides having family obligations to contend with, for some students the mere hassle of having to commute made “adjusting to UCLA extremely difficult.” While one student mentioned that having to commute a long distance was a “waste of time and energy,” for other students it meant giving up opportunities for personal development because there was less time to spend socializing on campus. For example, one student says, “Commuting did not allow me to live with other students and interact with them on a daily basis. This did not allow me to overcome my shy nature.” Another student writes, “the fact that I commuted my freshman year made life at UCLA harder. I felt more disconnected from UCLA life than my friends who lived on campus.” Such comments suggest that commuting makes students’ adjustment more difficult not only because it wastes their time and energy, but also because it minimizes their opportunity to meet people and to interact with others on campus—in other words, to become socially integrated (Tinto, 1993).

Financial Difficulties/Working. Financial difficulties and having to work were frequently cited by first-generation students as interfering with their adjustment to UCLA. Many students referred to their “financial problems,” “financial burden,” “money problems,” or “financial situation” as negatively contributing to their adjustment to UCLA. These financial difficulties, as can be seen by the comments below, force

many students to work long hours—with some students reporting that they basically had to work full-time while attending UCLA.

FG: “The fact that my parents refused to pay their expected family contribution created tension between us and increased my financial burden. (I had to get a full-time job, which caused me to struggle academically).”

FG: “Having to work to earn some money left me with few hours to spend on my studies.”

FG: “Having to support myself. Working and going to school, this was especially difficult if I got sick.”

FG: “Working—I have to work full-time to pay for my bills and expenses.”

FG: “Working 30+ hours a week.”

FG: “My parents cannot help me financially so the burden is all on me. My first year I was working about 20 hours a week in order to pay my tuition and housing. This definitely reflected on my grades.”

As with commuting, having to work many hours curtailed the time available studying and socializing on campus.

Diversity Problems. While it was not commented on as frequently as having to work or commute, some students did make it a point to explain that many times the difficulty they experienced adjusting to UCLA was due to the fact that they felt alone or stigmatized. While UCLA prides itself on its “diverse” student body, some first-generation students—especially those from the most underrepresented groups (Latinos

and African American)—felt that there were too few other students from their particular racial/ethnic group. For example,

FG: “The cultural insensitivity of UCLA. Lack of advising that has a personal touch. Although UCLA claims there is diversity in the student population there is no diversity in the everyday life of UCLA (classes, advising, environment, professors).”

FG: “I felt very alone. I was the only Mexicana in my hall my 1st year in the dorm and it was difficult to meet people. I felt like I did not belong. I felt alone in a huge campus and very distant from friends and family.”

FG: “Many times I felt stigmatized. I felt that because I was a Mexicano, dark complexion and a Latino surname, I was part of the quota and did not earn a spot. I felt though I was simply a token. Walking around campus and seeing so many persons that didn’t look like your neighbors or persons from your town makes it incredibly difficult to adjust and to feel understood.”

FG: “A lot of the time I felt like I was one of the few Latinos on campus. This made me feel uncomfortable when certain issues that dealt with minorities were discussed in class.”

These comments suggest that, for at least some underrepresented students on campus, the relative lack of diversity makes adjusting to UCLA more difficult. It appears that what these students perceive as the lack of diversity affects their adjustment negatively because it makes them feel stigmatized, alone, and like they do not belong at UCLA.

Facilitators of Adjustment

Despite the difficulties noted above, there were also several personal as well as institutional factors which appear to make these first-generation students' adjustment to UCLA easier. The positive categories that emerged were family support, friends, living in the dorms, having a part-time job on campus, and participating in AAP.

Family Support. While in some cases it was family responsibilities that interfered with students' adjustment, it was much more common to find that family support contributed to their positive adjustment to UCLA. As illustrated by the comments below, many students considered family support an important factor in their adjustment to UCLA.

FG "Parents that understand the importance of a college education, although they may have not fully understand the real academic demands."

FG: "The support of my family and roommate have helped me adjust to UCLA."

FG: "The support of my family helped make my adjustment easier."

FG: "Family support, love and enthusiasm have helped me to adjust to UCLA and cope with any difficulties I have experienced at UCLA."

FG: "support my parents gave me"

FG: "Another factor that helped me adjust at UCLA has been the support of family and friends."

FG: "The support I received from my family."

FG: "A strong family support."

FG: "Friends and family support."

While it is clear that family support plays a crucial role in many students' adjustment, it is also evident that the support from their siblings who have attended UCLA can be extremely valuable as well. Many students commented on the fact that their adjustment was made easier because of a brother or sister attending UCLA before or at the same time as they were.

FG: "My sister who graduated from UCLA helped me and gave me advice."

FG: "My brothers and sisters all went to UC campuses, so they gave me advice about college life. Furthermore, my brother attends UCLA and he is also a science major, so he tutored me in subjects I did not understand."

FG: "I had my older sister there with me my first 2 years of college. We even roomed together those two years. Having my sister there and working for a support [program] helped make my adjustment to UCLA a lot easier."

Therefore, it appears that first-generation students with siblings in college benefit not only from the support and advice they are able to receive from an experienced Bruin, but also from the help some siblings may be able to provide in certain subjects with tutoring.

Friends Attending UCLA. While family support is clearly an important component contributing to an easier adjustment, by far the most frequently cited factor was friends. As the comments below illustrate, adjusting to UCLA was easier if students already had friends attending UCLA already or if they had friends who came from the same high school.

FG: "Having friends attending UCLA."

FG: "The support of my friends was also a strong factor."

FG: "Having friends who were already attending UCLA.

FG: "During the first quarter in college, I hung out with my high school friends, thereby feeling a sense of belonging."

FG: "Friends from high school."

FG: "Many high school friends also attended UCLA and I get support from them and family."

FG: "Friends from high school also going to UCLA. Living together in dorms and attending the Freshman Summer Program made adjustment easier."

FG: "I had many friends from high school that also attended UCLA with me."

FG: "Friends from high school that also attended UCLA."

FG: "Attending college with friends from high school."

FG: "Friends from high school also attending UCLA."

FG: "Having friends from the same high school in the same university made me feel less uncomfortable in a new environment."

It appears students who have high school friends already attending UCLA are frequently able to get support from them, feel more comfortable, and/or to develop a sense of belonging that results from seeing a familiar face. However, the comments below demonstrate that while having friends at UCLA could ease students' adjustment, making new friends was also an important positive factor in student adjustment—particularly if they were able to meet people who either share similar interests, related to what they were feeling as a new student, or served as mentors.

FG: “Making friends at UCLA because they are in the same situation as me and need to make the same adjustments.”

FG: “Connecting with other people who share common interests or similar experiences in life.”

FG: “I think making the connection with other students helped make adjusting to UCLA easier.”

FG: “Meeting people who were also trying to adjust to this new life helped me because we were able to support each other and grow together.”

FG: “My roommates were going through much of the same feelings and problems as I was at the time and that made things a little easier, having people that are experiencing what you’re experiencing.”

FG: “Finding people who had similar interests, goals, and philosophies, etc.”

FG: “The major factor which kept me at UCLA was my peers. Once I found people who were similar to me (family, SES, high school background) the transition became a little easier. The demands of UCLA can be very overwhelming. Having the ability to speak about them with someone who can understand you makes things more bearable.”

FG: “Older students who have experience with classes, etc..”

FG: “Several friends (Korean) help and provide information. I was not lonely because of them in UCLA campus.”

FG: “Having a couple of mentors who showed me the ropes.”

These comments show that friends play a crucial role in students' adjustment to UCLA. Friends cannot only help students feel more comfortable around campus, but also serve as mentors. However, as the next three sections illustrates, it is not only making friends that is important but also finding a place where you one develop these friendships as well.

Dorms. Considering the important role that friends can play it is not surprising to find that living in the dorms eased students' adjustment by providing them with the opportunity to socialize and meet new people.

FG: "My roommates and the positive attitude portrayed by my RA in the dorms freshman year really made adjusting to life at UCLA much easier for me. I felt I had a very supportive group of people living with me and that helped me get through the overwhelming days."

FG: "Socially speaking, living in the dorms my freshman year helped me delve into the UCLA community and met a lot of new people."

FG: "The friends I made during my freshman year in the dorms helped me emotionally."

FG: "Living in the dorms helped me meet new people and provided many resources geared toward welcoming new students and helping them."

FG: "Living in the dorms made it really easy to meet a lot of people. I am still close with many of them."

FG: "Living in the dormitory with many other people in similar situation."

FG: “Dorm life and all the social opportunities available in the dorms (e.g., floor outings, special dinners, etc.) were really wonderful in helping with the transition to UCLA life.”

FG: “Staying in the dorms helped because you meet a lot of people—roommates especially.”

FG: “My floor in the dorms was great. I made lifelong friends. They helped me adjust to my new environment.”

Through the social activities and central location, living in the dorms provided students with a greater chance of meeting people—particularly other students who could relate to being a new student. However, for one student living in the dorms also “brought safety, stability and comfort.” It is clear that students benefit greatly from living in the dorms and in some cases can have a more difficult time adjusting if they are not able to live in the residence hall. Indeed, many students said specifically that they would have had an easier time adjusting if they had been able to live in the residence halls.

Part-time Job on Campus. The comments below reveal that, much like living in the dorms, working at a part-time job on campus can provide students with an opportunity to meet people and develop friendships.

FG: “Having a part-time job filled my time between class and let me meet new friends.”

FG: “I worked at a food service job and that allowed me to actually meet and become friends with people. This then led to feeling a little better about myself socially.”

FG: “An on-campus job that worked around my quarterly schedule, people I work with (on-campus).”

AAP Participation. Interestingly, while not revealed in the multivariate analyses, participating in a retention program was often cited by first-generation students as something that contributed positively to their adjustment to UCLA. The three most frequently cited programs were AAP, followed by the Freshman Summer Program (FSP, which is sponsored by AAP) and UCLA’s SSS program, PLUS. However, PLUS was only mentioned a few times and was almost always mentioned along with AAP. In other words, most students who cited the benefits of the PLUS program also mentioned AAP.. Specifically, twenty-two students acknowledged AAP as having contributed positively to their adjustment to UCLA. While it is only 13% of the first-generation students who participated in AAP, it is important to remember that these responses were spontaneous and located on the back of the survey. Out of all the possibilities, 13% spontaneously identified AAP.

The following comments are typical of those given by students who felt that AAP exclusively made their adjustment to UCLA easier.

FG: “My AAP counselor helped me a lot in coping with my feelings of alienation.”

FG: “AAP office made my experience a little easier. Being able to see that other students besides myself are also struggling or experiencing difficulty. I felt almost a connection with other students and wasn’t afraid to ask questions during

tutoring sessions. Also it gave me a chance to talk and interact with other minority students.”

FG: “Being a member of AAP really made things easier.”

FG: “Becoming involved with AAP activities (tutoring, counseling, rallies, etc.) has helped me come to terms with Affirmative Action and the role it played in my application to UCLA.”

FG: “The Academic Advancement Program—it’s counseling and tutoring services.”

FG: “...UCLA was very overwhelming so the Academic Advancement Program really helped me a lot. AAP was my support, both in terms of tutoring and counseling. Without AAP during my first 2 years here, I don’t know what I would have done.”

FG: “Academic services such as AAP facilitated the transition from high school to college.”

FG: “The academic transition from high school to college was difficult and needed to depend on AAP tutors and counselors more than I could imagine. AAP does provide a nice environment that seemed to welcome me to UCLA.”

FG: “I took advantage of the AAP tutorial program during the first two years in UCLA, they provided me with extra help on my academic demands so my pressures were reduced.”

It appears that many students believe that they benefited greatly from the counseling and tutoring AAP has to offer. In some cases it appears that AAP also helped students deal

with feelings of alienation and come to terms with affirmative action concerns. Perhaps it is the “welcoming environment” AAP provides—as one student put it—that helps students to feel comfortable enough to talk about such delicate issues of alienation and affirmative action.

As mentioned earlier, students also frequently reported that participating in the Freshman Summer Program (FSP) offered by AAP helped make their adjustment to UCLA easier. FSP enables students to earn units towards their degree and to become familiar with the campus by allowing them to take classes during the summer and live in the residence halls. However, students who participate in FSP also are expected to become involved in the social, cultural, and recreational activities that have been designed especially for them. Given the variety of opportunities FSP has to offer students to get involved and take classes, it is not surprising that four or five years after entering college students would still recall FSP as making an important contribution to their adjustment to UCLA.

FG: “I also went to the Freshman Summer Program which helped me meet new people and learn the ropes of how to survive at UCLA.”

FG: FSP gave me the opportunity to meet many good friends which have been a large part of my support system.”

FG: “The Freshman Summer Program offered through the Academic Advancement Program along with the tutorial and peer counseling services that followed.”

FG: “AAP helped the transition be smoother with the Freshman Summer Program (FSP).”

Summary

These open-ended responses are generally consistent with what we would expect from the normative data presented in Chapter Four. In other words, it is not surprising to find that students will have a harder time adjusting to UCLA if they arrive with little information about college, are less-well-prepared academically, have a heavy amount of family responsibility at home, have to commute, experience financial difficulties, and/or cannot relate to people on campus. Similarly, it seems reasonable to find that students will be more likely to have an easier time adjusting to UCLA if they receive family support, have or made friends at UCLA, live on campus, have a part-time job on campus, and participating in AAP or other retention programs.

One discrepancy worth noting is the fact that, while the results of the multivariate analyses did not suggest that first-generation students will have an easier time adjusting to UCLA if they participate in PLUS and AAP, the open-ended results presented here suggest otherwise. Several students reported that their adjustment to UCLA was made easier because of PLUS, AAP, or FSP. Perhaps if the longitudinal data had included outcomes measures such as “sense of belonging” or “feelings of alienation,” the empirical analyses would have confirmed these open-ended findings. Perhaps not. Nevertheless, these open-ended responses suggest that these retention programs are making an impression on many first-generation students. The unsettled question at this

point is whether first-generation students who do not participate in these programs are somehow able to attain similar benefits by other means.

While it was not the focus here, it is worth mentioning that many children of college graduates also reported that they benefited from AAP. However, in almost every such case the free tutoring (as opposed to the counseling or any other component of AAP) was specifically mentioned as a significant source of help. As with the first-generation students, children of college graduates have a harder time adjusting if they are either less-well-prepared academically, have to commute, encounter a lot of bureaucracy, and experience financial difficulties; and they report having an easier time adjusting if they are able to live in the dorms during their 1st or 2nd year and have or are able to and meet friends at UCLA. Both first-generation students and children of college graduates also commented on the large class sizes and the size of the institution as a factor which made their adjustment to UCLA more difficult. Lastly, both groups of students pointed out the benefits of getting involved in campus life in general and how that helped make their adjustment easier.

CHAPTER SIX

CONCLUSION

This final chapter reviews, synthesizes, and discusses the findings reported in Chapter Four (national profile of first-generation students) and Chapter Five (sample descriptives, multivariate analyses, and open-ended results). In order to present the many findings concisely, this chapter is divided into three sections. First, an overview of the study is provided. Next, findings are summarized within the context of the hypotheses and research questions. Finally, the implications of the findings, as well as limitations and recommendations for future research, are discussed.

Overview

First-generation college students—those whose parents did not attend college—are expected to enter colleges and universities in increasing numbers in the next decade (Terenzini et al., 1996; Chaffee, 1992). Preliminary research on this population has demonstrated that first-generation college students do differ in important ways from children of college graduates (Terenzini et al., 1996). First-generation students are more likely than students whose parents are college educated to come from lower income homes, to have less information and/or knowledge about college, and to arrive at college less-well-prepared academically (Nunez, Cuccaro-Alamin, & Carrol, 1998; Terenzini et al., 1996; Billson & Terry, 1982). Considering the various obstacles first-generation students encounter along the path to a college degree, those who are admitted to an

institution—particularly a selective institution such as UCLA—are already “successful” in the sense that they have made it further than many would have expected. Sadly, of those first-generation students who are admitted to a university, many do not make it to graduation day. Some research has already demonstrated that the mere fact of being first-generation puts the student at risk of not succeeding (Barahona, 1990). Yet, the fact that this student population has not been well researched has served to limit our understanding of how they are affected by the college experience. Specifically, more research focusing on the factors in the college environment which facilitate or inhibit first-generation students’ adjustment to college and academic achievement is needed—especially since they are expected to become a growing presence in our institutions.

The specific purpose of this study has thus been to (1) understand first-generation students by providing a national portrait of who they are and how they compare to children of college graduates; and (2) explore the factors which facilitate or impede first-generation students’ transition to college, academic and social adjustment, and academic and social self-image in a selective four year institution. In short, this study was undertaken with the intention of broadening our knowledge and understanding of first-generation college students.

Data collection and analyses proceeded as follows. First, analyses were conducted using data from the Cooperative Institutional Research Program (CIRP), an annual national survey that collects information on a variety of student characteristics from a large national sample of the freshmen enrolling each fall in different types of institutions all over the United States. A total of 36,767 first-generation students and

167,483 students who were children of college graduates were selected from the 1997 CIRP survey. Descriptive analyses were carried out to explore how first-generation students compare to children of college graduates nationally. Second, longitudinal survey research was used to conduct an in depth study of first-generation students attending the University of California, Los Angeles (UCLA), a major public research university. Using a follow-up survey (FUS) instrument specifically designed for this longitudinal study, two cohorts of students who had been previously surveyed as entering freshman at UCLA (in 1994 or 1995) were resurveyed in Winter 1999, four to five years after they first entered college. Both cohorts included first-generation students (N= 233) and students whose parents were college graduates (N =324). Descriptive statistics and multivariate analyses were used to analyze the longitudinal data set. The multivariate analyses focused on six outcome measures: transition to college, undergraduate GPA, social adjustment to college, academic adjustment to college, social self-image, and academic self-image. Finally, qualitative analyses were conducted on first-generation students' responses to open-ended questions on the FUS.

Summary of Findings

This section will discuss the results reported in Chapters Four and Five. However, given the substantial number of findings presented in these two chapters, the following discussion will center around the hypotheses and other interesting findings which are not directly addressed by the hypotheses or research questions. This section ends by revisiting the research questions outlined in Chapter One. Implications of these

findings will be discussed in the last section of this chapter.

Hypothesis #1: Compared to children of college graduates, first-generation students will expect to cover more of their college costs from work, scholarships and loans, will be more concerned about their ability to finance their education, will report having applied to fewer colleges, and will be more likely to attend a college close to home.

Hypothesis #1 was supported. This hypothesis was based on the following rationale: having had little or no experience with college, parents of first-generation college students, compared to children of college graduates, will be less able to provide their children with information about the college application process, institutional costs, financial aid, and college life in general. In addition, given the more limited economic resources of many first-generation students (Billson and Terry, 1982; Barahona, 1990; Terenzini, et. al, 1996; TERI, 1997), they would be less able to afford to apply to many schools or to move away from home.

The descriptive results presented in Chapter Four clearly support this hypothesis. About one-third of the first-generation students reported expecting to cover some of their first year's educational expenses from the money they receive from a Pell grant, as opposed to only about one in seven of the children of college graduates. This result no doubt reflects the fact that Pell grants are awarded on the basis of financial need. In addition, compared to children of college graduates, more first-generation students also expect to use loans to pay for at least some of their educational expenses. With regard to

work, more first-generation students expect to help pay for college through full-time work while attending college, while more children of college graduates will use money they saved from a summer job.

It is clear that first-generation students are also much more concerned about how they are going to pay for college. Nearly three-fourths of them are concerned that they will not have sufficient funds to finance their college education, compared to a little over three-fifths of the children of college graduates. It is thus not surprising to find that first-generation students are more likely to attend a college close to home: nearly three-fourths attend a college which is within 100 of their home, compared to a slightly over half of the children of college graduates. As would be expected given their greater financial concerns, more first-generation students (39 percent) than children of college graduates (22 percent) live with parents or relatives while attending college.

Lastly, results presented in Chapter Four also show that more first-generation students (44 percent versus 29 percent for children of college graduates) apply to only one college—the one they are currently attending—while more children of college graduates (57 percent, compared to only 42 percent for first-generation students) apply to two or more other colleges.

Hypothesis #2: When noting how important certain factors were in their decision to go to college, first-generation students (compared to children of college graduates) will be more likely to indicate as very important the following reasons: "to be able to get a better job," "to be able to make more money," and "to prove to others I could succeed."

Hypothesis #2 was supported. The rationale for this hypothesis was that the parents of first-generation students, coming more often from working class backgrounds (London, 1989, 1992, 1996), would be more likely to convey an instrumental view of the importance of going to college. On the other hand, college educated parents would be more likely to encourage their children to see the purpose of college in the tradition of the liberal arts. Thus, while first-generation students would be more interested in benefiting from the "social mobility" that college attendance may bring, children of college graduates would be more inclined to see college as a place to learn, to gain an appreciation of ideas, and to become a more cultured person.

Evidence to support this hypothesis is also derived from the descriptive results presented in Chapter Four. First-generation students were more likely than the children of college graduates to report financial reasons for attending college: "to get a better job" and "to make more money." Similarly, first-generation students were twice as likely (10 percent) as were children of college graduates (5 percent) to report that they were attending college because they "could not find a job." This suggest that one first-generation student in ten would not be in college if they could have found a job. And as expected, children of college graduates are more likely than first-generation students to

report that they are going to college “to learn about things” and “to become a more cultured person.”

It was expected that since first-generation students often have more obstacles to face (e.g., fewer financial resources, poorer academic preparation) and are breaking away from their family tradition of non-college attendance, they would have a greater expressed desire to prove to others that they could succeed. This was also found to be true. In fact, the largest difference between these two groups in their reasons for attending college is wanting “to prove to others I could succeed,” with 49 percent of the first-generation students noting it as very important compared to 36 percent of the children of college graduates.

Hypothesis #3: First-generation students have a more difficult time with the transition to college than do children of college graduates.

Hypothesis #3 was supported. The rationale underlying this is that first-generation students—being the first in their family to attend college—will experience more difficulty making the school-to-college transition because they arrive with very little information about college and what to expect (cultural capital).

The multivariate results reveal that first-generation students, compared to children of college graduates, have a more difficult time making the transition from home to college. Part of the reason for these difficulties in ease of transition is that first-generation students come from less affluent families and are less-well-prepared academically than children of college graduates are. Nevertheless, the multivariate

results show that even if we were to match first-generation students and non-first-generation students on parental income and academic preparation, the first-generation students would still have a more difficult time with the transition to college.

Hypothesis #4: Participating in the SSS program eases the process of transition to college among first-generation students.

Hypothesis #5: Being involved in the SSS program enhances the academic and social adjustment of first-generation college students.

Hypotheses #4 and #5 were not supported. These two hypotheses were both based on the realization that the goals of the SSS program are to help students with their transition to and adjustment in college. If the goals of this program are being met, first-generation students who participate in the program should have an easier time transitioning and adjusting than those who do not participate.

The multivariate results produced little evidence to support these hypotheses. In fact, the regression analyses for all six outcome measures—including transition to college and academic and social adjustment—revealed that SSS participation was not positively related to any of these outcomes. It should be noted that those few students who acknowledge in their open-ended responses that the PLUS program helped them to adjust to UCLA almost always mentioned PLUS and the Academic Advancement Program (AAP). Since PLUS and AAP are housed in the same building and share many of the same goals and resources, it may be that some SSS students who do not distinguish

between the two programs and are likely to confuse PLUS with AAP (the larger of the two programs). As will be discussed later in “additional findings,” many more first-generation students cited AAP as a positive factor in their adjustment at UCLA

Hypothesis #6: Being a first-generation college student will be negatively associated with academic achievement (as measured by college GPA). These effects will be partially attributable to other entering characteristics that are confounded with first-generation status, and partially attributable to other direct effects of the cultural capital associated with being a first-generation student.

Hypothesis #6 is only partially supported by the results. Given that previous research (Barahona, 1990) suggests that first-generation student status continues to exert a unique negative influence on persistence even after a variety of background characteristics are controlled, it was hypothesized that the same may be true for college GPA. The expectation here is that academic performance will be enhanced by academic preparation and by cultural capital.

Evidence suggests that first-generation status does not have a direct effect on student’s undergraduate GPA. While first-generation status was—as hypothesized—found to have a negative correlation with undergraduate GPA, this correlation is accounted for almost entirely by the fact that first-generation students tend to be less-well-prepared academically than are children of college graduates. In other words, once their lower high school grades and lower SAT scores are taken into account, first-generation students do just as well academically as do children of college graduates.

Therefore, since entering characteristics that are confounded with first-generation status do account for this negative effect, other direct effects attributable to the cultural capital associated with being a first-generation student are not evident.

Additional Findings

The Decision to Go to College. Descriptive results presented in Chapter Five reveal that many first-generation students do not make the decision to attend college until middle school or later. Evidence also shows that before they attend college, first-generation students overall receive less information or advice about college from all sources—parents, other relatives, friends—except high school teachers/counselors. First-generation students are also more than twice as likely as children of college graduates are to report that they are attending UCLA because of advice they received from a teacher. It may be that first-generation students are seeking advice or information from high school teachers and counselors because school personnel may be among the few people they know who have college degrees. In short, this pattern suggests that counselors and teachers are playing an important role in first-generation students' decision to attend college.

Family Encouragement/Support. Results present a mixed picture of the role that parents and family play in the college experience of first-generation students. While it is clear that first-generation students (compared to children of college graduates) receive less advice or information about college from parents, most first-generation student agree that their parents/family support them in their educational pursuits and understand the

academic demands that are being placed on them. Yet, first-generation students are slightly more likely than are children of college graduates to report that their “parents expect me to spend time with them most weekends, even if I have a lot of homework or studying to do” and substantially more likely to feel the need to “break away from my family in order to succeed in college.” In this connection, students who feel the need to break away from their family in order to succeed tend to experience more difficulty with respect to academic adjustment and GPA. The fact that many first-generation students feel a strong sense of obligation to their families and are still expected to take on many responsibilities at home while they are attending college (as evident from the open-ended results) may explain why so many first-generation students may feel that they must break away from family in order to succeed in college.

AAP Participation. While not revealed in the multivariate analyses, evidence from the open-ended results suggest that participating in a retention program contributes positively to first-generation students’ adjustment to UCLA. The three most frequently cited programs were AAP, followed by the Freshman Summer Program (FSP)—which is sponsored by AAP, and PLUS (UCLA’s SSS program). (As already noted, most of the students who cited the benefits of the PLUS program also mentioned AAP.) Many students apparently believe that they benefited greatly from the counseling and tutoring AAP has to offer, despite the negative finding from the longitudinal data. The open-ended responses also suggest that AAP helps students to deal with feelings of alienation. One student even commented that AAP helped him “come to terms with affirmative action and the role it played in my application to UCLA.” Perhaps it is the “welcoming

environment” AAP provides—as one student put it—that helps students to feel comfortable enough to talk about such delicate issues of alienation and affirmative action.

SAT Mediation. Since the student’s SAT composite score entered four of the six regression analyses, it seems clear that students with high SAT scores tend to have an easier time making the transition from home to college, get better undergraduate GPAs, adjust more readily to the academic demands of college, and develop a more positive social self-image while in college. In addition, the correlations of first-generation student status with three of the outcomes measures—transition to college, undergraduate GPA, and academic adjustment—were mediated in part by the student’s SAT score. In other words, the multivariate analyses show that the negative correlations between first-generation status and these three outcomes can be accounted for in part by the fact that (a) SAT scores correlate positively with these outcomes, and (b) first-generation students arrive at college with SAT scores that tend to be lower than those of children of college graduates.

Research Questions

This investigation was guided by five research questions (Chapter One) that were geared toward broadening our knowledge of first-generation college students. The findings discussed up to this point provide the following answers to these questions:

Question #1: To what extent do first-generation students nationally differ from children of college graduates in their pre-college characteristics? Are there

differences in the demographics, secondary school achievements and activities, reason for college choice, educational and career plans, values, beliefs, and self-concept of these two subpopulations?

In addition to the evidence available to support Hypotheses #1 and #2, the many findings presented in Chapter Four overwhelmingly confirm the expectation that first-generation students, considered from a national perspective, do in fact differ extensively from children of college graduates in their pre-college characteristics. Compared to freshmen whose parents are college graduates, first-generation freshmen tend to come from lower income homes, are more likely to be members of underrepresented racial/ethnic groups, are less well prepared academically, have lower degree aspirations and less confidence in their skills and abilities, and expect to take more remedial courses once they enter college. In addition, first-generation students apply to fewer colleges, attend college closer to home, and have greater concern about how they are going to pay for college. Finally, first-generation students are less likely to use personal computers and have spent less time volunteering, studying, exercising, participating in student clubs or groups, and socializing with friends. At the same time, they spend more time than do children of college graduates working and doing housework or childcare.

Since the particular focus of the longitudinal portion of this study was concerned with first-generation students attending a selective research university, national comparisons were also made between first-generation students and children of college graduates attending selective universities. Results show very much the same differences, although differences between first-generation students and children of college graduates

in academic preparation, degree aspirations, and career aspirations are somewhat smaller at selective universities than is the case for institutions in general. On the other hand, the income gap between these two groups is even wider in selective universities, as are the differences in concern about how they will finance their college education. In addition, it appears that many more first-generation students in highly selective universities tend not to be native English speakers or U.S. citizens.

Question #2: Do first-generation students feel like they are "caught between two worlds?" If so, to what extent does this feeling influence their transition to college?

Descriptive results presented in Chapter Five reveal that nearly half of first-generation students report frequently feeling "caught between two worlds," compared to less than one-fourth of the children of college graduates. Since this feeling is likely to be most prominent when one first enters college, it is not surprising that "feeling caught between two worlds" is also a negative predictor of transition to college for all students. In other words, students who feel like they are "caught between two worlds" are more likely to have a difficult time making the transition from home to college.

Question #3: What are the factors which contribute to the development of a social and academic self-image for first-generation college students?

Findings presented in Chapter Five reveal that a poor social self-image, for first-generation students, is related to being a woman, being Asian-American, and having a difficult time making friends. Freshman variables that predict having a positive social

self-image in college include self-ratings on social self-image, drive to achieve, academic self-image, and understanding others. On the other hand, college variables, that are associated with a positive self-image include hours per week spent on clubs/organizations and taking an ethnic studies course. The only variable that did not enter the social-self image regression for all students was hours per week spent on clubs/organizations. Since first-generation students are more likely to commute and live off campus, such organizations may represent their only opportunity to interact socially with other students.

For first-generation students, a negative academic self-image is related to being female, being an Asian American, taking a women's studies course, receiving tutoring, having a faculty member provide emotional support, and feeling one "was not ready for the academic demands of UCLA." Predictors of a positive academic self-image include self-ratings on academic self-concept, social self-image, drive to achieve, and writing ability, as well as SAT scores, making an early decision to attend college, and participating in AAP.

Question #4: What are the factors which contribute to the social and academic adjustment of first-generation college students at a selective university? Does SSS participation enhance social and academic adjustment to college for first-generation students?

Both the multivariate and open-ended analyses (Chapter Five) provide data to answer this question. It was found that first-generation students will be more likely to

experience difficulty adjusting socially to UCLA if they live with parents during the first two years of college, feel lonely or homesick, and experience difficulty academically. On the other hand, first-generation students who are better adjusted socially to UCLA tend to come to college with a positive view of themselves socially and emotionally, performed volunteer work in high school, and received advice about college from their parents. Once in college, they spend more time in student clubs/organizations or socializing with friends, talk to faculty about personal problems, meet often with an academic counselor, utilize Letters and Science counseling, and had a college official take a personal interest in their success. Interestingly, the two variables that did not enter the regression for all students were “met with an academic counselor” and “utilized Letters and Science Counseling.” This result suggest that academic counseling is of special importance for first-generation students.

First-generation students will have a difficult time adjusting academically if they are female, pick UCLA because many of its graduates go to top graduate schools, are going to college because they could not find a job, feel overwhelmed with all they have to do, take a remedial class, spend more hours per week commuting, experience culture shock, and feel like faculty underestimate their ability. On the other hand, first-generations students tend to have an easier time adjusting academically to UCLA if they have good high school grades, rate themselves highly on writing ability in high school or on academic ability while in college, and feel that the values of UCLA reflect their own. Most of these positive and negative predictors also entered the academic adjustment regression for all students.

When it comes to adjusting to UCLA in general, the open-ended responses revealed that first-generation students have an easier time if they receive family support, have friends or made friends at UCLA, live on campus, have a part-time job on campus, and participate in AAP or other retention programs. However, multivariate evidence provided for Hypothesis #5 failed to support the view that SSS participation enhances social and academic adjustment to college among first-generation students.

Question #5: After student background characteristics, which are often confounded with being a first-generation student are controlled, does first-generation status still put a student at a greater risk of not succeeding academically?

Evidence supporting Hypothesis #7 demonstrates that after student background characteristics which are confounded with being a first-generation student are controlled, first-generation status does not have a negative effect on undergraduate GPA. However, evidence supporting Hypothesis #3 and other findings reported in Chapter Five suggest that first-generation status does put a student at a greater risk of having a difficult time making the transition to college and adjusting academically to college, and impacts negatively on social self-image.

In the case of academic adjustment to college, first-generation status did not remain significant until the last step. Declines in the size of the coefficient for first-generation status occurred when two freshmen variables, self-rating on academic ability and SAT composite, entered the regression and then again when the involvement variable, “feeling overwhelmed with all I have to do,” entered the equation.

Implications

This section discusses the implications of the findings derived from this study. Theoretical implications are presented first, followed by implications for policy and practice. This section concludes with a discussion of the limitations of this investigation and suggestions for future research.

Theoretical Implications

The guiding theoretical frameworks for this study were Astin's Theory of Student Involvement and Tinto's Model of Institutional Departure. Given that there are very few theoretically based studies examining the impact of college experience for first-generation students, this study helps extend the scope of these two popular models by examining their applicability to first-generation college students.

Not surprisingly, the present study shows that first-generation students who get involved (Astin, 1984) and are academically and socially integrated (Tinto, 1987, 1993) into the UCLA community will be more likely to experience success in college. In other words, many of the findings from this investigation show that these models are generalizable to first-generation students. Qualitative data from the open-ended questions suggest that first-generation students had an easier time adjusting to UCLA if they made friends, lived on campus, had a part-time job on campus, and participated in AAP. First-generation students reported that living in the dorms and having a part-time job on campus helped them because it provided them with the opportunity to get involved

and make friends (i.e., social integration). Friends, in turn, helped students feel more connected to UCLA. On the other hand, AAP students were more likely to become academically integrated by utilizing the tutoring and academic counseling AAP has to offer. In short, this study not only provides evidence suggesting that these models can be applied to first-generation students, but it also challenges the notion that such students will either succeed or fail merely on the basis of their academic skill level (Velasquez, 1998; Oliver, Rodriguez, & Mickelson, 1985). This is not to say that academic skills are not important—indeed, the student’s SAT composite score directly affects four of the outcomes—but rather that a number of other factors also contribute to academic adjustment and success.

However, this investigation also reveals that first-generation students encounter a number of obstacles that make it difficult for them to become involved or integrated. For example, compared to children of college graduates, first-generation students are more likely to come from lower income homes. Having limited financial support, in turn, makes it harder for students to become involved socially because many of them—as was evident from this study—have to work long hours or have to live at home and spend time commuting to campus. The fact that first-generation students were also more likely to have difficulty making the transition from home to college is also related to their low income status, possible because they would have less time and less money to spend on socializing, dating, or participating in other campus activities which may make the transition from home to college a little easier.

It is also clear that many first-generation students are not able to get heavily involved on campus because of family obligations. For example, at UCLA more than one first-generation student in three reports that the family expects them to spend time with them on weekends even if they have a lot of studying or homework to do. First-generation students who have substantial family responsibilities and who are expected to come home every weekend to baby sit or carry out other family duties will not be able to get as involved in extracurricular activities or devote as much to their studies as other students who do not have these obligations.

Results suggest that getting involved is also made more difficult for students who feel alienated, like they do not “fit in,” or like they are not part of the UCLA community. Nearly three-fourths of the first-generation students, compared to a little over half of the children of college graduates, report that “UCLA can be a very alienating place.” In addition, when compared to children of college graduates, first-generation students overall were more likely to report that they did not feel part of the academic and social community at UCLA. Students who feel alienated may be more hesitant to become involved in campus activities.

To summarize, both the Astin and Tinto models are supported by the findings that all students—first-generation students and children of college graduates alike—are more likely to experience success in college if they get involved and become integrated into the UCLA community. However, even at UCLA, where most students are full-time, first-generation students appear to be more likely to encounter obstacles which will prevent them from getting involved. How, then, can these students be helped to become involved

and integrated, given the many obstacles that often make it harder for them from take full advantage of the college experience? How do first-generation students become more involved or integrated socially and academically when many of them have competing family responsibilities and financial constraints that force them to commute and/or work long hours? Is it possible for first-generation students to become integrated when many feel alienated? In short, what can we do to help all students—including first-generation students—to feel more a part of the academic and social community at UCLA? The next section attempts some answers to these questions and pushes us to think more broadly about how we can fully incorporate first-generation students into the college experience.

Policy and Practice Implications

The findings of this study have several implications for policy and practice. Among other things, they demonstrate that “success” in college involves more than academic performance, and that even academic success requires more than the presence of strong academic skills. Recommendations for secondary schools based on these findings are presented first, followed by recommendations for UCLA specifically.

Secondary Schools

The findings show clearly that counselors and teachers can play a vital role in first-generation students' decision to attend college and success in college (see Tables 4.5 & 5.2). Given the paucity of counselors in most public schools, and the relative lack of people in the first-generation student's pre-collegiate life who can offer advice about college, the responsibility for counseling first-generation students about college and for encouraging them to attend college should not be limited to the guidance counselor or college advisor. Teachers should be encouraged to play a more active role in this process, particularly since they can provide this information consistently and may often be the only people the students know besides the school counselor who can provide them with useful information about college. Starting as early as elementary school, teachers could begin seeking out first-generation students and encouraging them to think about college. When you consider that more first-generation students make their decision to go to college much later (see Table 5.2), starting early is especially important. In many cases it takes only one such person to make a difference in a student's life. Teachers, in short, are in an ideal position to make that difference with respect to college attendance.

The findings also have a number of implications for the college choice process. First-generation students, for example, make fewer applications to college than do children of college graduates (see Table 4.5). In fact, many have applied to only one college—the one they are currently attending. Apparently, many students who are the very first person in their family to apply to college are not aware that it is common practice to apply to more than one institution (Brooks-Terry, 1988). Clearly, teachers and

college counselors should consider encouraging more first-generation students to learn about and apply to several schools. Closely connected to this choice process are college finances: making first-generation students aware that they may qualify for fee waivers may encourage more of them to apply to many more schools, both public and private.

This study has also shown that first-generation students are very concerned about how they are going to pay for college (see Tables 4.7 & 5.2). While such concern is understandable, given that many first-generation students come from lower income homes, it could well be alleviated for some students if they were given more information about how financial aid works and who qualifies. It may be that some first-generation students believe that they can pay for college only by working at a full-time job, simply because they are not aware of other options. Indeed, many first-generation students may not be aware that some institutions craft financial aid packages that cover most, if not all, of the student's college and living expenses. If this information gap (i.e., lack of cultural capital) is contributing to the first-generation student's high level of stress about financing college, much of it could be alleviated through financial aid workshops and other forms of counseling. Ideally, such interventions should be made long before students enter college.

Finally, several findings suggest that part of the difficulty that first-generation students experience in college can be attributable to the fact that many come to college less-well-prepared academically (i.e., poorer grades, lower SAT scores). Indeed, many students commented that they had a more difficult time adjusting to UCLA because their high schools had not prepared them academically for college. These findings suggest that

if public school officials are going to institute special programs of college guidance and counseling as already proposed, these same programs should also incorporate a major emphasis on enhancing academic preparation for college.

UCLA

While this section will focus on the study's implications for UCLA, readers should keep in mind that much of the discussion and recommendations could apply as well to other selective research universities.

Specifically, findings from this study show that many first-generation students who enroll at UCLA (1) are less well informed than other students about academics, financial aid, and college life in general; (2) have a more difficult time making that transition from home to college; and (3) experience difficulty adjusting academically because they are less-well-prepared academically and because they end up feeling overwhelmed by all the things they have to do. Given this evidence, UCLA may well want to consider creating a one or two unit course to help first-generation students—particularly freshmen—deal more effectively with this transition and maximize their learning while in college. A number of other universities have already implemented such a course. For example, San Diego State University offers a course for freshman called “University Seminar,” which is intended to create a forum where the university experience can be discussed, faculty and student relationships can develop, and information can be conveyed about university resources. In this course, students learn critical survival skills and strategies, time management skills, and how to use resources such as libraries and computers. Emphasis is placed on planning and students are

encouraged to develop a personal academic plan covering their next four years (i.e., the major they are considering, courses they plan to take, how they plan to pay for college, etc.).

A course such as this one would benefit all students but would probably be most beneficial to first-generation students who arrive with limited information about college. The fact that feeling overwhelmed was found to mediate some of the negative effect of first-generation status on academic adjustment suggests that first-generation students would probably benefit greatly from assistance in time management as a means of easing academic adjustment. In addition, this course would also help minimize the “culture shock” that is experienced by students and makes it more difficult for them to make the transition from home to college.

Perhaps this course could be open to all students but strongly encouraged for first-generation freshmen. Since the goals of this course—to help students excel academically and to help them deal more effectively with the transition to college and overall adjustment—would complement the goals of AAP and PLUS. Perhaps these students could be obliged to take the course as part of the program participation requirements.

Another finding with potential significance for practice is that the difficulty some first-generation students experience in making that transition to college is attributable to the fact that they come from lower income homes. Since many first-generation students thus have to work full-time or live at home (which means commuting) in order to afford college, one of the major sources of assistance would be full financial aid packages which would eliminate the need to work full-time and allow them to live on campus. In this

way these students will be able to become more involved in campus activities and feel more integrated into the UCLA community. In addition, providing more opportunities for students to work on campus at jobs that pay more than minimum wage may help reduce the number of students who have to work off campus. Providing students with enough financial aid to cover their college expenses will enable them not only to spend more time on their studies, but also to feel more a part of the UCLA community by joining student clubs and interacting with fellow students.

Many first-generation students believe that AAP and FSP have played an important role in facilitating their adjustment to UCLA. The longitudinal data show that participation in AAP has a positive effect on students' academic self-image, although other outcomes failed to demonstrate any effects of AAP or PLUS. Clearly, these apparent inconsistencies between the qualitative and quantitative results suggest the need for more in depth studies of these programs using a wider range of outcome measures. However, it should not go unnoticed that while AAP may not identify itself as an academic self-image enhancing program, it does appear to be creating this atmosphere. Furthermore, since many students state that AAP has helped them deal with their feeling of alienation, and given that 72 percent of first-generation students feel that "UCLA can be an alienating place," perhaps AAP counselors should be encouraged to discuss feelings of alienation directly with all students.

Lastly, it is also important to continue to support activities that provide opportunities for students to get involved and interact with faculty. It appears that social adjustment is enhanced by getting involved in student activities and organizations and

receiving support and encouragement from faculty and staff. Many findings from this study suggests that faculty encouragement and support are important. For example, the fact that first-generation students were more likely to be better adjusted socially when a professor, administrator, or staff person took a personal interest in their success, suggests that faculty involvement probably needs to go beyond simple interaction. These findings also provide strong support for Rendon's (1994) argument that, when faculty take an interest in students' success, it can be transformational. However, since simply offering opportunities for students to get involved may not work for first-generation students who do not know how to take full advantage of the system (Rendon, 1993), efforts to encourage first-generation students to get involved may need to be very proactive.

Limitations and Future Research

There are at least four general limitations to this study. First, since the longitudinal analyses focused only on students at one institution, the generalizability of the findings is uncertain. Given the unique demography of California, the findings may not be generalizable to institutions in other regions. On the other hand, the descriptive findings show clearly that differences between first-generation students and children of college graduates at UCLA in most respects mirror the national results, not only for research universities but also for institutions in general. Clearly, it would be useful to replicate the longitudinal portion of this study at other colleges and universities to help determine the general applicability of the results.

The second limitation has to do with sample size. Because of the relatively small sample and the marginal reliability of some measures, it is possible that Type II errors may have occurred. For example, while the Beta coefficients for first-generation status were in the hypothesized direction for all outcome measures, half of these relationships did not maintain statistical significance once other input characteristics were controlled. Consequently, we cannot be sure whether first-generation status has no effect on these outcomes, or whether the effects were too weak to reach significance given the relatively small sample size. Clearly, studies using larger samples would be desirable.

Third, since environmental measures were assessed at the same time as the outcome measures, the direction of some “effects” can be questioned. Future studies which assess first-generation students at several different points in time can help to clarify the causal ordering of events. It would be especially useful to gather information on first-generation students immediately after the first year of college, since it seems reasonable to expect that first-generation students would make their greatest gains in learning the “hidden curriculum” of the university during their first year of college.

Finally, while weighting procedures were utilized to correct for the effect of response bias, weights may not have adjusted completely for this type of bias. Future studies should make it a priority to obtain higher response rates—for example, through the use of monetary incentives or by applying the Total Design Method (Dillman, 1983).

While these limitations suggest clear directions for the general design of future research on first-generation students, the findings from this study also point to substantive areas where research might be focused. For example, the inconsistency

between the multivariate analyses and open-ended results with regard to AAP and PLUS clearly demand more study. The multivariate results did not demonstrate that first-generation students who participate in PLUS and AAP are likely to have an easier time adjusting to UCLA, but the open-ended results suggest otherwise. In addition, research in this area should also focus on determining whether (a) the positive impacts suggested by these responses can be demonstrated with carefully crafted longitudinal studies; and (b) if first-generation students who do not participate in these programs are able to acquire the same kinds of benefits in other ways. One approach would be to use longitudinal outcome measures that directly reflect the “sense of belonging,” “feelings of alienation,” and similar outcomes mentioned in the student’s open-ended responses. Research that focuses on such outcomes, as well as on the different components of these programs, may be able to reveal the full extent of their impacts on students. In short, while the open-ended responses make it clear that some students believe that AAP and PLUS are helping them adjust to college, the meaning of these comments can be better understood through future longitudinal research.

The open-ended results also suggest that the Freshman Summer Program (FSP) is a positive factor in some first-generation students’ adjustment to college. Since this study did not identify students who participated in FSP, future longitudinal research on first-generation students at UCLA should also examine the possible effect of this program on the same student outcomes.

As it was pointed out earlier, findings from the present study suggest that part of the reason why first-generation students experience difficulty transitioning from home to

college has to do with the fact that they come to college less-well-prepared academically. While the SAT is a well-established predictor of actual academic performance in college, the fact that it also predicts the other outcomes—transition from home to college, undergraduate GPAs, academic adjustment, and social self-image while in college—raises the possibility that first-generation students' knowledge that their SAT scores are “low” when compared to those of their peers at the university may affect their adjustment to the university. Future research would be able to make this distinction clear. In other words, it would be important to know whether these effects are determined by the student's actual academic preparation level or by the perceived gap that the first-generation student sees between his or her preparation and those of the peers.

More research is also needed on the implications of “feeling caught between two worlds” and its effects on college success. Close to 50 percent of the first-generation students at UCLA report feeling “caught between two worlds,” and the longitudinal data show that such students have a harder making the transition from home to college. Given these findings, it appears that this phenomenon needs to be explored further, perhaps through qualitative research where it may be possible to discover the true meaning behind “feeling caught between two worlds.” In other words, what is it about “feeling caught between two worlds” that makes the student's transition to college more difficult? Is it the fear of entering a “new world” or is the anxiety of not wanting to leave the other behind for fear of losing one's identity? Or is it simply the stress that accompanies frequently stepping in and out of two different worlds? In addition, a multi-campus study would be able to provide comparative results to explore whether this feeling is

heightened for first-generation students at selective or elite universities where a large majority of students tend to come from college educated families.

Finally, this study provides evidence to support previous research (Barahona, 1990; Suarez, 1997) showing that first-generation status alone poses a unique disadvantage for students who are trying to succeed in college. In other words, the results refute the notion that the difficulties that first-generation students experience in college can be entirely explained in terms of correlated factors such as academic preparation, race/ethnicity, and income. Most studies of college student development include these other variables, but few have included first-generation status, perhaps because investigators assume that it is “covered” by these other more familiar variables. This study demonstrates once again that first-generation status is a viable construct in its own right and that studies of college success should not continue to ignore first-generation status as a potentially important variable.

A Final Thought

While common sense would dictate that students whose parents never attended college would have a more difficult time making that transition from home to college than would children of college graduates, such common sense assumptions rarely lead to changes in programs or practice. On the contrary, educators are much more likely to be moved to act if they have solid evidence from which to base their actions. Evidence is clearly needed to justify the development or continuance of programs which are designed to help first-generation students make it to college, persist, and excel. In times like these,

when resources are scarce, future research on first-generation students is thus necessary, not only to discover more about the special problems of this growing population, but also to learn how we can better serve them.

Appendix A

1994 Student Information Form (SIF)

1995 Student Information Form (SIF)

1997 Student Information Form (SIF)

1998 Student Information Form (SIF)

1994 Student Information Form (SIF)

PLEASE PRINT (one letter or number per box)

	M I LAST	When were you born?		
NAME:	FIRST			
ADDRESS:				Month (01-12)
CITY:	STATE:	ZIP:	PHONE:	Day (01-31)
				Year

1994 STUDENT INFORMATION FORM

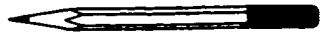
DIRECTIONS
Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.

- Use only black lead pencil (No. 2 is ideal).
- Make heavy black marks that fill the oval.
- Erase clearly any answer you wish to change.
- Make no stray markings of any kind.

EXAMPLE:
Will marks made with ballpoint or felt-tip marker be properly read? Yes... No...

Dear Student:
The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Higher Education Research Institute at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.

Sincerely, *Alexander W. Astin*



PLEASE USE #2 PENCIL

Alexander W. Astin, Director
Higher Education Research Institute

FORM NO.: 103297

PLEASE PROVIDE YOUR SOCIAL SECURITY NO.		Mark here if directed
COAST A	COAST B	A
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

1. Your sex: Male Female

2. How old will you be on December 31 of this year? (Mark one)

16 or younger... <input type="radio"/>	21-24... <input type="radio"/>
17... <input type="radio"/>	25-29... <input type="radio"/>
18... <input type="radio"/>	30-39... <input type="radio"/>
19... <input type="radio"/>	40-54... <input type="radio"/>
20... <input type="radio"/>	55 or older... <input type="radio"/>

3. In what year did you graduate from high school? (Mark one)

1994... <input type="radio"/>	Did not graduate but passed G.E.D. test... <input type="radio"/>
1993... <input type="radio"/>	
1992... <input type="radio"/>	Never completed high school... <input type="radio"/>
1991 or earlier... <input type="radio"/>	

4. Are you enrolled (or enrolling) as a:
(Mark one) Full-time student? ...
Part-time student? ...

5. How many miles is this college from your permanent home? (Mark one)

5 or less... <input type="radio"/>	11-50... <input type="radio"/>	101-500... <input type="radio"/>
6-10... <input type="radio"/>	51-100... <input type="radio"/>	Over 500... <input type="radio"/>

6. What was your average grade in high school? (Mark one) A or A-... B... C...
A-... B-... D...
B+... C-...

7. What were your scores on the SAT and/or ACT?

SAT VERBAL	[] [] [] [] [] [] [] [] [] []
SAT MATH	[] [] [] [] [] [] [] [] [] []
ACT Composite	[] [] [] [] [] [] [] [] [] []

8. Citizenship status:
 U.S. citizen
 Permanent resident (green card)
 Neither

9. During high school (grades 9-12) how many years did you study each of the following subjects? (Mark one for each item)

English	[] [] [] [] [] [] [] [] [] []
Mathematics	[] [] [] [] [] [] [] [] [] []
Foreign Language	[] [] [] [] [] [] [] [] [] []
Physical Science	[] [] [] [] [] [] [] [] [] []
Biological Science	[] [] [] [] [] [] [] [] [] []
History/Am. Govt.	[] [] [] [] [] [] [] [] [] []
Computer Science	[] [] [] [] [] [] [] [] [] []
Arts and/or Music	[] [] [] [] [] [] [] [] [] []

10. Prior to this term, have you ever taken courses for credit at this institution?
 Yes No

11. Since leaving high school, have you ever taken courses at any other institution? (Mark all that apply in each column)

	For Credit	Not for Credit
Yes, at a community/junior college	[] [] [] [] [] [] [] [] [] []	[] [] [] [] [] [] [] [] [] []
Yes, at a 4-yr. college or university	[] [] [] [] [] [] [] [] [] []	[] [] [] [] [] [] [] [] [] []
Yes, at some other postsecondary school (For example, technical, vocational, business)	[] [] [] [] [] [] [] [] [] []	[] [] [] [] [] [] [] [] [] []

12. Where do you plan to live during the fall term? (Mark one)

With parents or relatives	[] [] [] [] [] [] [] [] [] []
Other private home, apartment or room	[] [] [] [] [] [] [] [] [] []
College dormitory	[] [] [] [] [] [] [] [] [] []
Fraternity or sorority house	[] [] [] [] [] [] [] [] [] []
Other campus student housing	[] [] [] [] [] [] [] [] [] []
Other	[] [] [] [] [] [] [] [] [] []

13. Is this college your: (Mark one)

First choice? ... <input type="radio"/>	Less than third choice? ... <input type="radio"/>
Second choice? ... <input type="radio"/>	Third choice? ... <input type="radio"/>

14. To how many colleges other than this one did you apply for admission this year?

<input type="radio"/> No other	<input type="radio"/> 1	<input type="radio"/> 3	<input type="radio"/> 5
<input type="radio"/> 2	<input type="radio"/> 4	<input type="radio"/> 6 or more	<input type="radio"/>

15. What is the highest academic degree that you intend to obtain? (Mark one in each column)

None	[] [] [] [] [] [] [] [] [] []
Vocational certificate	[] [] [] [] [] [] [] [] [] []
Associate (A.A. or equivalent)	[] [] [] [] [] [] [] [] [] []
Bachelor's degree (B.A., B.S., etc.)	[] [] [] [] [] [] [] [] [] []
Master's degree (M.A., M.S., etc.)	[] [] [] [] [] [] [] [] [] []
Ph.D. or Ed.D.	[] [] [] [] [] [] [] [] [] []
M.D., D.O., D.D.S., or D.V.M.	[] [] [] [] [] [] [] [] [] []
J.D. (Law)	[] [] [] [] [] [] [] [] [] []
B.D. or M.Div. (Divinity)	[] [] [] [] [] [] [] [] [] []
Other	[] [] [] [] [] [] [] [] [] []

16. Is English your native language?
 Yes No

17. Are your parents: (Mark one)

Both alive and living with each other? ... <input type="radio"/>
Both alive, divorced or living apart? ... <input type="radio"/>
One or both deceased? ... <input type="radio"/>

18. Which of your parents were born in the U.S.? (Mark one)

<input type="radio"/> Both	<input type="radio"/> Father only
<input type="radio"/> Neither	<input type="radio"/> Mother only

19. Which of the following statements applies to you? (Mark one)

I was born in the United States	[] [] [] [] [] [] [] [] [] []
I came to the United States	[] [] [] [] [] [] [] [] [] []
Before age 6	[] [] [] [] [] [] [] [] [] []
Between ages 6-12	[] [] [] [] [] [] [] [] [] []
After age 12	[] [] [] [] [] [] [] [] [] []

20. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below? (Mark one answer for each possible source)

- a. My Own or Family Resources
- Parents, other relatives or friends
 - Spouse
 - Savings from summer work
 - Other savings
 - Part-time job on campus
 - Part-time job off campus
 - Full-time job while in college
- b. Aid Which Need Not Be Repaid
- Pell Grant
 - Supplemental Educational Opportunity Grant
 - State Scholarship or Grant
 - College Work-Study Grant
 - College Grant/Scholarship (other than above)
 - Vocational Rehabilitation funds
 - Other private grant
 - Other Government Aid (ROTC, BIA, GI/military benefits, etc.)
- c. Aid Which Must Be Repaid
- Stafford Loan (GSL)
 - Perkins Loan
 - Other College Loan
 - Other Loan
- d. Other Than Above

21. Are you: (Mark all that apply)
- White/Caucasian
 - African American/Black
 - American Indian
 - Asian American/Asian
 - Mexican American/Chicano
 - Puerto Rican
 - Other Latino
 - Other

22. Current religious preferences: (Mark one in each column)
- Baptist
 - Buddhist
 - Eastern Orthodox
 - Episcopal
 - Islamic
 - Jewish
 - LDS (Mormon)
 - Lutheran
 - Methodist
 - Presbyterian
 - Quaker
 - Roman Catholic
 - Seventh Day Adventist
 - United Church of Christ
 - Other Christian
 - Other Religion
 - None

23. Do you consider yourself a born-again Christian? Yes No

24. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark (F). If you engaged in an activity one or more times, but not frequently, mark (O) (occasionally). Mark (N) (Not at all) if you have not performed the activity during the past year.

- (Mark one for each item)
- Attended a religious service
 - Was bored in class
 - Participated in organized demonstrations
 - Failed to complete a homework assignment on time
 - Tutored another student
 - Studied with other students
 - Was a guest in a teacher's home
 - Smoked cigarettes
 - Drank beer
 - Drank wine or liquor
 - Stayed up all night
 - Spoke a language other than English at home
 - Felt overwhelmed by all I had to do
 - Felt depressed
 - Performed volunteer work
 - Came late to class
 - Played a musical instrument
 - Asked a teacher for advice after class
 - Overstayed and missed class or appointment
 - Discussed politics
 - Visited a museum or art gallery
 - Missed school due to illness
 - Discussed religion

25. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.

- (Mark one in each row)
- Academic ability
 - Artistic ability
 - Competitiveness
 - Cooperativeness
 - Creativity
 - Drive to achieve
 - Emotional health
 - Leadership ability
 - Mathematical ability
 - Physical appearance
 - Physical health
 - Popularity
 - Public speaking ability
 - Self-confidence (intellectual)
 - Self-confidence (social)
 - Sensitivity to criticism
 - Stubbornness
 - Understanding of others
 - Writing ability

26. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

- Less than \$6,000
- \$6,000-9,999
- \$10,000-14,999
- \$15,000-19,999
- \$20,000-24,999
- \$25,000-29,999
- \$30,000-39,999
- \$40,000-49,999
- \$50,000-59,999
- \$60,000-74,999
- \$75,000-99,999
- \$100,000-149,999
- \$150,000-199,999
- \$200,000 or more

27. What is the highest level of formal education obtained by your parents? (Mark one in each column)

- | | Father | Mother |
|---|-----------------------|-----------------------|
| Grammar school or less | <input type="radio"/> | <input type="radio"/> |
| Some high school | <input type="radio"/> | <input type="radio"/> |
| High school graduate | <input type="radio"/> | <input type="radio"/> |
| Postsecondary school other than college | <input type="radio"/> | <input type="radio"/> |
| Some college | <input type="radio"/> | <input type="radio"/> |
| College degree | <input type="radio"/> | <input type="radio"/> |
| Some graduate school | <input type="radio"/> | <input type="radio"/> |
| Graduate degree | <input type="radio"/> | <input type="radio"/> |

28. Do you have a disability? (Mark all that apply)

- None
- Hearing
- Speech
- Orthopedic
- Learning disability
- Health-related
- Paralytically sighted or blind
- Other

29. In deciding to go to college, how important to you was each of the following reasons? (Mark one answer for each possible reason)

- My parents wanted me to go
- I could not find a job
- Wanted to get away from home
- To be able to get a better job
- To gain a general education and appreciation of ideas
- To improve my reading and study skills
- There was nothing better to do
- To make me a more cultured person
- To be able to make more money
- To learn more about things that interest me
- To prepare myself for graduate or professional school
- A mentor/role model encouraged me to go

30. Mark only three responses, one in each column.

Your mother's occupation
 Your father's occupation
 Your probable career occupation

NOTE: If your father or mother is deceased, please indicate his or her last occupation.

Accountant or actuary

Actor or entertainer

Architect or urban planner

Artist

Business (clerical)

Business executive (management, administrator)

Business owner or proprietor

Business salesperson or buyer

Clergy (minister, priest)

Clergy (other religious)

Clinical psychologist

College teacher

Computer programmer or analyst

Conservationist or forester

Dentist (including orthodontist)

Dietitian or home economist

Engineer

Farmer or rancher

Foreign service worker (including diplomat)

Homemaker (full-time)

Interior decorator (including designer)

Interpreter (translator)

Lab technician or hygienist

Law enforcement officer

Lawyer (attorney) or judge

Military service (career)

Musician (performer, composer)

Nurse

Optometrist

Pharmacist

Physician

School counselor

School principal or superintendent

Scientific researcher

Social, welfare or recreation worker

Statistician

Therapist (physical, occupational speech)

Teacher or administrator (elementary)

Teacher or administrator (secondary)

Veterinarian

Writer or journalist

Skilled trades

Other

Undecided

Laborer (unskilled)

Semi-skilled worker

Other occupation

Unemployed

31. Mark one in each row:

Disagree Strongly
 Disagree Somewhat
 Agree Somewhat
 Agree Strongly

The Federal government is not doing enough to protect the consumer from faulty goods and services

The Federal government is not doing enough to control environmental pollution

The Federal government should raise taxes to reduce the deficit

There is too much concern in the courts for the rights of criminals

Abortion should be legal

The death penalty should be abolished

If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time

The activities of married women are best confined to the home and family

Marijuana should be legalized

It is important to have laws prohibiting homosexual relationships

Employers should be allowed to require drug testing of employees or job applicants

The best way to control AIDS is through widespread, mandatory testing

Just because a man thinks that a woman has "led him on" does not entitle him to have sex with her

The federal government should do more to control the sale of handguns

A national health care plan is needed to cover everybody's medical costs

Racial discrimination is no longer a major problem in America

The Federal government should do more to discourage energy consumption

Realistically, an individual can do little to bring about changes in our society

Wealthy people should pay a larger share of taxes than they do now

Colleges should prohibit racist/sexist speech on campus

Colleges would be improved if organized sports were de-emphasized

People should not obey laws which violate their personal values

32. During your last year in high school, how much time did you spend during a typical week doing the following activities?

Hours per week: 0 1 2 3 4 5 6 7 8 9 10

Studying/homework

Socializing with friends

Talking with teachers outside of class

Exercising/sports

Partying

Working (for pay)

Volunteer work

Student clubs/groups

Watching TV

Household/childcare duties

Reading for pleasure

33. Do you have any concern about your ability to finance your college education? (Mark one)

None (I am confident that I will have sufficient funds)

Some (but I probably will have enough funds)

Major (not sure I will have enough funds to complete college)

34. How would you characterize your political views? (Mark one)

Far left

Liberal

Middle-of-the-road

Conservative

Far right

35. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

My relatives wanted me to come here

My teacher advised me

This college has a very good academic reputation

This college has a good reputation for its social activities

I was offered financial assistance

This college offers special educational programs

This college has low tuition

High school counselor advised me

Private college counselor advised me

I wanted to live near home

A friend suggested attending

A college rep. recruited me

The athletic department recruited me

This college's graduates gain admission to top graduate/professional schools

This college's graduates get good jobs

I was attracted by the religious affiliation/orientation of the college

I wanted to go to a school about the size of this college

Not accepted anywhere else

Local college; no other options

36. Below is a list of different undergraduate major fields grouped into general categories. Mark only one oval to indicate your probable field of study.

- | | |
|--|---|
| ARTS AND HUMANITIES | PHYSICAL SCIENCE |
| Art, fine and applied ① | Astronomy ② |
| English (language and literature) ② | Atmospheric Science (incl. Meteorology) ③ |
| History ③ | Chemistry ④ |
| Journalism ④ | Earth Science ⑤ |
| Language and Literature (except English) ⑤ | Marine Science (incl. Oceanography) ⑥ |
| Music ⑥ | Mathematics ⑦ |
| Philosophy ⑦ | Physics ⑧ |
| Speech ⑧ | Statistics ⑨ |
| Theater or Drama ⑨ | Other Physical Science ⑩ |
| Theology or Religion ⑩ | PROFESSIONAL |
| Other Arts and Humanities ⑪ | Architecture or Urban Planning ⑪ |
| BIOLOGICAL SCIENCE | Home Economics ⑫ |
| Biology (general) ⑫ | Health Technology (medical, dental, laboratory) ⑬ |
| Biochemistry or Biophysics ⑬ | Library or Archival Science ⑭ |
| Botany ⑭ | Nursing ⑮ |
| Environmental Science ⑮ | Pharmacy ⑯ |
| Marine (Life) Science ⑯ | Pre dental, Pre medicine, Pre veterinary ⑰ |
| Microbiology or Bacteriology ⑰ | Therapy (occupational, physical, speech) ⑱ |
| Zoology ⑱ | Other Professional ⑲ |
| Other Biological Science ⑲ | SOCIAL SCIENCE |
| BUSINESS | Anthropology ⑳ |
| Accounting ⑳ | Economics ㉑ |
| Business Admin. (general) ㉑ | Ethnic Studies ㉒ |
| Finance ㉒ | Geography ㉓ |
| International Business ㉓ | Political Science (gov't., international relations) ㉔ |
| Marketing ㉔ | Psychology ㉕ |
| Management ㉕ | Social Work ㉖ |
| Secretarial Studies ㉖ | Sociology ㉗ |
| Other Business ㉗ | Women's Studies ㉘ |
| EDUCATION | Other Social Science ㉙ |
| Business Education ㉘ | TECHNICAL |
| Elementary Education ㉙ | Building Trades ㉚ |
| Music or Art Education ㉚ | Data Processing or Computer Programming ㉛ |
| Physical Education or Recreation ㉛ | Drafting or Design ㉜ |
| Secondary Education ㉜ | Electronics ㉝ |
| Special Education ㉝ | Mechanics ㉞ |
| Other Education ㉞ | Other Technical ㉟ |
| ENGINEERING | OTHER FIELDS |
| Aeronautical or Astronautical Eng. ㊱ | Agriculture ㊱ |
| Civil Engineering ㊲ | Communications ㊲ |
| Chemical Engineering ㊳ | Computer Science ㊳ |
| Electrical or Electronic Engineering ㊴ | Forestry ㊴ |
| Industrial Engineering ㊵ | Law Enforcement ㊵ |
| Mechanical Engineering ㊶ | Military Science ㊶ |
| Other Engineering ㊷ | Other Field ㊷ |
| | Undecided ㊸ |

103297

DO NOT WRITE IN THIS AREA

37. Please indicate the importance to you personally of each of the following: (Mark one for each item)

- | | | | | |
|--|-----------------|----------------------|------------------|-------------|
| | ① Not Important | ② Somewhat Important | ③ Very Important | ④ Essential |
| Becoming accomplished in one of the performing arts (acting, dancing, etc.) | ① | ② | ③ | ④ |
| Becoming an authority in my field | ① | ② | ③ | ④ |
| Obtaining recognition from my colleagues for contributions to my special field | ① | ② | ③ | ④ |
| Influencing the political structure | ① | ② | ③ | ④ |
| Influencing social values | ① | ② | ③ | ④ |
| Raising a family | ① | ② | ③ | ④ |
| Having administrative responsibility for the work of others | ① | ② | ③ | ④ |
| Being very well off financially | ① | ② | ③ | ④ |
| Helping others who are in difficulty | ① | ② | ③ | ④ |
| Making a theoretical contribution to science | ① | ② | ③ | ④ |
| Writing original works (poems, novels, short stories, etc.) | ① | ② | ③ | ④ |
| Creating artistic work (painting, sculpture, decorating, etc.) | ① | ② | ③ | ④ |
| Becoming successful in a business of my own | ① | ② | ③ | ④ |
| Becoming involved in programs to clean up the environment | ① | ② | ③ | ④ |
| Developing a meaningful philosophy of life | ① | ② | ③ | ④ |
| Participating in a community action program | ① | ② | ③ | ④ |
| Helping to promote racial understanding | ① | ② | ③ | ④ |
| Keeping up to date with political affairs | ① | ② | ③ | ④ |
| Becoming a community leader | ① | ② | ③ | ④ |

38. What is your best guess as to the chances that you will: (Mark one for each item)

- | | | | | |
|--|--------------------|---------------|----------------------|-------------|
| | ① Very Good Chance | ② Same Chance | ③ Very Little Chance | ④ No Chance |
| Change major field? | ① | ② | ③ | ④ |
| Change career choice? | ① | ② | ③ | ④ |
| Fail one or more courses? | ① | ② | ③ | ④ |
| Graduate with honors? | ① | ② | ③ | ④ |
| Be elected to a student office? | ① | ② | ③ | ④ |
| Get a job to help pay for college expenses? | ① | ② | ③ | ④ |
| Work full time while attending college? | ① | ② | ③ | ④ |
| Join a social fraternity, sorority, or club? | ① | ② | ③ | ④ |
| Play varsity/intercollegiate athletics? | ① | ② | ③ | ④ |
| Be elected to an academic honor society? | ① | ② | ③ | ④ |
| Make at least a "B" average? | ① | ② | ③ | ④ |
| Need extra time to complete your degree requirements? | ① | ② | ③ | ④ |
| Get a bachelor's degree (B.A., B.S., etc.)? | ① | ② | ③ | ④ |
| Participate in student protests or demonstrations? | ① | ② | ③ | ④ |
| Drop out of this college temporarily (exclude transferring)? | ① | ② | ③ | ④ |
| Drop out permanently (exclude transferring)? | ① | ② | ③ | ④ |
| Transfer to another college before graduating? | ① | ② | ③ | ④ |
| Be satisfied with your college? | ① | ② | ③ | ④ |
| Get married while in college? (skip if married) | ① | ② | ③ | ④ |
| Participate in volunteer or community service work? | ① | ② | ③ | ④ |
| Participate actively in religious activities? | ① | ② | ③ | ④ |

39. The Higher Education Research Institute at UCLA actively encourages the colleges that participate in this survey to conduct local studies of their students. If these studies involve collecting follow-up data, it is necessary for the institution to know the students' ID numbers so that follow-up data can be linked with the data from this survey. If your college asks for a tape copy of the data and signs an agreement to use it only for research purposes, do we have your permission to include your ID number in such a tape? Yes No

The remaining ovals are provided for questions specifically designed by your college rather than the Higher Education Research Institute. If your college has chosen to use the ovals, please observe carefully the supplemental directions given to you.

- | | | |
|---------------|---------------|---------------|
| 40. ① ② ③ ④ ⑤ | 45. ① ② ③ ④ ⑤ | 50. ① ② ③ ④ ⑤ |
| 41. ① ② ③ ④ ⑤ | 46. ① ② ③ ④ ⑤ | 51. ① ② ③ ④ ⑤ |
| 42. ① ② ③ ④ ⑤ | 47. ① ② ③ ④ ⑤ | 52. ① ② ③ ④ ⑤ |
| 43. ① ② ③ ④ ⑤ | 48. ① ② ③ ④ ⑤ | 53. ① ② ③ ④ ⑤ |
| 44. ① ② ③ ④ ⑤ | 49. ① ② ③ ④ ⑤ | 54. ① ② ③ ④ ⑤ |

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THANK YOU!

PH479-Questar-8403-54321

1995 Student Information Form (SIF)

PLEASE PRINT (one letter or number per box)

NAME:	FIRST M I LAST	When were you born? Month (01-12) Day (01-31) Year
ADDRESS:		
CITY:	STATE:	ZIP:
PHONE:		

1995 STUDENT INFORMATION FORM

DIRECTIONS
 Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.
 - Use only black lead pencil (No. 2 is ideal).
 - Make heavy black marks that fill the oval.
 - Erase cleanly any answer you wish to change.
 - Make no stray markings of any kind.

EXAMPLE:
 Will marks made with ballpoint or felt-tip marker be properly read? Yes... No...

Dear Student:
 The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Higher Education Research Institute at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your responses will be held in the strictest professional confidence.



Sincerely,

 Alexander W. Astin, Director
 Higher Education Research Institute

FORM NO.: 15260	PLEASE PROVIDE YOUR SOCIAL SECURITY NO.	Mark here if directed																																																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">A</td> <td style="width: 10%; text-align: center;">B</td> <td style="width: 10%; text-align: center;">C</td> <td style="width: 10%; text-align: center;">D</td> <td style="width: 10%; text-align: center;">E</td> <td style="width: 10%; text-align: center;">F</td> <td style="width: 10%; text-align: center;">G</td> <td style="width: 10%; text-align: center;">H</td> <td style="width: 10%; text-align: center;">I</td> <td style="width: 10%; text-align: center;">J</td> <td style="width: 10%; text-align: center;">K</td> <td style="width: 10%; text-align: center;">L</td> <td style="width: 10%; text-align: center;">M</td> <td style="width: 10%; text-align: center;">N</td> <td style="width: 10%; text-align: center;">O</td> <td style="width: 10%; text-align: center;">P</td> <td style="width: 10%; text-align: center;">Q</td> <td style="width: 10%; text-align: center;">R</td> <td style="width: 10%; text-align: center;">S</td> <td style="width: 10%; text-align: center;">T</td> <td style="width: 10%; text-align: center;">U</td> <td style="width: 10%; text-align: center;">V</td> <td style="width: 10%; text-align: center;">W</td> <td style="width: 10%; text-align: center;">X</td> <td style="width: 10%; text-align: center;">Y</td> <td style="width: 10%; text-align: center;">Z</td> </tr> </table>	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">A</td> <td style="width: 10%; text-align: center;">B</td> <td style="width: 10%; text-align: center;">C</td> <td style="width: 10%; text-align: center;">D</td> <td style="width: 10%; text-align: center;">E</td> <td style="width: 10%; text-align: center;">F</td> <td style="width: 10%; text-align: center;">G</td> <td style="width: 10%; text-align: center;">H</td> <td style="width: 10%; text-align: center;">I</td> <td style="width: 10%; text-align: center;">J</td> <td style="width: 10%; text-align: center;">K</td> <td style="width: 10%; text-align: center;">L</td> <td style="width: 10%; text-align: center;">M</td> <td style="width: 10%; text-align: center;">N</td> <td style="width: 10%; text-align: center;">O</td> <td style="width: 10%; text-align: center;">P</td> <td style="width: 10%; text-align: center;">Q</td> <td style="width: 10%; text-align: center;">R</td> <td style="width: 10%; text-align: center;">S</td> <td style="width: 10%; text-align: center;">T</td> <td style="width: 10%; text-align: center;">U</td> <td style="width: 10%; text-align: center;">V</td> <td style="width: 10%; text-align: center;">W</td> <td style="width: 10%; text-align: center;">X</td> <td style="width: 10%; text-align: center;">Y</td> <td style="width: 10%; text-align: center;">Z</td> </tr> </table>	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																												

7. What were your scores on the SAT and/or ACT?

SAT VERBAL

--	--	--	--	--	--

SAT MATH

--	--	--	--	--	--

ACT Composite:

13. Is this college your: (Mark one)

First choice? Less than third choice?

Second choice? Third choice?

1. Your sex: Male Female

2. How old will you be on December 31 of this year? (Mark one)

16 or younger... <input type="radio"/>	21-24 <input type="radio"/>
17 <input type="radio"/>	25-29 <input type="radio"/>
18 <input type="radio"/>	30-39 <input type="radio"/>
19 <input type="radio"/>	40-54 <input type="radio"/>
20 <input type="radio"/>	55 or older... <input type="radio"/>

8. Citizenship status:

U.S. citizen
 Permanent resident (green card)
 Neither

14. To how many colleges other than this one did you apply for admission this year?

No other 1 3 5

2 4 6 or more

Note: If you applied to no other college, skip to item 16.

3. In what year did you graduate from high school? (Mark one)

1995 Did not graduate but passed G.E.D. test?

1994 Never completed high school?

1993 1992 or earlier.

9. Have you had, or do you feel you will need, any special tutoring or remedial work in any of the following subjects? (Mark all that apply)

English	Have Had <input type="radio"/>	Will Need <input type="radio"/>
Reading	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>
Social Studies	<input type="radio"/>	<input type="radio"/>
Science	<input type="radio"/>	<input type="radio"/>
Foreign Language	<input type="radio"/>	<input type="radio"/>

15. How many other acceptances did you receive this year? (Mark one)

None 1 3 5

2 4 6 or more

4. Are you enrolled (or enrolling) as a: (Mark one)

Full-time student?

Part-time student?

10. Prior to this term, have you ever taken courses for credit at this institution?

Yes No

16. What is the highest academic degree that you intend to obtain? (Mark one in each column)

None	<input type="radio"/>	<input type="radio"/>
Vocational certificate	<input type="radio"/>	<input type="radio"/>
Associate (A.A. or equivalent)	<input type="radio"/>	<input type="radio"/>
Bachelor's degree (B.A., B.S., etc.)	<input type="radio"/>	<input type="radio"/>
Master's degree (M.A., M.S., etc.)	<input type="radio"/>	<input type="radio"/>
Ph.D. or Ed.D.	<input type="radio"/>	<input type="radio"/>
M.D., D.O., D.D.S., or D.V.M.	<input type="radio"/>	<input type="radio"/>
LL.B. or J.D. (Law)	<input type="radio"/>	<input type="radio"/>
B.D. or M.Div. (Divinity)	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>

5. How many miles is this college from your permanent home? (Mark one)

5 or less 11-50 101-500

6-10 51-100 Over 500

11. Since leaving high school, have you ever taken courses at any other institution? (Mark all that apply in each column)

Yes, at a community/junior college	For Credit <input type="radio"/>	Not for Credit <input type="radio"/>
Yes, at a 4-yr. college or university	<input type="radio"/>	<input type="radio"/>
Yes, at some other postsecondary school (For example, technical, vocational, business)	<input type="radio"/>	<input type="radio"/>

6. What was your average grade in high school? (Mark one)

A or A+ B C

A- B- D

B+ C-

12. Where do you plan to live during the fall term? (Mark one)

With parents or relatives

Other private home, apartment or room

College dormitory

Fraternity or sorority house

Other campus student housing

Other

17. Is English your native language?

Yes No

18. Are your parents: (Mark one)

Both alive and living with each other?

Both alive, divorced or living apart?

One or both deceased?

18. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below? (Mark one answer for each possible source)

a. My Own or Family Resources

	None	1/1-1/3	1/3-1/2	1/2-2/3	2/3-3/4	3/4-1
Parents, other relatives or friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Savings from summer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other savings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time job on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time job off campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time job while in college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b. Aid Which Need Not Be Repaid

Pell Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplemental Educational Opportunity Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State Scholarship or Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College Work-Study Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College Grant/Scholarship (other than above)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocational Rehabilitation funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other private grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Government Aid (ROTC, BIA, GI/military benefits, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

c. Aid Which Must Be Repaid

Stafford Loan (GSL)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perkins Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other College Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

d. Other Than Above

20. Are you: (Mark all that apply)

White/Caucasian

African American/Black

American Indian

Asian American/Asian

Mexican American/Chicano

Puerto Rican

Other Latino

Other

21. Current religious preference: (Mark one in each column)

	None	1/1-1/3	1/3-1/2	1/2-2/3	2/3-3/4	3/4-1
Baptist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buddhist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eastern Orthodox	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Episcopal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Islamic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jewish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LDS (Mormon)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lutheran	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methodist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presbyterian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quaker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Roman Catholic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seventh Day Adventist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
United Church of Christ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Christian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Do you consider yourself a born-again Christian? Yes No

23. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark (F). If you engaged in an activity one or more times, but not frequently, mark (O) (occasionally). Mark (N) (Not at all) if you have not performed the activity during the past year.

(Mark one for each item)

	Frequently	Occasionally	Not at all
Attended a religious service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was bored in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in organized demonstrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Failed to complete a homework assignment on time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tutored another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Studied with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was a guest in a teacher's home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoked cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank wine or liquor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spoke a language other than English at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt overwhelmed by all I had to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performed volunteer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a musical instrument	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a teacher for advice after class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overslept and missed class or appointment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed politics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked in a local, state or national political campaign	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voted in a student election	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a personal computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialized with someone of another racial/ethnic group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.

(Mark one in each row)

	Very High	High	Average	Low	Very Low
Academic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artistic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cooperativeness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cynicism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drive to achieve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematical ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-confidence (intellectual)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stubbornness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. What is the highest level of formal education obtained by your parents? (Mark one in each column)

	Father	Mother
Grammar school or less	<input type="radio"/>	<input type="radio"/>
Some high school	<input type="radio"/>	<input type="radio"/>
High school graduate	<input type="radio"/>	<input type="radio"/>
Postsecondary school other than college	<input type="radio"/>	<input type="radio"/>
Some college	<input type="radio"/>	<input type="radio"/>
College degree	<input type="radio"/>	<input type="radio"/>
Some graduate school	<input type="radio"/>	<input type="radio"/>
Graduate degree	<input type="radio"/>	<input type="radio"/>

26. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

<input type="radio"/> Less than \$6,000	<input type="radio"/> \$40,000-49,999
<input type="radio"/> \$6,000-9,999	<input type="radio"/> \$50,000-59,999
<input type="radio"/> \$10,000-14,999	<input type="radio"/> \$60,000-74,999
<input type="radio"/> \$15,000-19,999	<input type="radio"/> \$75,000-99,999
<input type="radio"/> \$20,000-24,999	<input type="radio"/> \$100,000-149,999
<input type="radio"/> \$25,000-29,999	<input type="radio"/> \$150,000-199,999
<input type="radio"/> \$30,000-39,999	<input type="radio"/> \$200,000 or more

27. How much special consideration should college admissions officers give to each of the following? (Mark one in each row)

	A lot	Some	None
Low income students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High-achieving students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foreign students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children of alumni	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
African Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
American Indians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asian Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hispanics/Latinos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whites/Caucasians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. In deciding to go to college, how important to you was each of the following reasons? (Mark one answer for each possible reason)

	Very Important	Important	Not Important
My parents wanted me to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not find a job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanted to get away from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be able to get a better job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To gain a general education and appreciation of ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To improve my reading and study skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There was nothing better to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To make me a more cultured person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be able to make more money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To learn more about things that interest me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A mentor/role model encouraged me to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. Mark only three responses, one in each column.

- M Your mother's occupation
- F Your father's occupation
- Y Your probable career occupation

NOTE: If your father or mother is deceased, please indicate his or her last occupation.

- Accountant or actuary (X) () ()
- Actor or entertainer () () (X)
- Architect or urban planner () () (X)
- Artist () () (X)
- Business (clerical) () () (X)
- Business executive (management, administrator) () () (X)
- Business owner or proprietor () () (X)
- Business salesperson or buyer () () (X)
- Clergy (minister, priest) () () (X)
- Clergy (other religious) () () (X)
- Clinical psychologist () () (X)
- College teacher () () (X)
- Computer programmer or analyst () () (X)
- Conservationist or forester () () (X)
- Dentist (including orthodontist) () () (X)
- Dietitian or home economist () () (X)
- Engineer () () (X)
- Farmer or rancher () () (X)
- Foreign service worker (including diplomat) () () (X)
- Homemaker (full-time) () () (X)
- Interior decorator (including designer) () () (X)
- Interpreter (translator) () () (X)
- Lab technician or hygienist () () (X)
- Law enforcement officer () () (X)
- Lawyer (attorney) or judge () () (X)
- Military service (career) () () (X)
- Musician (performer, composer) () () (X)
- Nurse () () (X)
- Optometrist () () (X)
- Pharmacist () () (X)
- Physician () () (X)
- Policymaker/Government () () (X)
- School counselor () () (X)
- School principal or superintendent () () (X)
- Scientific researcher () () (X)
- Social, welfare or recreation worker () () (X)
- Statistician () () (X)
- Therapist (physical, occupational speech) () () (X)
- Teacher or administrator (elementary) () () (X)
- Teacher or administrator (secondary) () () (X)
- Veterinarian () () (X)
- Writer or journalist () () (X)
- Skilled trades () () (X)
- Other () () (X)
- Undecided () () (X)
- Laborer (unskilled) () () (X)
- Semi-skilled worker () () (X)
- Other occupation () () (X)
- Unemployed () () (X)

30. Mark one in each row:

- 1 Disagree Strongly
- 2 Disagree Somewhat
- 3 Agree Somewhat
- 4 Agree Strongly

- The Federal government is not doing enough to control environmental pollution () (X) () ()
- The Federal government should raise taxes to reduce the deficit () () (X) ()
- There is too much concern in the courts for the rights of criminals () () () (X)
- Abortion should be legal () () (X) ()
- The death penalty should be abolished () () (X) ()
- If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time () () (X) ()
- The activities of married women are best confined to the home and family () () (X) ()
- Marijuana should be legalized () () (X) ()
- It is important to have laws prohibiting homosexual relationships () () (X) ()
- Employers should be allowed to require drug testing of employees or job applicants () () (X) ()
- Just because a man thinks that a woman has "led him on" does not entitle him to have sex with her () () (X) ()
- The federal government should do more to control the sale of handguns () () (X) ()
- A national health care plan is needed to cover everybody's medical costs () () (X) ()
- Racial discrimination is no longer a major problem in America () () (X) ()
- Realistically, an individual can do little to bring about changes in our society () () (X) ()
- Wealthy people should pay a larger share of taxes than they do now () () (X) ()
- Colleges should prohibit racist/sexist speech on campus () () (X) ()
- People should not obey laws which violate their personal values () () (X) ()
- Affirmative action in college admissions should be abolished () () (X) ()
- Better education and more job opportunities would substantially reduce crime () () (X) ()
- Children of undocumented immigrants should be denied access to public education () () (X) ()

31. During your last year in high school, how much time did you spend during a typical week doing the following activities?

Hours per week:	None	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	Over 16
Studying/homework	()	()	()	()	()	()	()	()	()	()
Socializing with friends	()	()	()	()	()	()	()	()	()	()
Talking with teachers outside of class	()	()	()	()	()	()	()	()	()	()
Exercise or sports	()	()	()	()	()	()	()	()	()	()
Partying	()	()	()	()	()	()	()	()	()	()
Working (for pay)	()	()	()	()	()	()	()	()	()	()
Volunteer work	()	()	()	()	()	()	()	()	()	()
Student clubs/groups	()	()	()	()	()	()	()	()	()	()
Watching TV	()	()	()	()	()	()	()	()	()	()
Housework/childcare	()	()	()	()	()	()	()	()	()	()
Reading for pleasure	()	()	()	()	()	()	()	()	()	()
Played video games	()	()	()	()	()	()	()	()	()	()

32. Do you have any concern about your ability to finance your college education? (Mark one)

- None (I am confident that I will have sufficient funds) ()
- Some (but I probably will have enough funds) ()
- Major (not sure I will have enough funds to complete college) ()

33. How would you characterize your political views? (Mark one)

- Far left ()
- Liberal ()
- Middle-of-the-road ()
- Conservative ()
- Far right ()

34. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

	Very Important	Important	Not Important
My relatives wanted me to come here	(X)	()	()
My teacher advised me	(X)	()	()
This college has a very good academic reputation	(X)	()	()
This college has a good reputation for its social activities	(X)	()	()
I was offered financial assistance	(X)	()	()
This college offers special educational programs	(X)	()	()
This college has low tuition	(X)	()	()
High school counselor advised me	(X)	()	()
Private college counselor advised me	(X)	()	()
I wanted to live near home	(X)	()	()
A friend suggested attending	(X)	()	()
A college rep. recruited me	(X)	()	()
The athletic department recruited me	(X)	()	()
This college's graduates gain admission to top graduate/professional schools	(X)	()	()
This college's graduates get good jobs	(X)	()	()
I was attracted by the religious affiliation/orientation of the college	(X)	()	()
I wanted to go to a school about the size of this college	(X)	()	()
Not accepted anywhere else	(X)	()	()
Rankings in national magazines	(X)	()	()

35. Below is a list of different undergraduate major fields grouped into general categories. Mark only one oval to indicate your probable field of study.

- | | |
|---|--|
| <input type="checkbox"/> ARTS AND HUMANITIES | <input type="checkbox"/> PHYSICAL SCIENCE |
| <input type="checkbox"/> Art, fine and applied | <input type="checkbox"/> Astronomy |
| <input type="checkbox"/> English (language and literature) | <input type="checkbox"/> Atmospheric Science (incl. Meteorology) |
| <input type="checkbox"/> History | <input type="checkbox"/> Chemistry |
| <input type="checkbox"/> Journalism | <input type="checkbox"/> Earth Science |
| <input type="checkbox"/> Language and Literature (except English) | <input type="checkbox"/> Marine Science (incl. Oceanography) |
| <input type="checkbox"/> Music | <input type="checkbox"/> Mathematics |
| <input type="checkbox"/> Philosophy | <input type="checkbox"/> Physics |
| <input type="checkbox"/> Speech | <input type="checkbox"/> Statistics |
| <input type="checkbox"/> Theater or Drama | <input type="checkbox"/> Other Physical Science |
| <input type="checkbox"/> Theology or Religion | <input type="checkbox"/> PROFESSIONAL |
| <input type="checkbox"/> Other Arts and Humanities | <input type="checkbox"/> Architecture or Urban Planning |
| <input type="checkbox"/> BIOLOGICAL SCIENCE | <input type="checkbox"/> Home Economics |
| <input type="checkbox"/> Biology (general) | <input type="checkbox"/> Health Technology (medical, dental, laboratory) |
| <input type="checkbox"/> Biochemistry or Biophysics | <input type="checkbox"/> Library or Archival Science |
| <input type="checkbox"/> Botany | <input type="checkbox"/> Nursing |
| <input type="checkbox"/> Environmental Science | <input type="checkbox"/> Pharmacy |
| <input type="checkbox"/> Marine (Life) Science | <input type="checkbox"/> Preclinical, Premedicine, Pre-veterinary |
| <input type="checkbox"/> Microbiology or Bacteriology | <input type="checkbox"/> Therapy (occupational, physical, speech) |
| <input type="checkbox"/> Zoology | <input type="checkbox"/> Other Professional |
| <input type="checkbox"/> Other Biological Science | <input type="checkbox"/> SOCIAL SCIENCE |
| <input type="checkbox"/> BUSINESS | <input type="checkbox"/> Anthropology |
| <input type="checkbox"/> Accounting | <input type="checkbox"/> Economics |
| <input type="checkbox"/> Business Adm'n. (general) | <input type="checkbox"/> Ethnic Studies |
| <input type="checkbox"/> Finance | <input type="checkbox"/> Geography |
| <input type="checkbox"/> International Business | <input type="checkbox"/> Political Science (gov't., international relations) |
| <input type="checkbox"/> Marketing | <input type="checkbox"/> Psychology |
| <input type="checkbox"/> Management | <input type="checkbox"/> Social Work |
| <input type="checkbox"/> Secretarial Studies | <input type="checkbox"/> Sociology |
| <input type="checkbox"/> Other Business | <input type="checkbox"/> Women's Studies |
| <input type="checkbox"/> EDUCATION | <input type="checkbox"/> Other Social Science |
| <input type="checkbox"/> Business Education | <input type="checkbox"/> TECHNICAL |
| <input type="checkbox"/> Elementary Education | <input type="checkbox"/> Building Trades |
| <input type="checkbox"/> Music or Art Education | <input type="checkbox"/> Data Processing or Computer Programming |
| <input type="checkbox"/> Physical Education or Recreation | <input type="checkbox"/> Drafting or Design |
| <input type="checkbox"/> Secondary Education | <input type="checkbox"/> Electronics |
| <input type="checkbox"/> Special Education | <input type="checkbox"/> Mechanics |
| <input type="checkbox"/> Other Education | <input type="checkbox"/> Other Technical |
| <input type="checkbox"/> ENGINEERING | <input type="checkbox"/> OTHER FIELDS |
| <input type="checkbox"/> Aeronautical or Astronautical Eng. | <input type="checkbox"/> Agriculture |
| <input type="checkbox"/> Civil Engineering | <input type="checkbox"/> Communications |
| <input type="checkbox"/> Chemical Engineering | <input type="checkbox"/> Computer Science |
| <input type="checkbox"/> Electrical or Electronic Engineering | <input type="checkbox"/> Forestry |
| <input type="checkbox"/> Industrial Engineering | <input type="checkbox"/> Law Enforcement |
| <input type="checkbox"/> Mechanical Engineering | <input type="checkbox"/> Military Science |
| <input type="checkbox"/> Other Engineering | <input type="checkbox"/> Other Field |
| | <input type="checkbox"/> Undecided |

DO NOT WRITE IN THIS AREA

36. Please indicate the importance to you personally of each of the following: (Mark one for each item)

D Not Important
 C Somewhat Important
 B Very Important
 A Essential

- | | |
|--|---|
| Becoming accomplished in one of the performing arts (acting, dancing, etc.) | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Becoming an authority in my field | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Obtaining recognition from my colleagues for contributions to my special field | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Influencing the political structure | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Influencing social values | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Raising a family | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Having administrative responsibility for the work of others | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Being very well off financially | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Helping others who are in difficulty | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Making a theoretical contribution to science | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Writing original works (poems, novels, short stories, etc.) | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Creating artistic work (painting, sculpture, decorating, etc.) | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Becoming successful in a business of my own | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Becoming involved in programs to clean up the environment | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Developing a meaningful philosophy of life | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Participating in a community action program | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Helping to promote racial understanding | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Keeping up to date with political affairs | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Becoming a community leader | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |

37. What is your best guess as to the chances that you will: (Mark one for each item)

D No Chances
 C Very Little Chances
 B Some Chances
 A Very Good Chances

- | | |
|--|---|
| Change major field? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Change career choice? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Fail one or more courses? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Graduate with honors? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Be elected to a student office? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Get a job to help pay for college expenses? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Work full time while attending college? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Join a social fraternity, sorority, or club? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Play varsity/intercollegiate athletics? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Be elected to an academic honor society? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Make at least a "B" average? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Need extra time to complete your degree requirements? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Get a bachelor's degree (B.A., B.S., etc.)? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Participate in student protests or demonstrations? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Drop out of this college temporarily (exclude transferring)? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Drop out permanently (exclude transferring)? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Transfer to another college before graduating? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Be satisfied with your college? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Get married while in college? (skip if married) | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Participate in volunteer or community service work? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| Find a job after college graduation in the field for which you were trained? | <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |

38. The Higher Education Research Institute at UCLA actively encourages the colleges that participate in this survey to conduct local studies of their students. If these studies involve collecting follow-up data, it is necessary for the institution to know the students' ID numbers so that follow-up data can be linked with the data from this survey. If your college asks for a tape copy of the data and signs an agreement to use it only for research purposes, do we have your permission to include your ID number in such a tape? Yes No

The remaining ovals are provided for questions specifically designed by your college rather than the Higher Education Research Institute. If your college has chosen to use the ovals, please observe carefully the supplemental directions given to you.

- | | | |
|---|---|---|
| 39. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 44. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 49. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E |
| 40. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 45. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 50. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E |
| 41. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 46. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 51. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E |
| 42. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 47. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 52. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E |
| 43. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 48. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | 53. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E |

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THANK YOU!

R10197-Questar/5021-54321

1997 Student Information Form (SIF)

PLEASE PRINT (one letter or number per box)

NAME:	M I LAST	When were you born?			
ADDRESS:		Month	Day	Year	
CITY:	STATE:	ZIP:	PHONE:		

1997 STUDENT INFORMATION FORM

DIRECTIONS
 Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.
 - Use only black lead pencil (No. 2 is ideal).
 - Make heavy black marks that fill the oval.
 - Erase cleanly any answer you wish to change.
 - Make no stray markings of any kind.

EXAMPLE:
 Will marks made with ballpoint or felt-tip marker be properly read? Yes No

Dear Student:
 The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Higher Education Research Institute at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.

Sincerely, *Alexander W. Astin*
 Alexander W. Astin, Director
 Higher Education Research Institute



PLEASE USE #2 PENCIL

FORM NO. 248108

	PLEASE PROVIDE YOUR SOCIAL SECURITY NO.	Mark here if directed
		GROUP CODE A
1		<input type="radio"/>
2		<input type="radio"/>
3		<input type="radio"/>
4		<input type="radio"/>
5		<input type="radio"/>
6		<input type="radio"/>
7		<input type="radio"/>
8		<input type="radio"/>
9		<input type="radio"/>
0		<input type="radio"/>

1. Your sex: Male Female
2. How old will you be on December 31 of this year? (Mark one)

16 or younger <input type="radio"/>	21-24 <input type="radio"/>
17 <input type="radio"/>	25-29 <input type="radio"/>
18 <input type="radio"/>	30-39 <input type="radio"/>
19 <input type="radio"/>	40-54 <input type="radio"/>
20 <input type="radio"/>	55 or older <input type="radio"/>
3. In what year did you graduate from high school? (Mark one)

1997 <input type="radio"/>	Did not graduate but passed G.E.D. test <input type="radio"/>
1996 <input type="radio"/>	
1995 <input type="radio"/>	Never completed high school <input type="radio"/>
1994 or earlier <input type="radio"/>	
4. Are you enrolled (or enrolling) as a: (Mark one)

Full-time student? <input type="radio"/>
Part-time student? <input type="radio"/>
5. How many miles is this college from your permanent home? (Mark one)

5 or less <input type="radio"/>	11-50 <input type="radio"/>	101-500 <input type="radio"/>
6-10 <input type="radio"/>	51-100 <input type="radio"/>	Over 500 <input type="radio"/>
6. What was your average grade in high school? (Mark one)

A or A- <input type="radio"/>	B <input type="radio"/>	C <input type="radio"/>
A- <input type="radio"/>	B- <input type="radio"/>	D <input type="radio"/>
B <input type="radio"/>	C+ <input type="radio"/>	

7. What were your scores on the SAT and/or ACT?

SAT VERBAL	<input type="text"/>	<input type="text"/>
SAT MATH	<input type="text"/>	<input type="text"/>
ACT Composite	<input type="text"/>	<input type="text"/>
8. Citizenship status:
 - U.S. citizen
 - Permanent resident (green card)
 - Neither
9. Have you had, or do you feel you will need, any special tutoring or remedial work in any of the following subjects? (Mark all that apply)

	Have Had	Will Need
English	<input type="checkbox"/>	<input type="checkbox"/>
Reading	<input type="checkbox"/>	<input type="checkbox"/>
Mathematics	<input type="checkbox"/>	<input type="checkbox"/>
Social Studies	<input type="checkbox"/>	<input type="checkbox"/>
Science	<input type="checkbox"/>	<input type="checkbox"/>
Foreign Language	<input type="checkbox"/>	<input type="checkbox"/>

10. Prior to this term, have you ever taken courses for credit at this institution?
 - Yes No
11. Since leaving high school, have you ever taken courses at any other institution? (Mark all that apply in each column)

	For Credit	Not for Credit
Yes, at a community junior college	<input type="checkbox"/>	<input type="checkbox"/>
Yes, at a 4-yr. college or university	<input type="checkbox"/>	<input type="checkbox"/>
Yes, at some other postsecondary school (For example, technical, vocational, business)	<input type="checkbox"/>	<input type="checkbox"/>
12. Where do you plan to live during the fall term? (Mark one)
 - With parents or relatives
 - Other private home, apartment or room
 - College dormitory
 - Fraternity or sorority house
 - Other campus student housing
 - Other

13. In planning for college, did you: (Mark any that apply)
 - Seek high school counselor's advice
 - Hire a private college counselor
 - Take a SAT/ACT preparation course
14. Is this college your: (Mark one)
 - First choice?
 - Second choice?
 - Third choice?
 - Less than third choice?
 - 11 or more
15. To how many colleges other than this one did you apply for admission this year?
 - None
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7-10
 - 11 or more

Note: If you applied to no other college, skip to item 17.
16. How many other acceptances did you receive this year? (Mark one)
 - None
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7-10
 - 11 or more
17. What is the highest academic degree that you intend to obtain? (Mark one in each column)

	High School Diploma	High School Diploma with College
None	<input type="checkbox"/>	<input type="checkbox"/>
Vocational certificate	<input type="checkbox"/>	<input type="checkbox"/>
Associate (A.A. or equivalent)	<input type="checkbox"/>	<input type="checkbox"/>
Bachelor's degree (B.A., B.S., etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Master's degree (M.A., M.S., etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Ph.D. or Ed.D.	<input type="checkbox"/>	<input type="checkbox"/>
M.D., D.O., D.D.S., or D.V.M.	<input type="checkbox"/>	<input type="checkbox"/>
J.D. (Law)	<input type="checkbox"/>	<input type="checkbox"/>
B.D. or M.Div. (Divinity)	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>
18. Are your parents: (Mark one)
 - Both alive and living with each other?
 - Both alive, divorced or living apart?
 - One or both deceased?

19. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below? (Mark one answer for each possible source)

	None	\$1,000	\$1,000 - \$1,500	\$1,500 - \$2,000	Over \$2,000
a. My Own or Family Resources					
Parents, other relatives or friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Savings from summer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other savings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time job on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time job off campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time job while in college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Aid Which Need Not Be Repaid					
Pell Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplemental Educational Opportunity Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State Scholarship or Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College Work-Study Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College Grant/Scholarship (other than above)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocational Rehabilitation funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other private grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Government Aid (ROTC, BIA, GI/military benefits, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Aid Which Must Be Repaid					
Stafford Loan (GSL)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perkins Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other College Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Other Than Above	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. How many persons are currently dependent on your parents for support (include yourself and your parents, if applicable)?

1 2 3 4 5 6 or more

21. Is English your native language?

Yes No

22. Current religious preference: (Mark one in each column)

	None	Father's	Mother's
Baptist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buddhist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eastern Orthodox	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Episcopal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Islamic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jewish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LDS (Mormon)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lutheran	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methodist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presbyterian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quaker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Roman Catholic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seventh Day Adventist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
United Church of Christ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Christian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Do you consider yourself a born-again Christian?

Yes No

24. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark (F). If you engaged in an activity one or more times, but not frequently, mark (O) (occasionally). Mark (N) (Not at all) if you have not performed the activity during the past year.

(Mark one for each item)

	Frequently	Occasionally	Not at all
Attended a religious service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was bored in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in organized demonstrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tutored another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Studied with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was a guest in a teacher's home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoked cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank wine or liquor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt overwhelmed by all I had to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performed volunteer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a musical instrument	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a teacher for advice after class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overslept and missed class or appointment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed politics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked in a local, state or national political campaign	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voted in a student election	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a personal computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialized with someone of another racial/ethnic group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Missed school due to employment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lost my temper	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Took a prescribed anti-depressant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Found it difficult to study at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.

(Mark one in each row)

	Highest 10%	Above Average	Average	Below Average	Lowest 10%
Academic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artistic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cooperativeness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drive to achieve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematical ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-confidence (intellectual)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-understanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spirituality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. What is the highest level of formal education obtained by your parents?

(Mark one in each column)

	Father	Mother
Grammar school or less	<input type="radio"/>	<input type="radio"/>
Some high school	<input type="radio"/>	<input type="radio"/>
High school graduate	<input type="radio"/>	<input type="radio"/>
Postsecondary school other than college	<input type="radio"/>	<input type="radio"/>
Some college	<input type="radio"/>	<input type="radio"/>
College degree	<input type="radio"/>	<input type="radio"/>
Some graduate school	<input type="radio"/>	<input type="radio"/>
Graduate degree	<input type="radio"/>	<input type="radio"/>

27. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

Less than \$6,000 \$40,000-49,999

\$6,000-9,999 \$50,000-59,999

\$10,000-14,999 \$60,000-74,999

\$15,000-19,999 \$75,000-99,999

\$20,000-24,999 \$100,000-149,999

\$25,000-29,999 \$150,000-199,999

\$30,000-39,999 \$200,000 or more

28. Are you: (Mark all that apply)

White/Caucasian

African American/Black

American Indian

Mexican American/Chicano

Puerto Rican

Other Latino

Chinese American/Chinese

Filipino American/Filipino

Japanese American/Japanese

Korean American/Korean

Southeast Asian (Vietnamese, Laotian, Cambodian, etc.)

Other Asian American/Asian

Other

29. In deciding to go to college, how important to you was each of the following reasons? (Mark one answer for each possible reason)

	Very Important	Somewhat Important	Not Important
My parents wanted me to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not find a job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanted to get away from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be able to get a better job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drive to achieve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To gain a general education and appreciation of ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To improve my reading and study skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There was nothing better to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To make me a more cultured person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be able to make more money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To learn more about things that interest me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A mentor role model encouraged me to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To prove to others I could succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. Mark only three responses, one in each column.

D Your mother's occupation
 E Your father's occupation
 Y Your probable career occupation

NOTE: If your father or mother is deceased, please indicate his or her last occupation.

- Accountant or actuary Y E D
- Actor or entertainer Y E D
- Architect or urban planner Y E D
- Artist Y E D
- Business (clerical) Y E D
- Business executive (management, administrator) Y E D
- Business owner or proprietor Y E D
- Business salesperson or buyer Y E D
- Clergy (minister, priest) Y E D
- Clergy (other religious) Y E D
- Clinical psychologist Y E D
- College administrator/staff Y E D
- College teacher Y E D
- Computer programmer or analyst Y E D
- Conservationist or forester Y E D
- Dentist (including orthodontist) Y E D
- Dietitian or home economist Y E D
- Engineer Y E D
- Farmer or rancher Y E D
- Foreign service worker (including diplomat) Y E D
- Homemaker (full-time) Y E D
- Interior decorator (including designer) Y E D
- Lab technician or hygienist Y E D
- Law enforcement officer Y E D
- Lawyer (attorney) or judge Y E D
- Military service (career) Y E D
- Musician (performer, composer) Y E D
- Nurse Y E D
- Optometrist Y E D
- Pharmacist Y E D
- Physician Y E D
- Policymaker/Government Y E D
- School counselor Y E D
- School principal or superintendent Y E D
- Scientific researcher Y E D
- Social, welfare or recreation worker Y E D
- Therapist (physical, occupational speech) Y E D
- Teacher or administrator (elementary) Y E D
- Teacher or administrator (secondary) Y E D
- Veterinarian Y E D
- Writer or journalist Y E D
- Skilled trades Y E D
- Other Y E D
- Undecided Y E D
- Laborer (unskilled) Y E D
- Semi-skilled worker Y E D
- Other occupation Y E D
- Unemployed Y E D

31. Mark one in each row:

1. Disagree Strongly
 2. Disagree Somewhat
 3. Agree Somewhat
 4. Agree Strongly

- The Federal government is not doing enough to control environmental pollution 1 2 3 4
- The Federal government should raise taxes to reduce the deficit 1 2 3 4
- There is too much concern in the courts for the rights of criminals 1 2 3 4
- Abortion should be legal 1 2 3 4
- The death penalty should be abolished 1 2 3 4
- If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time 1 2 3 4
- The activities of married women are best confined to the home and family 1 2 3 4
- Marijuana should be legalized 1 2 3 4
- It is important to have laws prohibiting homosexual relationships 1 2 3 4
- Employers should be allowed to require drug testing of employees or job applicants 1 2 3 4
- Just because a man thinks that a woman has "led him on" does not entitle him to have sex with her 1 2 3 4
- The federal government should do more to control the sale of handguns 1 2 3 4
- A national health care plan is needed to cover everybody's medical costs 1 2 3 4
- Racial discrimination is no longer a major problem in America 1 2 3 4
- Realistically, an individual can do little to bring about changes in our society 1 2 3 4
- Wealthy people should pay a larger share of taxes than they do now 1 2 3 4
- Colleges should prohibit racist/sexist speech on campus 1 2 3 4
- People should not obey laws which violate their personal values 1 2 3 4
- Affirmative action in college admissions should be abolished 1 2 3 4
- Same sex couples should have the right to legal marital status 1 2 3 4

32. During your last year in high school, how much time did you spend during a typical week doing the following activities?

Hours per week:	None	Less than 1 hour	1-2	3-5	6-10	11-15	16-20	Over 20
Studying/homework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Socializing with friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Talking with teachers outside of class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise or sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working (for pay)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student clubs/groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Watching TV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Housework/caregiving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reading for pleasure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playing video games	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prayer/meditation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

33. Do you have any concern about your ability to finance your college education? (Mark one)

- None (I am confident that I will have sufficient funds)
- Some (but I probably will have enough funds)
- Major (not sure I will have enough funds to complete college)

34. How would you characterize your political views? (Mark one)

- Far left
- Liberal
- Middle-of-the-road
- Conservative
- Far right

35. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

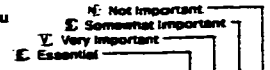
	Very important	Somewhat important	Not important
My relatives wanted me to come here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My teacher advised me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This college has a very good academic reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This college has a good reputation for its social activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was offered financial assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This college offers special educational programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This college has 'low tuition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High school counselor advised me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private college counselor advised me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I wanted to live near home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A friend suggested attending	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A college rep. recruited me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The athletic department recruited me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not offered aid by first choice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This college's graduates gain admission to top graduate/professional schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This college's graduates get good jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was attracted by the religious affiliation/orientation of the college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I wanted to go to a school about the size of this college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not accepted anywhere else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rankings in national magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

36. Below is a list of different undergraduate major fields grouped into general categories. Mark only one oval to indicate your probable field of study.

- | | |
|--|--|
| ARTS AND HUMANITIES | PHYSICAL SCIENCE |
| Art, fine and applied 1 | Astronomy 3 |
| English (language and literature) 2 | Atmospheric Science (incl. Meteorology) 3 |
| History 3 | Chemistry 3 |
| Journalism 3 | Earth Science 3 |
| Language and Literature (except English) 3 | Marine Science (incl. Oceanography) 3 |
| Music 3 | Mathematics 3 |
| Philosophy 3 | Physics 3 |
| Speech 3 | Statistics 3 |
| Theater or Drama 3 | Other Physical Science 3 |
| Theology or Religion 3 | PROFESSIONAL |
| Other Arts and Humanities 3 | Architecture or Urban Planning 3 |
| BIOLOGICAL SCIENCE | Home Economics 3 |
| Biology (general) 3 | Health Technology (medical, dental, laboratory) 3 |
| Biochemistry or Biophysics 3 | Library or Archival Science 3 |
| Botany 3 | Nursing 3 |
| Environmental Science 3 | Pharmacy 3 |
| Marine (Life) Science 3 | Pre dental, Pre medicine, Pre veterinary 3 |
| Microbiology or Bacteriology 3 | Therapy (occupational, physical, speech) 3 |
| Zoology 3 | Other Professional 3 |
| Other Biological Science 3 | SOCIAL SCIENCE |
| BUSINESS | Anthropology 3 |
| Accounting 3 | Economics 3 |
| Business Admin. (general) 3 | Ethnic Studies 3 |
| Finance 3 | Geography 3 |
| International Business 3 | Political Science (govt., international relations) 3 |
| Marketing 3 | Psychology 3 |
| Management 3 | Social Work 3 |
| Secretarial Studies 3 | Sociology 3 |
| Other Business 3 | Women's Studies 3 |
| EDUCATION | Other Social Science 3 |
| Business Education 3 | TECHNICAL |
| Elementary Education 3 | Building Trades 3 |
| Music or Art Education 3 | Data Processing or Computer Programming 3 |
| Physical Education or Recreation 3 | Drafting or Design 3 |
| Secondary Education 3 | Electronics 3 |
| Special Education 3 | Mechanics 3 |
| Other Education 3 | Other Technical 3 |
| ENGINEERING | OTHER FIELDS |
| Aeronautical or Astronautical Eng. 3 | Agriculture 3 |
| Civil Engineering 3 | Communications 3 |
| Chemical Engineering 3 | Computer Science 3 |
| Electrical or Electronic Engineering 3 | Forestry 3 |
| Industrial Engineering 3 | Law Enforcement 3 |
| Mechanical Engineering 3 | Military Science 3 |
| Other Engineering 3 | Other Field 3 |
| | Undecided 3 |

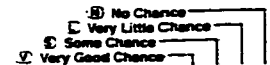
DO NOT WRITE IN THIS AREA

37. Please indicate the importance to you personally of each of the following: (Mark one for each item)



- Becoming accomplished in one of the performing arts (acting, dancing, etc.) N S V E
- Becoming an authority in my field N S V E
- Obtaining recognition from my colleagues for contributions to my special field N S V E
- Influencing the political structure N S V E
- Influencing social values N S V E
- Raising a family N S V E
- Having administrative responsibility for the work of others N S V E
- Being very well off financially N S V E
- Helping others who are in difficulty N S V E
- Making a theoretical contribution to science N S V E
- Writing original works (poems, novels, short stories, etc.) N S V E
- Creating artistic work (painting, sculpture, decorating, etc.) N S V E
- Becoming successful in a business of my own N S V E
- Becoming involved in programs to clean up the environment N S V E
- Developing a meaningful philosophy of life N S V E
- Participating in a community action program N S V E
- Helping to promote racial understanding N S V E
- Keeping up to date with political affairs N S V E
- Becoming a community leader N S V E

38. What is your best guess as to the chances that you will: (Mark one for each item)



- Change major field? N S V E
- Change career choice? N S V E
- Fail one or more courses? N S V E
- Graduate with honors? N S V E
- Be elected to a student office? N S V E
- Get a job to help pay for college expenses? N S V E
- Work full time while attending college? N S V E
- Join a social fraternity, sorority, or club? N S V E
- Play varsity/intercollegiate athletics? N S V E
- Be elected to an academic honor society? N S V E
- Make at least a "B" average? N S V E
- Need extra time to complete your degree requirements? N S V E
- Get a bachelor's degree (B.A., B.S., etc.)? N S V E
- Participate in student protests or demonstrations? N S V E
- Drop out of this college temporarily (exclude transferring)? N S V E
- Drop out permanently (exclude transferring)? N S V E
- Transfer to another college before graduating? N S V E
- Be satisfied with your college? N S V E
- Get married while in college? (skip if married) N S V E
- Participate in volunteer or community service work? N S V E
- Seek personal counseling? N S V E

39. The Higher Education Research Institute at UCLA actively encourages the colleges that participate in this survey to conduct local studies of their students. If these studies involve collecting follow-up data, it is necessary for the institution to know the students' ID numbers so that follow-up data can be linked with the data from this survey. If your college asks for a tape copy of the data and signs an agreement to use it only for research purposes, do we have your permission to include your ID number in such a tape? Yes No

The remaining ovals are provided for questions specifically designed by your college rather than the Higher Education Research Institute. If your college has chosen to use the ovals, please observe carefully the supplemental directions given to you.

- | | | |
|---------------|---------------|---------------|
| 40. A B C D E | 45. A B C D E | 50. A B C D E |
| 41. A B C D E | 46. A B C D E | 51. A B C D E |
| 42. A B C D E | 47. A B C D E | 52. A B C D E |
| 43. A B C D E | 48. A B C D E | 53. A B C D E |
| 44. A B C D E | 49. A B C D E | 54. A B C D E |

Prepared by the Higher Education Research Institute, University of California, Los Angeles, California 90095-1521

THANK YOU!

R12722-Questair900703-14321

1998 Student Information Form (SIF)

PLEASE PRINT (one letter or number per box)

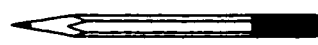
NAME:		M I	LAST		When were you born?							
		Month (01-12)			Day (01-31)	Year						
ADDRESS:					STATE:			ZIP:	PHONE:			
CITY:												

1998 STUDENT INFORMATION FORM

DIRECTIONS
 Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.
 • Use only black lead pencil (No. 2 is ideal).
 • Make heavy black marks that fill the oval.
 • Erase cleanly any answer you wish to change.
 • Make no stray markings of any kind.

EXAMPLE:
 Will marks made with ballpoint or felt-tip marker be properly read? Yes No

Dear Student:
 The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Higher Education Research Institute at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.



Sincerely, *Alexander W. Astin*
 Alexander W. Astin, Director
 Higher Education Research Institute

PLEASE USE #2 PENCIL

FORM NO.: 42271	PLEASE PROVIDE YOUR SOCIAL SECURITY NO.		Mark here if directed group code	
	1	2	3	4
	5	6	7	8
	9	0	1	2
	3	4	5	6
	7	8	9	0
	A	B	C	D
	E	F	G	H
	I	J	K	L
	M	N	O	P

1. Your sex: Male Female
2. How old will you be on December 31 of this year? (Mark one)

16 or younger.....	<input type="radio"/>	21-24.....	<input type="radio"/>
17.....	<input type="radio"/>	25-29.....	<input type="radio"/>
18.....	<input type="radio"/>	30-39.....	<input type="radio"/>
19.....	<input type="radio"/>	40-54.....	<input type="radio"/>
20.....	<input type="radio"/>	55 or older....	<input type="radio"/>
3. Is English your native language?
 Yes No
4. In what year did you graduate from high school? (Mark one)

1998.....	<input type="radio"/>	Did not graduate but passed G.E.D. test..	<input type="radio"/>
1997.....	<input type="radio"/>	Never completed	<input type="radio"/>
1996.....	<input type="radio"/>	high school.....	<input type="radio"/>
1995 or earlier.....	<input type="radio"/>		
5. Are you enrolled (or enrolling) as a: (Mark one)

Full-time student?	<input type="radio"/>
Part-time student?	<input type="radio"/>
6. How many miles is this college from your permanent home? (Mark one)

5 or less	<input type="radio"/>	11-50	<input type="radio"/>	101-500	<input type="radio"/>
6-10	<input type="radio"/>	51-100	<input type="radio"/>	Over 500	<input type="radio"/>
7. What was your average grade in high school? (Mark one)

A or A+.....	<input type="radio"/>	B.....	<input type="radio"/>	C.....	<input type="radio"/>
D.....	<input type="radio"/>	E.....	<input type="radio"/>	F.....	<input type="radio"/>
G.....	<input type="radio"/>	H.....	<input type="radio"/>	I.....	<input type="radio"/>

8. What were your scores on the SAT and/or ACT?

SAT VERBAL.....				
SAT MATH.....				
ACT Composite.....				

9. Citizenship status:
 U.S. citizen
 Permanent resident (green card)
 Neither
10. During high school (grades 9-12) how many years did you study each of the following subjects? (Mark one for each item)
- | | | | | | | | |
|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| English..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mathematics..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Foreign Language..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Physical Science..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Biological Science..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| History/Am. Govt..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Computer Science..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Arts and/or Music..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

11. Prior to this term, have you ever taken courses for credit at this institution?
 Yes No
12. Since leaving high school, have you ever taken courses at any other institution? (Mark all that apply in each column)
- | | For Credit | Not for Credit |
|---|-----------------------|-----------------------|
| Yes, at a community/junior college..... | <input type="radio"/> | <input type="radio"/> |
| Yes, at a 4-yr. college or university..... | <input type="radio"/> | <input type="radio"/> |
| Yes, at some other postsecondary school (For example, technical, vocational, business)..... | <input type="radio"/> | <input type="radio"/> |

13. Where do you plan to live during the fall term? (Mark one)
- | | |
|--|-----------------------|
| With parents or relatives..... | <input type="radio"/> |
| Other private home, apartment or room..... | <input type="radio"/> |
| College dormitory..... | <input type="radio"/> |
| Fraternity or sorority house..... | <input type="radio"/> |
| Other campus student housing..... | <input type="radio"/> |
| Other..... | <input type="radio"/> |

14. From what kind of secondary school did you graduate? (Mark one)
- Public.....
- Private (denominational).....
- Private (non-religious).....
- Other.....
15. Is this college your: (Mark one)
- First choice?..... Less than third choice?.....
- Second choice?..... choice?.....
- Third choice?.....
16. To how many colleges other than this one did you apply for admission this year?
- | | | | | | | | |
|------|-----------------------|---|-----------------------|------------|-----------------------|------|-----------------------|
| None | <input type="radio"/> | 1 | <input type="radio"/> | 4 | <input type="radio"/> | 7-10 | <input type="radio"/> |
| 2 | <input type="radio"/> | 5 | <input type="radio"/> | 11 or more | <input type="radio"/> | | |
| 3 | <input type="radio"/> | 6 | <input type="radio"/> | | | | |
- Note: If you applied to no other college, skip to item 18.

17. How many other acceptances did you receive this year? (Mark one)
- | | | | | | | | |
|------|-----------------------|---|-----------------------|------------|-----------------------|------|-----------------------|
| None | <input type="radio"/> | 1 | <input type="radio"/> | 4 | <input type="radio"/> | 7-10 | <input type="radio"/> |
| 2 | <input type="radio"/> | 5 | <input type="radio"/> | 11 or more | <input type="radio"/> | | |
| 3 | <input type="radio"/> | 6 | <input type="radio"/> | | | | |

18. What is the highest academic degree that you intend to obtain? (Mark one in each column)
- None.....
- Vocational certificate.....
- Associate (A.A. or equivalent).....
- Bachelor's degree (B.A., B.S., etc.).....
- Master's degree (M.A., M.S., etc.).....
- Ph.D. or Ed.D.....
- M.D., D.O., D.D.S., or D.V.M.....
- LL.B. or J.D. (Law).....
- B.D. or M.Div. (Divinity).....
- Other.....
19. Are your parents: (Mark one)
- Both alive and living with each other?.....
- Both alive, divorced or living apart?.....
- One or both deceased?.....

20. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below? (Mark one answer for each possible source)

a. My Own or Family Resources

Parents, other relatives or friends	None	0-1,000	1,001-5,000	5,001-10,000	Over \$10,000
Spouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Savings from summer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other savings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time job on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time job off campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time job while in college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b. Aid Which Need Not Be Repaid

Pell Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplemental Educational Opportunity Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State Scholarship or Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College Work-Study Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College Grant/Scholarship (other than above)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocational Rehabilitation funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other private grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Government Aid (ROTC, BIA, GI/military benefits, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

c. Aid Which Must Be Repaid

Stafford Loan (GSL)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perkins Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other College Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Loan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

d. Other Than Above

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

21. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

<input type="radio"/> Less than \$6,000	<input type="radio"/> \$40,000-49,999
<input type="radio"/> \$6,000-9,999	<input type="radio"/> \$50,000-59,999
<input type="radio"/> \$10,000-14,999	<input type="radio"/> \$60,000-74,999
<input type="radio"/> \$15,000-19,999	<input type="radio"/> \$75,000-99,999
<input type="radio"/> \$20,000-24,999	<input type="radio"/> \$100,000-149,999
<input type="radio"/> \$25,000-29,999	<input type="radio"/> \$150,000-199,999
<input type="radio"/> \$30,000-39,999	<input type="radio"/> \$200,000 or more

22. Current religious preference: (Mark one in each column)

Baptist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buddhist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eastern Orthodox	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Episcopal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Islamic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jewish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LDS (Mormon)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lutheran	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methodist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presbyterian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quaker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Roman Catholic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seventh Day Adventist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
United Church of Christ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Christian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark (F) - If you engaged in an activity one or more times, but not frequently, mark (O) (occasionally). Mark (N) (Not at all) if you have not performed the activity during the past year.

(Mark one for each item)

Attended a religious service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was bored in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in organized demonstrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tutored another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Studied with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was a guest in a teacher's home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoked cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank wine or liquor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt overwhelmed by all I had to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performed volunteer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a musical instrument	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a teacher for advice after class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overslept and missed class or appointment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed politics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voted in a student election	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialized with someone of another racial/ethnic group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Took a prescribed anti-depressant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Came late to class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attended a public racial or concert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visited an art gallery or museum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read the editorial page in the daily newspaper	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Checked out a book or journal from the school library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicated via e-mail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used the Internet for research or homework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in Internet chat rooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played computer games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Internet use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Are you: (Mark all that apply)

White/Caucasian	<input type="radio"/>
African American/Black	<input type="radio"/>
American Indian	<input type="radio"/>
Asian American/Asian	<input type="radio"/>
Mexican American/Chicano	<input type="radio"/>
Puerto Rican	<input type="radio"/>
Other Latino	<input type="radio"/>
Other	<input type="radio"/>

25. Were you adopted by your family?

No (skip to question 25)

If Yes, please mark one of the following:

Yes, at age 0-2 3-7 8-12 13 or older

26. Were you ever in foster care?

Yes No

27. What is the highest level of formal education obtained by your parents? (Mark one in each column)

	Father	Mother
Grammar school or less	<input type="radio"/>	<input type="radio"/>
Some high school	<input type="radio"/>	<input type="radio"/>
High school graduate	<input type="radio"/>	<input type="radio"/>
Postsecondary school other than college	<input type="radio"/>	<input type="radio"/>
Some college	<input type="radio"/>	<input type="radio"/>
College degree	<input type="radio"/>	<input type="radio"/>
Some graduate school	<input type="radio"/>	<input type="radio"/>
Graduate degree	<input type="radio"/>	<input type="radio"/>

28. In deciding to go to college, how important to you was each of the following reasons? (Mark one answer for each possible reason)

My parents wanted me to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not find a job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanted to get away from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be able to get a better job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To gain a general education and appreciation of ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To improve my reading and study skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To make me a more cultured person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be able to make more money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A mentor/role model encouraged me to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To prove to others I could succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To prepare myself for graduate or professional school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because my friends were going	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (Mark one in each row)

Academic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artistic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Athletic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cooperativeness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drive to achieve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematical ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-confidence (intellectual)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-understanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spirituality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. Mark only three responses, one in each column.

- Your mother's occupation
- Your father's occupation
- Your probable career occupation

NOTE: If your father or mother is deceased, please indicate his or her last occupation.

- Accountant or actuary
- Actor or entertainer
- Architect or urban planner
- Artist
- Business (clerical)
- Business executive (management, administrator)
- Business owner or proprietor
- Business salesperson or buyer
- Clergy (minister, priest)
- Clergy (other religious)
- Clinical psychologist
- College administrator/staff
- College teacher
- Computer programmer or analyst
- Conservationist or forester
- Dentist (including orthodontist)
- Dietitian or home economist
- Engineer
- Farmer or rancher
- Foreign service worker (including diplomat)
- Homemaker (full-time)
- Interior decorator (including designer)
- Lab technician or hygienist
- Law enforcement officer
- Lawyer (attorney) or judge
- Military service (career)
- Musican (performer, composer)
- Nurse
- Optometrist
- Pharmacist
- Physician
- Policymaker/Government
- School counselor
- School principal or superintendent
- Scientific researcher
- Social, welfare or recreation worker
- Therapist (physical, occupational speech)
- Teacher or administrator (elementary)
- Teacher or administrator (secondary)
- Veterinarian
- Writer or journalist
- Skilled trades
- Other
- Unemployed
- Laborer (unskilled)
- Semi-skilled worker
- Other occupation
- Unemployed

31. Mark one in each row:

- Disagree Strongly
- Disagree Somewhat
- Agree Somewhat
- Agree Strongly

- There is too much concern in the courts for the rights of criminals
- Abortion should be legal
- The death penalty should be abolished
- If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time
- Marijuana should be legalized
- It is important to have laws prohibiting homosexual relationships
- Employers should be allowed to require drug testing of employees or job applicants
- Just because a man thinks that a woman has "led him on" does not entitle him to have sex with her
- The federal government should do more to control the sale of handguns
- Racial discrimination is no longer a major problem in America
- Realistically, an individual can do little to bring about changes in our society
- Wealthy people should pay a larger share of taxes than they do now
- Colleges should prohibit racist/sexist speech on campus
- Same sex couples should have the right to legal marital status
- Material on the Internet should be regulated by the government

32. During your last year in high school, how much time did you spend during a typical week doing the following activities?

Hours per week:	None	1-2	3-4	5-6	7-8	9-10	11-12	13-14	Over 14
Studying/homework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socializing with friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talking with teachers outside of class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise or sports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Partying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working (for pay)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volunteer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student clubs/groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watching TV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housework/childcare	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading for pleasure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing video games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prayer/meditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. Do you have any concern about your ability to finance your college education? (Mark one)

- None (I am confident that I will have sufficient funds)
- Some (but I probably will have enough funds)
- Major (not sure I will have enough funds to complete college)

34. Do you have a disability? (Mark all that apply)

- None
- Speech
- Orthopedic
- Learning disability
- Health-related
- Partially sighted or blind
- Other

35. Did your high school require community service for graduation? Yes No

36. How would you characterize your political views? (Mark one)

- Far left
- Liberal
- Middle-of-the-road
- Conservative
- Far right

37. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

- My relatives wanted me to come here
- My teacher advised me
- This college has a very good academic reputation
- This college has a good reputation for its social activities
- I was offered financial assistance
- This college offers special educational programs
- This college has low tuition
- High school counselor advised me
- Private college counselor advised me
- I wanted to live near home
- Not offered aid by first choice
- This college's graduates gain admission to top graduate/professional schools
- This college's graduates get good jobs
- I was attracted by the religious affiliation/orientation of the college
- I wanted to go to a school about the size of this college
- Not accepted anywhere else
- Rankings in national magazines
- Information in a multicollege guidebook

38. Below is a list of different undergraduate major fields grouped into general categories. Mark only one oval to indicate your probable field of study.

- | | |
|--|--|
| ARTS AND HUMANITIES | PHYSICAL SCIENCE |
| Art, fine and applied 1 | Astronomy 2 |
| English (language and literature) 3 | Atmospheric Science (incl. Meteorology) 3 |
| History 3 | Chemistry 3 |
| Journalism 3 | Earth Science 3 |
| Language and Literature (except English) 3 | Marine Science (incl. Oceanography) 3 |
| Music 3 | Mathematics 3 |
| Philosophy 3 | Physics 3 |
| Speech 3 | Statistics 3 |
| Theater or Drama 3 | Other Physical Science 3 |
| Theology or Religion 3 | PROFESSIONAL |
| Other Arts and Humanities 3 | Architecture or Urban Planning 3 |
| BIOLOGICAL SCIENCE | Home Economics 3 |
| Biology (general) 3 | Health Technology (medical, dental, laboratory) 3 |
| Biochemistry or Biophysics 3 | Library or Archival Science 3 |
| Botany 3 | Medicine, Dentistry, Veterinary 3 |
| Environmental Science 3 | Nursing 3 |
| Marine (Life) Science 3 | Pharmacy 3 |
| Microbiology or Bacteriology 3 | Therapy (occupational, physical, speech) 3 |
| Zoology 3 | Other Professional 3 |
| Other Biological Science 3 | SOCIAL SCIENCE |
| BUSINESS | Anthropology 3 |
| Accounting 3 | Economics 3 |
| Business Admin. (general) 3 | Ethnic Studies 3 |
| Finance 3 | Geography 3 |
| International Business 3 | Political Science (govt., international relations) 3 |
| Marketing 3 | Psychology 3 |
| Management 3 | Social Work 3 |
| Secretarial Studies 3 | Sociology 3 |
| Other Business 3 | Women's Studies 3 |
| EDUCATION | Other Social Science 3 |
| Business Education 3 | TECHNICAL |
| Elementary Education 3 | Building Trades 3 |
| Music or Art Education 3 | Data Processing or Computer Programming 3 |
| Physical Education or Recreation 3 | Drafting or Design 3 |
| Secondary Education 3 | Electronics 3 |
| Special Education 3 | Mechanics 3 |
| Other Education 3 | Other Technical 3 |
| ENGINEERING | OTHER FIELDS |
| Aeronautical or Astronautical Eng. 3 | Agriculture 3 |
| Civil Engineering 3 | Communications 3 |
| Chemical Engineering 3 | Computer Science 3 |
| Electrical or Electronic Engineering 3 | Forestry 3 |
| Engineering 3 | Law Enforcement 3 |
| Industrial Engineering 3 | Military Science 3 |
| Mechanical Engineering 3 | Other Field 3 |
| Other Engineering 3 | Undecided 3 |

DO NOT WRITE IN THIS AREA

39. Please indicate the importance to you personally of each of the following: (Mark one for each item)

- | | | | | |
|--|-----------------|----------------------|------------------|-------------|
| | 1 Not Important | 2 Somewhat Important | 3 Very Important | 4 Essential |
| Becoming accomplished in one of the performing arts (acting, dancing, etc.) | 1 | 2 | 3 | 4 |
| Becoming an authority in my field | 1 | 2 | 3 | 4 |
| Obtaining recognition from my colleagues for contributions to my special field | 1 | 2 | 3 | 4 |
| Influencing the political structure | 1 | 2 | 3 | 4 |
| Influencing social values | 1 | 2 | 3 | 4 |
| Raising a family | 1 | 2 | 3 | 4 |
| Having administrative responsibility for the work of others | 1 | 2 | 3 | 4 |
| Being very well off financially | 1 | 2 | 3 | 4 |
| Helping others who are in difficulty | 1 | 2 | 3 | 4 |
| Making a theoretical contribution to science | 1 | 2 | 3 | 4 |
| Writing original works (poems, novels, short stories, etc.) | 1 | 2 | 3 | 4 |
| Creating artistic work (painting, sculpture, decorating, etc.) | 1 | 2 | 3 | 4 |
| Becoming successful in a business of my own | 1 | 2 | 3 | 4 |
| Becoming involved in programs to clean up the environment | 1 | 2 | 3 | 4 |
| Developing a meaningful philosophy of life | 1 | 2 | 3 | 4 |
| Participating in a community action program | 1 | 2 | 3 | 4 |
| Helping to promote racial understanding | 1 | 2 | 3 | 4 |
| Keeping up to date with political affairs | 1 | 2 | 3 | 4 |
| Becoming a community leader | 1 | 2 | 3 | 4 |

40. What is your best guess as to the chances that you will: (Mark one for each item)

- | | | | | |
|--|-------------|----------------------|---------------|--------------------|
| | 1 No Chance | 2 Very Little Chance | 3 Some Chance | 4 Very Good Chance |
| Change major field? | 1 | 2 | 3 | 4 |
| Change career choice? | 1 | 2 | 3 | 4 |
| Fail one or more courses? | 1 | 2 | 3 | 4 |
| Graduate with honors? | 1 | 2 | 3 | 4 |
| Be elected to a student office? | 1 | 2 | 3 | 4 |
| Get a job to help pay for college expenses? | 1 | 2 | 3 | 4 |
| Work full time while attending college? | 1 | 2 | 3 | 4 |
| Join a social fraternity, sorority, or club? | 1 | 2 | 3 | 4 |
| Play varsity/intercollegiate athletics? | 1 | 2 | 3 | 4 |
| Be elected to an academic honor society? | 1 | 2 | 3 | 4 |
| Make at least a "B" average? | 1 | 2 | 3 | 4 |
| Need extra time to complete your degree requirements? | 1 | 2 | 3 | 4 |
| Get a bachelor's degree (B.A., B.S., etc.)? | 1 | 2 | 3 | 4 |
| Participate in student protests or demonstrations? | 1 | 2 | 3 | 4 |
| Drop out of this college temporarily (exclude transferring)? | 1 | 2 | 3 | 4 |
| Drop out permanently (exclude transferring)? | 1 | 2 | 3 | 4 |
| Transfer to another college before graduating? | 1 | 2 | 3 | 4 |
| Be satisfied with your college? | 1 | 2 | 3 | 4 |
| Get married while in college? (skip if married) | 1 | 2 | 3 | 4 |
| Participate in volunteer or community service work? | 1 | 2 | 3 | 4 |
| Seek personal counseling? | 1 | 2 | 3 | 4 |

41. Do you give the Higher Education Research Institute at UCLA permission to include your ID number should your college request the data for additional research analyses? Yes No

The remaining ovals are provided for questions specifically designed by your college rather than the Higher Education Research Institute. If your college has chosen to use the ovals, please observe carefully the supplemental directions given to you.

- | | | |
|-------------|-------------|-------------|
| 42. 1 2 3 4 | 48. 1 2 3 4 | 56. 1 2 3 4 |
| 43. 1 2 3 4 | 49. 1 2 3 4 | 57. 1 2 3 4 |
| 44. 1 2 3 4 | 50. 1 2 3 4 | 58. 1 2 3 4 |
| 45. 1 2 3 4 | 51. 1 2 3 4 | 59. 1 2 3 4 |
| 46. 1 2 3 4 | 52. 1 2 3 4 | 60. 1 2 3 4 |
| 47. 1 2 3 4 | 53. 1 2 3 4 | 61. 1 2 3 4 |
| 48. 1 2 3 4 | 54. 1 2 3 4 | 62. 1 2 3 4 |
| 49. 1 2 3 4 | 55. 1 2 3 4 | |

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THANK YOU!

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Appendix B

1998-99 UCLA Follow-up Survey (FUS)

Survey #

UCLA 1998 Follow-up Survey

Dear Student,

Thank you for participating in this survey. The information you are being asked to provide will be used to better understand how UCLA students are affected by their college experience. Therefore, the information obtained from you is very important. Please know that your responses are and will remain **CONFIDENTIAL**.

Please answer all questions by filling in the bubbles clearly with a pen or pencil. Thank you.

1. Mark the one circle that best describes your grade point average at UCLA so far:

- A (3.75 or higher)
- A-, B+ (3.25 - 3.74)
- B (2.75 - 3.24)
- B-, C+ (2.55 - 2.74)
- C (1.75 - 2.54)
- C- or less (below 1.75)

2. When did you make your decision to go to college? (Mark one)

- Before elementary school
- Elementary school
- Jr. high/middle school
- Freshman or sophomore year of high school
- Junior or senior year of high school

3. Were you involved in a pre-college outreach/enrichment program?

- No
- Yes Which one(s)? _____

4. How many brothers and/or sisters attended college before you? (Mark one)

- None
- One
- Two
- Three or more

5. Are you the first born among your brothers and/or sisters?

- Yes
- No

6. How satisfied are you with your college experience at UCLA? (Mark one)

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

7. During high school, how often did the following people provide you with advice or information about college:

	Often	Occasionally	Never	Not Applicable
Your mother.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your father.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your brothers and/or sisters.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other relatives (cousins, uncle, etc.).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends of the family.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school friends.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school teachers or counselors.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private college counselors.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Which option listed below best describes where you lived during each year you attended college: (Mark in a column for each year enrolled)

	YEAR				
	1	2	3	4	5
With parents or relatives.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other private home, apartment, room.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College dormitory.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fraternity or sorority house.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other campus student housing.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. How much difficulty did you experience in making the transition from home to UCLA?

- A lot
- Some
- A little
- None

10. Please indicate the highest degree you (A) will have earned as of June 1999 and (B) plan to complete at any institution: (Mark one in each column)

	Highest Degree	
	Earned As of 1999	Planned Anywhere
None.....	<input type="radio"/>	<input type="radio"/>
Vocational certificate.....	<input type="radio"/>	<input type="radio"/>
Associate (A.A. or equivalent).....	<input type="radio"/>	<input type="radio"/>
Bachelor's degree (BA, BS, etc.).....	<input type="radio"/>	<input type="radio"/>
Master's degree (MA, MS, etc.).....	<input type="radio"/>	<input type="radio"/>
Ph.D. or Ed.D.....	<input type="radio"/>	<input type="radio"/>
MD., D.O., D.D.S. or D.V.M.....	<input type="radio"/>	<input type="radio"/>
LL.B or J.D. (Law).....	<input type="radio"/>	<input type="radio"/>
B.D or M.DIV. (Divinity).....	<input type="radio"/>	<input type="radio"/>
Other.....	<input type="radio"/>	<input type="radio"/>

11. Were you ever (or are you currently) involved in any of the following TRIO programs:

	YES	NO
Upward Bound.....	<input type="radio"/>	<input type="radio"/>
Talent Search.....	<input type="radio"/>	<input type="radio"/>
Educational Opportunity Centers.....	<input type="radio"/>	<input type="radio"/>
Student Support Service (e.g., PLUS).....	<input type="radio"/>	<input type="radio"/>
Robert McNair.....	<input type="radio"/>	<input type="radio"/>

12. Since coming to UCLA, have you:
(Mark all that apply)

- Joined a fraternity or sorority.....
- Got married.....
- Had a part-time job on campus.....
- Had a part-time job off campus.....
- Worked full-time while attending college.....
- Participated in student government.....
- Taken a remedial course.....
- Taken an ethnic studies course.....
- Taken a women's studies course.....
- Attended a cultural awareness workshop.....
- Participated in an ethnic/racial student organization.....
- Participated in campus protest/demonstration.....
- Been elected to student office.....
- Enrolled in honors or advanced courses.....
- Tutored another student.....
- Held a leadership position on campus.....

13. What is (was) your UCLA major?

14. At UCLA, how much difficulty have you had:

- | | A lot | Some | None |
|---|--------------------------|--------------------------|--------------------------|
| Making friends..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Keeping up academically..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Dealing with the bureaucracy..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Financing your college education..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fitting into the general environment..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

15. In your opinion, to what extent:
(Mark one for each item)

- | | A lot | Somewhat | A little | Not at all |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| Do the values of UCLA reflect your own..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you feel part of the academic community..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you feel part of the social community..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

16. Rate yourself on each of the following traits as compared with the average person your age.

(Mark one in each row)

- | | Highest 10% | Above Avg. | Average | Below Avg. | Lowest 10% |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Academic ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Drive to achieve..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Emotional health..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Leadership ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mathematical ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Public speaking ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Self-confidence (intellectual)..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Self-confidence (social)..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Understanding of others..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Writing ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ability to think critically..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Problem solving skills..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall academic self-image..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

17. During the past year, how much time did you spend during a typical week doing the following activities?

(Mark one in each row)

- | | Hours Per Week | | | | | | |
|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | None | < 1 | 1-2 | 3-5 | 6-10 | 11-15 | 16+ |
| Studying/homework..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Socializing with friends..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Working for pay..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Student clubs/organizations..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Household responsibilities..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Childcare/baby sitting..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Commuting to UCLA..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Classes/labs..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Socializing with family..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

18. How many UCLA professors, administrators or staff members have you encountered who took a personal interest in you and your success?

- None
- One
- Two
- Three or more

19. Below are some statements about UCLA. Indicate the extent to which you agree or disagree.

(Mark one for each item)

- | | Agree Strongly | Agree Somewhat | Disagree Somewhat | Disagree Strongly |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| Faculty at UCLA are very supportive..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Students at UCLA respect cultural differences..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| There is a lot of racial tension at UCLA..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It was difficult learning the "red tape" at Murphy Hall when I started..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Most faculty tend to underestimate my ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I experienced "culture shock" when I first came to UCLA..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The bureaucracy at UCLA is overwhelming..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| UCLA has changed me in ways I am uncomfortable with..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| UCLA can be a very alienating place..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

20. Since entering UCLA, how often have you:

	Frequently	Occasionally	Not at all
Met with an academic counselor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used tutoring services.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in intramural sports.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked on an independent study project.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Took interdisciplinary courses.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed course content with students outside of class.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Studied with other students.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voted in a student election.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt lonely or homesick.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt overwhelmed by all you had to do.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. How often did you utilize services offered by:

	Frequently	Occasionally	Not at all
Academic Advancement Program (AAP).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career Center.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dinner for 12 Strangers.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EXPO Center.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Honors Counseling.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Letters & Science Counseling.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program Leading to Undergraduate Success (PLUS).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student Psychological Services (SPS).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student Research Program (SRP).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Women's Resource Center.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing Programs.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. How often have professors provided you with:

	Frequently	Occasionally	Not at all
Encouragement to pursue graduate/professional school.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An opportunity to work on a research project.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advice and guidance about your educational program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respect (treated you like a colleague).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An opportunity to publish a paper.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional support and encouragement.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A letter of recommendation.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assistance to improve your study skills.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Honest feedback about your skills and abilities.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intellectual challenge and stimulation.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An opportunity to discuss coursework outside of class.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative feedback about your abilities and skills.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An opportunity to talk about personal problems or concerns.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. When you compare your UCLA life with your home life, have you ever felt like you were "caught between two worlds?"

- Many times
- Sometimes
- Seldom
- Not at all

24. Please indicate your agreement with each of the following statements. (Mark one for each item)

	Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly
Adjusting to the social environment at UCLA has been difficult.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very involved with social activities at UCLA.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjusting to the academic standards at UCLA has been difficult.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wasn't ready for the academic demands of UCLA.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strongly identify with my ethnic culture/heritage.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In order to "fit in" at UCLA, I often feel I have to change my personal characteristics (e.g., personality, behavior, etc.).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel the need to break away from my family in order to succeed in college.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents/family expect me to spend time with them most weekends, even if I have a lot of studying or homework to do.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents/family understand the academic demands that are being placed on me.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents/family support me in my academic/educational pursuits.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I cannot talk to my parents about classes because they would not understand.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Since coming to UCLA, I sometimes feel uncomfortable around my family because I feel disconnected from them.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was always assumed by my parents/family that I would go to college.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Did you ever consider taking a leave of absence, withdrawing from school or transferring to another college?

- No
- Leave of absence. Why? _____
- Withdraw from school. Why? _____
- Transfer to another college. Why? _____

26. Did you actually take a leave of absence, withdraw from school or transfer to another college?

- No
- Yes

27. Please briefly describe what factors (personal and/or within the campus) helped make your adjustment to UCLA easier.

28. Please briefly describe what factors (personal and/or within the campus) made your adjustment to UCLA more difficult.

If you would like to be considered for a follow-up interview concerning your experience here at UCLA, please write your phone number here # _____.

Thank you for your participation!

Please mail your completed questionnaire in the enclosed postage-paid envelope to:
Higher Education Research Institute, 3005 Moore Hall, Box 951521, UCLA. Los Angeles, CA 90095

Appendix C
Survey Cover Letter

January 19, 1999

Dear UCLA Student

Several weeks ago we asked you to participate in a follow-up survey of students who filled out our Freshman Survey in 1994 or 1995. As of January 19 we have not received your reply. Since your response is very important to the success of this project, we are again asking you to help us by completing the enclosed questionnaire and returning it in the enclosed postage paid envelope. Please answer even if you are no longer enrolled at UCLA.

The main purpose of this study is to learn more about your adjustment to UCLA and your experiences in the last few years. The short questionnaire asks you about your college activities and perceptions of the campus and is being sent to about 1,500 students who entered UCLA as freshmen in 1994 and 1995 and completed the Freshman Survey a few years ago.

Your participation in this survey is completely voluntary, and your willingness to participate will have no effect on your UCLA status. Your responses are confidential, will be utilized for the sole purpose of this study, and at no time will any individual student responses be reported. If you have any questions about the rights of subjects, feel free to contact the UCLA Office of Protection of Research Subjects at (310) 825-8714.

I hope that you will take about 15 minutes to answer the questions on this survey. This is your opportunity to help us anticipate the needs of future students. This is not "just another survey." I expect this effort to provide the UCLA community with greater insight into the student experience on our campus. ***Please complete and mail the questionnaire by February 5, 1999 using the pre-paid envelope provided.***

Your participation will not go unrewarded! A student will be chosen at random from those who mail surveys by February 5th to receive a \$100 gift certificate redeemable at the UCLA Student Store or Tower Records. Please take a few minutes right now to fill out the survey and entry form below. Place both in the pre-paid envelope, and drop it in the mail to ensure your chances of winning the \$100 gift certificate. Entry forms will be separated from surveys to ensure your anonymity. You will not be put on any mailing lists!

If you have any questions regarding this study, please feel free to call Marisol Arredondo or Professor Alexander Astin at (310) 825-1925. Thank you in advance for your time, assistance, and cooperation.

Sincerely,

Marisol Arredondo
Graduate Student Researcher

HS#98-312



(clip)
\$100 Gift Certificate Entry Form (Drawing #2)

Name: _____ ***Phone:*** _____ ***email:*** _____

Remember, entry forms will be immediately separated from surveys to ensure your anonymity.

Appendix D

**Pre-College Characteristics of First-Time, Full-time First-Generation Students and
Children of College Graduates who Entered Highly Selective, Public Universities in the
Fall of 1997**

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference FGS-CCG
	FGS	CCG	
Background Characteristics			
Parent's Income			
\$60,000 or more	23.1	72.0	-48.9
\$10,000 to \$29,999	34.9	6.4	+28.5
Less than \$9,000	8.8	1.3	+7.5
\$30,000 to \$59,000	33.3	20.3	+13.0
Parents Status			
Living with each other	72.4	80.3	-7.9
Divorced or separate	21.6	17.0	+4.6
One or both deceased	6.0	2.7	+3.3
Father's Career			
Business (executive)	22.1	34.4	-12.3
Other	29.7	18.6	+11.1
Skilled worker	16.4	3.3	+13.1
Unskilled worker	8.1	.4	+7.7
Education (secondary/elementary)	.4	6.1	-5.7
Semi-skilled worker	9.0	.9	+8.1
Engineer	2.7	12.2	-9.5
Unemployed	6.1	1.2	+4.9
Doctor (MD or DDS)	.6	7.2	-6.6
Lawyer	.0	5.5	-5.5
Farmer or forester	.8	.4	+4
Mother's Career			
Education (secondary/elementary)	2.8	23.2	-20.4
Other	28.1	17.0	-11.1
Nurse	2.3	9.4	-7.1
Unskilled worker	6.3	.4	+5.9
Semi-skilled worker	8.1	.9	+7.2
Homemaker (full-time)	15.7	12.0	+3.7
Unemployed	9.8	4.3	+5.5
Business (clerical)	8.4	4.9	+3.5
Business (executive)	11.8	13.6	-1.8
Lawyer	.0	1.0	-1.0

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference FGS-CCG
	1997 FGS	CCG	
Student's Race/Ethnicity			
White/Caucasian	49.9	76.5	-26.6
African American/Black	9.2	5.6	+3.6
Mexican American/Chicano	4.6	.9	+3.7
Puerto Rican	3.3	1.0	2.3
American Indian	2.0	1.7	+3
Asian American*	26.9	16.0	+10.9
Other Latino	6.9	2.0	+4.9
18 years old or younger	78.8	80.9	-2.1
Native English speaker	66.0	89.3	-23.3
Citizenship status			
Permanent res. (green card)	17.0	5.0	+12.0
US citizen	81.9	94.1	-12.2
Political Orientation			
Middle of the road	57.0	46.4	+10.6
Conservative or far right	12.7	20.6	-7.9
Far left or Liberal	30.2	33.0	-2.8
Self-Concept			
Academic ability	71.4	86.4	-15.0
Writing ability	38.7	56.1	-17.4
Mathematical ability	50.6	60.5	-9.9
Public speaking ability	27.1	40.3	-13.2
Self-confidence (intellectual)	56.9	68.4	-11.5
Creativity	47.5	59.3	-11.8
Leadership ability	53.7	62.3	-8.6
Self-understanding	56.6	64.0	-8.1
Emotional health	53.3	60.7	-7.4
Understanding of others	65.8	70.1	-4.3
Physical health	52.0	61.5	-9.5
Artistic ability	24.8	32.0	-7.2
Competitiveness	57.3	60.9	-3.6
Popularity	36.6	46.7	-10.1
Spirituality	39.4	42.8	-3.4
Drive to achieve	74.8	76.9	-2.1
Self-confidence (social)	44.9	52.2	-7.3
Cooperativeness	73.7	74.4	-.7

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference
	FGS	CCG	
Academic Preparation and Degree Aspirations			
High School GPA			
A or A+	23.9	32.9	-9.0
A-	26.9	31.1	-4.2
B+	24.2	20.1	+3.2
B	16.7	11.7	+5.0
B-	5.5	3.0	+2.5
C+ or less	2.8	1.2	+1.6
Had Remedial Work In*			
Reading	4.2	2.3	+1.9
English	5.6	3.3	+2.3
Social studies	3.0	1.6	+1.4
Science	4.5	3.2	+1.3
Mathematics	9.0	9.1	-.1
Will Need Remedial Work In*			
Mathematics	24.2	15.7	+8.5
English	16.1	6.5	+9.6
Reading	8.3	2.4	+5.9
Science	16.6	9.0	+7.6
Social studies	5.7	1.8	+3.9
Foreign language	12.1	8.9	+3.2
In Planning for College*			
Took SAT/ACT prep. course	34.6	41.8	-7.2
Sought HS counselor's advice	73.8	68.5	-5.3
Hired private college counselor	1.9	3.8	-1.9
Degree Aspirations			
Vocational certificate or A.A.	.3	.1	+2
Bachelor's (B.A., B.S.)	18.1	11.5	+6.6
Ph.D. or Ed.D.	19.8	22.0	-2.2
Master's (M.A., M.S.)	39.9	41.0	-1.1
M.D., D.O., D.D.S., D.V.M.	15.5	17.1	-1.6
LL.B. or J.D. (law)	4.3	6.9	-2.6

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference
	FGS	CCG	
Decisions About College			
Reasons Noted for Going to College*			
To prove to others I could succeed	40.9	27.2	+13.7
To be able to get a better job	74.9	69.8	+5.1
To be able to make more money	71.8	66.8	+5.0
To Improve reading & study skills	47.1	38.8	+8.3
I could not find a job	7.6	3.0	+4.6
Wanted to get away from home	19.9	21.3	-1.4
Role model/mentor encouraged me	13.7	10.4	+3.3
My parents wanted me to go	36.4	35.3	+1.1
Reasons Noted in Selecting Their Own College*			
Wanted to live near home	20.0	12.3	+7.7
Low tuition	40.5	33.7	+6.8
Offered financial assistance	35.6	17.5	+18.1
Good academic reputation	69.4	75.1	-5.7
Graduates go to top grad schools	42.3	48.2	-5.9
Rankings in national magazines	21.9	24.3	-2.4
Size of college	18.0	23.4	-5.4
Advice of HS guidance counselor	10.2	6.2	+4.0
Offers special programs	24.1	17.7	+6.4
Teacher advised me	5.7	3.1	+2.6
Relatives wanted me to come	8.9	8.9	0.0
Graduates get good jobs	58.8	62.5	-3.7
Religious affiliation/orientation	1.8	2.0	-2
Good social reputation	35.0	37.5	-2.5
Colleges Applied to for Admissions Other than the One Attending			
None	12.1	12.7	-.6
Five or more	28.8	32.2	-3.4
Two to Four	48.8	44.1	+4.7
One	10.5	11.1	-.6
Acceptances Received			
No other	4.5	4.4	+1
Four or more	32.4	35.4	-3.0
One	17.3	17.6	-.3
Three	21.5	21.2	+3
Two	24.1	21.4	+2.7
College was Students First Choice	60.7	64.3	-3.6

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference
	1997		
	FGS	CCG	FGS-CCG
Miles from College			
11 to 100	54.3	44.2	+10.1
101 to 500	31.9	38.3	-6.4
More than 500	6.5	11.8	-5.3
10 or less	7.4	5.7	+1.7
Planning to Live in the Fall			
College dormitory	84.7	91.4	-6.7
With parents or relatives	11.8	5.1	+6.7
Other private home, apt, room	1.8	.9	+9
Paying for College			
Concerns about Paying for College			
None	18.9	42.0	-23.1
Major	24.2	8.1	+16.1
Some	57.0	49.0	+8.0
Received Any Aid from:			
Pell Grant	37.0	9.5	+27.5
Parental or family aid	74.5	90.7	-16.2
Part-time job off campus	17.5	10.9	+6.6
Other college grant	24.6	20.1	+4.5
Stafford/Guaranteed Student Loan	34.9	16.7	+18.2
Savings from summer work	47.1	52.0	-4.9
Other savings	25.7	33.1	-7.4
Supp Educational Oppty Grant	13.3	3.1	+10.2
State scholarship or grant	28.7	13.8	+14.9
Full-time job while in college	2.2	.7	+1.5
Perkins Loan	20.7	7.9	+12.8
Other loan	7.9	5.4	+2.5
Other private grant	10.7	11.6	-.9
Other college loan	13.7	9.1	+4.6
Spouse	.5	.2	+3
College Work-Study Grant	25.4	9.2	+16.2
Part-time job on campus	37.2	23.0	+14.2

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference
	1997		
	FGS	CCG	FGS-CCG
Received \$1,500 or more			
Parental or family aid	50.0	82.2	-32.2
Other college grant	11.0	11.6	-.6
Pell Grant	14.2	3.1	+11.1
Other savings	5.5	10.7	-5.2
Savings from summer work	7.2	11.0	-3.8
Stafford/Guaranteed Student Loan	18.7	8.4	+10.3
Full-time job while in college	.7	.3	+.4
Other private grant	3.6	4.0	-.4
Part-time job on campus	5.9	3.0	+2.9
Part-time job off campus	2.1	1.5	+.6
Supp Educational Oppty Grant	2.3	.7	+1.6
State scholarship or grant	10.3	4.4	++5.9
Spouse	.2	.1	+.1
Other Loan (including Perkins Loan)	22.0	14.5	+7.5
College Work-Study Grant	4.6	1.6	+3.0
Activities Engaged in the Past Year			
Used a personal computer*	58.4	75.0	-16.6
Played a musical instrument	34.0	46.7	-12.7
Tutored another student	64.0	65.3	-1.3
Performed volunteer work	78.9	84.4	-5.5
Socialized w/different ethnic group*	74.4	74.4	0.0
Attended a religious service	73.6	82.3	-8.7
Discussed politics*	12.5	20.8	-8.3
Was bored in class*	33.5	44.0	-10.5
Voted in student election*	22.8	26.3	-3.5
Studied with other students	87.6	90.8	-3.2
Drank wine or liquor	49.7	61.8	-12.1
Was a guest in a teacher's home	23.7	29.1	-5.4
Drank beer	44.9	56.7	-11.8
Participated in demonstrations	40.6	32.1	+8.5
Worked in political campaign	9.5	12.6	-3.1
Asked teacher for advice*	23.3	25.1	-1.8
Felt overwhelmed*	27.6	29.2	-1.6
Felt depressed*	9.5	8.0	+1.5
Smoked cigarettes*	8.5	10.4	-1.9
Hours per week Spent on			
Volunteer work (None)	34.1	28.0	+6.1
Studying or doing homework (6+)	45.8	52.3	-6.5
Working for pay (6+)	59.9	50.5	+9.4
Exercising or sports (6+)	42.0	53.1	-11.1
Student clubs and groups (3+)	33.7	37.5	-3.8
Socializing with friends (6+)	72.5	80.8	-8.3
Housework/Childcare (6+)	9.4	5.8	+3.6

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference
	FGS	CCG	
Life Goals and Future Activities			
Essential or Very Important Objectives			
Keep up to date with politics	29.2	38.2	-9.0
Develop philosophy of life	46.3	50.7	-4.4
Be successful in own business	44.6	37.0	+7.6
Be very well off financially	82.1	72.9	+9.2
Be a community leader	33.1	33.9	-.8
Achieve in a performing art	10.8	14.1	-3.3
Have admin responsibility	41.1	37.0	+4.1
Become authority in my own field	66.1	66.2	-.1
Participate in cmtly action program	26.8	25.2	+1.6
Obtain recognition from colleagues	59.9	56.7	+3.2
Raise a family	73.5	75.8	-2.3
Write original works	14.3	16.2	-1.9
Influence political structure	18.8	18.8	0.0
Create artistic work	11.4	14.3	-2.9
Theoretical contribute to science	26.0	21.4	+4.6
Influence social values	36.7	35.5	+1.2
Be involved in environ clean-up	21.8	19.4	-2.4
Promote racial understanding	42.7	36.0	+6.7
Very Good Chances that			
Get bachelor's degree	77.8	83.0	-5.2
Make at least "B" average	52.1	63.2	-11.1
Participate in volunteer/cmtly svc	21.7	27.0	-5.3
Join social fraternity/sorority	15.5	21.8	-6.3
Graduate with honors	18.3	24.9	-6.6
Work full-time while attending	3.8	1.6	+2.2
Change career choice	14.7	19.6	-4.9
Be satisfied with college	46.1	55.0	-8.9
Change major field	16.9	20.4	-3.5
Play varsity/intercol athletics	9.1	10.7	-1.6
Marry while in college	3.3	2.1	+1.2
Transfer to another college	4.5	4.0	+.5
Need extra time for degree	6.7	5.6	+1.1
Participate in student protests	6.0	5.9	+.1
Seek personal counseling	9.9	6.6	+3.3
Be elected to student office	3.4	3.3	+.1
Drop out permanently	.9	.4	+.5
Fail one or more courses	1.2	.9	+.3
Drop out temporarily	.7	.6	+.1

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference FGS-CCG
	1997 FGS	CCG	
College Major			
Arts or Humanities	8.2	11.8	-3.6
Professional	18.5	13.9	+4.6
Education	3.8	3.3	+.5
Technical	2.0	1.2	+.8
Biological Sciences	12.3	12.9	-.6
Other Fields	8.1	5.5	+2.6
Business	15.4	16.6	-1.2
Engineering	10.7	11.6	-.9
Undecided	8.8	9.0	-.2
Social Sciences	10.2	11.0	-.8
Physical Sciences	2.7	3.2	-.5
Career Goals			
Nurse	1.9	1.2	+.7
Physician	13.1	13.5	-.4
Undecided	15.3	14.8	+.5
Other career	6.9	5.8	+1.1
Engineer	10.2	10.0	+.2
Teacher/admin (elementary)	1.6	1.8	-.2
Accountant or actuary	2.7	1.7	+1.0
Lawyer (attorney) or judge	4.2	5.9	-1.7
Skilled trades	.2	.2	0.0
Business (clerical)	.5	.3	+.2
Computer programmer or analyst	5.3	3.5	+1.8
Writer or journalist	2.1	3.0	-.9
Social, welfare, recreation worker	1.0	.6	+.4
Scientific researcher	2.7	3.2	-.5
Law enforcement officer	.6	.3	+.3
Policymaker/government	.7	1.3	-.6
Lab technician or hygienist	.3	.2	+.1
Military service (career)	.1	.3	-.2
Musician (performer, composer)	.6	1.2	-.6
Actor or entertainer	1.0	1.5	-.5
Business executive (management)	8.8	10.8	-2.0
Business owner or proprietor	2.2	2.4	-.2
Foreign service (incl. diplomat)	.4	1.1	-.7
Artist	.9	1.5	-.6
Teacher/admin (secondary)	2.3	2.3	0.0
Architect or urban planner	1.2	1.2	0.0
Clinical psychologist	2.2	1.7	+.5
College teacher	.3	.7	-.4
Pharmacist	2.1	1.3	+.8
School counselor	.2	.2	0.0
Homemaker (full-time)	.0	.1	-.1

Pre-College Characteristics of First-Time, Full-time First-Generation Students (FGS) and Children of College Graduates (CCG) who Entered Highly Selective, Public Universities in the Fall of 1997

	Percent in		Difference
	1997		
	FGS	CCG	FGS-CCG
Dentist (including orthodontist)	.8	.9	-.1
Conservationist or forester	.4	.4	0.0
Dietitian or home economist	.4	.3	+.1
Farmer or rancher	.1	.1	0.0
Interior decorator (including design)	.3	.1	+.2
Veterinarian	1.4	1.0	+.4
Therapist (phys, occup, speech)	3.5	2.4	+1.1

Appendices E.1 – E.6

Entering Variables at Each Step for All Students

Appendix E.1 Identifying the Factors which make the Transition to College from Home Difficult (n = 535)

Step	R-sq	Variables in the Equation	Beta After Step									
			1	2	3	4	5	6	7	8	9	10
1	.06	SAT Composite	-.24	-.22***	-.23***	-.22***	-.24***	-.24***	-.25***	-.22***	-.17***	-.16***
2	.08	Parental income	-.14***	-.14***	-.16***	-.17***	-.15***	-.14***	-.14***	-.10*	-.09*	-.08
3	.09	Miles from college to home	.08*	.11**	.11**	.11**	.11**	.12**	.13**	.06	.07	
4	.10	College Advice: Private counselor	.08	.09*	.10*	.10*	.11*	.10*	.11**	.11**	.09*	
5	.10	Race: African American/Black	-.10**	-.09*	-.09*	-.09*	-.09*	-.10*	-.10*	-.09*	-.07	-.07
6	.11	SIF Self-rating: Emotional health	-.10**	-.09*	-.09*	-.09*	-.10*	-.10*	-.10*	-.09*	-.03	-.01
7	.12	SIF Anticipate: Change major field	-.08*	-.07	-.08	-.08*	-.09*	-.09*	-.09*	-.09*	-.09*	-.09*
8	.13	College Generation: FG	.14***	.10*	.11*	.12**	.11*	.10*	.10*	.10*	.10*	.10*
9	.23	FUS Activity: Felt lonely or homesick	.36***	.36***	.35***	.35***	.34***	.34***	.34***	.34***	.34***	.28***
10	.26	FUS Activity: Felt overwhelmed with all you have to do	.30***	.29***	.29***	.28***	.28***	.27***	.27***	.27***	.18***	.18***
11	.27	FUS Activity: Worked full time in college	.11**	.11**	.12**	.11**	.12**	.12**	.11**	.11**	.10**	.09*
12	.30	Caught between 2 worlds	.33***	.32***	.33***	.32***	.32***	.31***	.32***	.31***	.23***	.20***
13	.30	Difficulty: Dealing w/bureaucracy	.17***	.17***	.16***	.15***	.15***	.14***	.14***	.14***	.11**	.10**
14	.35	Experienced culture shock	.33***	.33***	.33***	.32***	.33***	.32***	.32***	.31***	.26***	.25***
15	.36	Difficulty: Making friends	.23***	.22***	.23***	.23***	.24***	.23***	.23***	.23***	.16***	.15***
16	.37	Difficulty: Keep up academically	.29***	.28***	.27***	.27***	.27***	.26***	.25***	.25***	.20***	.16***

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.1 Identifying the Factors which make the Transition to College from Home Difficult (n = 535) (continued)

Step	R-sq	Variables in the Equation	Simple												
			r	11	12	13	14	15	16						
1	.06	SAT Composite	-.24	-.15***	-.14***	-.15***	-.13*	-.15***	-.13***						
2	.08	Parental income	-.16	-.08*	-.07	-.06	-.08*	-.07	-.06						
3	.09	Miles from college to home	.07	.08*	.08*	.08*	.07*	.09*	.08*						
4	.10	College Advice: Private counselor	.10	.08*	.07	.07	.06	.07*	.07*						
5	.10	Race: African American/Black	-.07	-.08*	-.07	-.06	-.07*	-.08*	-.07*						
6	.11	SIF Self-rating: Emotional health	-.09	-.01	.01	.01	.02	.04	.05						
7	.12	SIF Anticipate: Change major field	-.08	-.08*	-.10**	-.09*	-.08*	-.08*	-.07						
8	.13	College Generation: FG	.20	.10*	.09*	.09*	.07	.06	.06						
9	.23	FUS Activity: Felt lonely or homesick	.38	.28***	.24***	.23***	.21*	.18***	.18***						
10	.26	FUS Activity: Felt overwhelmed with all you have to do	.32	.17***	.13**	.12**	.12*	.11**	.08						
11	.27	FUS Activity: Worked full time in college	.12	.09*	.07	.07	.08*	.07*	.07						
12	.30	Caught between 2 worlds	.36	.19***	.19***	.19***	.15*	.15***	.14***						
13	.30	Difficulty: Dealing w/bureaucracy	.13	.09*	.08*	.08*	.05	.05	.04						
14	.35	Experienced culture shock	.36	.25***	.23***	.23***	.23*	.22***	.22***						
15	.36	Difficulty: Making friends	.21	.15***	.15***	.14***	.14*	.14***	.12***						
16	.37	Difficulty: Keep up academically	.32	.16***	.14***	.14***	.13*	.11**	.11**						

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.2 Predicting Undergraduate GPA (n=520)

Step	R-sq	Variables in the Equation	Beta After Step												
			1	2	3	4	5	6	7	8	9				
1	.10	High School GPA	.32	.26***	.27***	.28***	.27***	.26***	.27***	.27***	.27***	.27***	.27***	.27***	
2	.16	SAT Composite	.31	.24***	.23***	.23***	.23***	.23***	.23***	.23***	.23***	.23***	.23***	.23***	
3	.18	SIF Grad; Make theoretical contribution	-.15	-.18***	-.16***	-.17***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	
4	.20	SIF Ant; Participate in demonstrations	.07	.10*	.12**	.12**	.12**	.13***	.13***	.13***	.16***	.16***	.16***	.17***	
5	.21	SIF Ant; Work full time while in college	-.19	-.16***	-.14***	-.13***	-.13***	-.13***	-.13***	-.13***	-.13***	-.13***	-.12***	-.11**	
6	.23	Going to college; Get away from home	-.12	-.10**	-.11**	-.13***	-.13***	-.13***	-.13***	-.13***	-.13***	-.13***	-.12***	-.13***	
7	.24	Going to college; Couldn't find a job	-.12	-.13***	-.10**	-.10**	-.10**	-.10**	-.10**	-.10**	-.10**	-.10**	-.10**	-.10**	
8	.25	US Citizen; Yes	-.09	-.07	-.07	-.09*	-.09*	-.08*	-.08*	-.07	-.08*	-.08*	-.08*	-.13**	
9	.26	Parental income	.11	.12**	.08	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.13**	.13**	
10	.26	Age	-.08	-.09*	-.08*	-.07	-.07	-.08*	-.08*	-.08*	-.08*	-.08*	-.09**	-.08*	
11	.32	FUS Self-rating; Drive to achieve	.30	.26***	.27***	.26***	.26***	.25***	.25***	.25***	.25***	.25***	.25***	.25***	
12	.36	FUS Act Enrolled in honors courses	.36	.30***	.27***	.26***	.26***	.24***	.24***	.24***	.24***	.24***	.24***	.24***	
13	.37	Faculty provided; Encouragement to pursue graduate school	.29	.25***	.24***	.23***	.23***	.22***	.22***	.21***	.21***	.21***	.21***	.21***	
14	.39	FUS HPW; Working for pay	-.23	-.19***	-.17***	-.17***	-.17***	-.16***	-.16***	-.15***	-.15***	-.15***	-.14***	-.13***	
15	.40	FUS Act; Intramural sports	-.10	-.11**	-.12**	-.12**	-.11**	-.12**	-.12**	-.12**	-.12**	-.12**	-.11**	-.12**	
16	.41	FUS Act; Felt Overwhelmed with all	-.15	-.15***	-.13**	-.12**	-.13**	-.12**	-.12**	-.11**	-.10**	-.10**	-.10**	-.09*	
17	.43	Utilized; Career Center	.15	.13***	.13***	.12**	.12**	.13***	.14***	.14***	.14***	.14***	.14***	.13***	
18	.44	FUS HPW; Commuting to UCLA	-.17	-.17***	-.14***	-.13**	-.13**	-.12**	-.12**	-.14***	-.14***	-.14***	-.14***	-.14***	
19	.44	Academic Self-Image	.36	.30***	.26***	.26***	.26***	.25***	.24***	.24***	.23***	.23***	.23***	.22***	
20	.45	Utilized; Student Psych Services	-.11	-.11**	-.09*	-.09*	-.09*	-.09**	-.09**	-.08*	-.08*	-.08**	-.08**	-.08*	
21	.46	FUS Act; Took interdisciplinary course	.25	.22***	.19***	.18***	.18***	.17***	.17***	.17***	.16***	.16***	.17***	.17***	
22	.46	Major; Communications	.15	.15***	.12**	.12**	.12**	.12**	.12**	.12**	.12**	.11**	.12***	.12**	
23	.47	Need to break away to succeed	-.17	-.16***	-.14***	-.14***	-.14***	-.14***	-.13***	-.13***	-.13***	-.12***	-.12***	-.13***	
24	.48	Difficulty; Financing college education	-.23	-.22***	-.16***	-.16***	-.16***	-.16***	-.16***	-.15***	-.15***	-.14***	-.14***	-.13***	
Not in the Equation															
College Generation; FG			-.16	-.14***	-.07	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.09*	-.05

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.2 Predicting Undergraduate GPA (n=520) (continued)

Step	R-sq	Variables in the Equation	r	10	11	12	13	14	15	16	17	18
1	.10	High School GPA	.32	.26***	.23***	.20***	.18***	.18***	.18***	.18***	.18***	.18***
2	.16	SAT Composite	.31	.21***	.22***	.18***	.19***	.18***	.18***	.17***	.17***	.16***
3	.18	SIF Goal: Make theoretical contribution	-.15	-.13***	-.14***	-.14***	-.14***	-.14***	-.14***	-.13***	-.13***	-.12***
4	.20	SIF Ant: Participate in demonstrations	.07	.17***	.14***	.12***	.11**	.11**	.10**	.11***	.11***	.12***
5	.21	SIF Ant: Work full time while in college	-.19	-.12**	-.09*	-.07*	-.07*	-.05	-.06	-.05	-.06	-.05
6	.23	Going to college: Get away from home	-.12	-.13***	-.11**	-.10**	-.10**	-.08*	-.08*	-.06	-.07	-.08**
7	.24	Going to college: Couldn't find a job	-.12	-.09**	-.09**	-.09**	-.08*	-.08*	-.08*	-.07*	-.07*	-.07
8	.25	US Citizen: Yes	-.09	-.14***	-.15***	-.15***	-.16***	-.15***	-.14***	-.14***	-.13***	-.13***
9	.26	Parental income	.11	.12***	.11**	.10**	.10**	.08*	.09**	.08*	.08*	.08*
10	.26	Age	-.08	-.08*	-.06	-.07	-.07	-.07	-.06	-.06	-.06	-.06
11	.32	FUS Self-rating: Drive to achieve	.30	.24***	.24***	.21***	.20***	.19***	.20***	.20***	.19***	.19***
12	.36	FUS Act Enrolled in honors courses	.36	.24***	.20***	.20***	.18***	.17***	.16***	.17***	.17***	.16***
13	.37	Faculty provided: Encouragement to pursue graduate school	.29	.21***	.17***	.13***	.13***	.14***	.14***	.14***	.13***	.13***
14	.39	FUS HIPW: Working for pay	-.23	-.13***	-.12***	-.12***	-.12***	-.12***	-.13***	-.12***	-.12***	-.11***
15	.40	FUS Act: Intramural sports	-.10	-.11***	-.13***	-.11***	-.12***	-.13***	-.13***	-.14***	-.15***	-.15***
16	.41	FUS Act: Felt Overwhelmed with all	-.15	-.09*	-.10**	-.12***	-.12***	-.11**	-.12***	-.12***	-.13***	-.13***
17	.43	Utilized: Career Center	.15	.13***	.10**	.10**	.10**	.10**	.10**	.11***	.11***	.11***
18	.44	FUS HIPW: Commuting to UCLA	-.17	-.14***	-.13***	-.12***	-.11**	-.10**	-.11***	-.11***	-.10***	-.10**
19	.44	Academic Self-Image	.36	.22***	.13***	.11**	.11**	.10*	.14***	.12**	.12**	.12**
20	.45	Utilized: Student Psych Services	-.11	-.07	-.08*	-.08*	-.09**	.08*	-.08**	-.08**	-.08**	-.09**
21	.46	FUS Act: Took interdisciplinary course	.25	.16***	.13***	.09**	.07	.08*	.08*	.08**	.07*	.07*
22	.46	Major: Communications	.15	.11**	.09*	.08*	.08*	.09**	.08**	.09**	.08**	.08*
23	.47	Need to break away to succeed	-.17	-.13***	-.13***	-.14***	-.14***	-.14***	-.14***	-.13***	-.14***	-.13***
24	.48	Difficulty: Financing college education	-.23	-.14***	-.14***	-.13***	-.14***	-.11**	-.12***	-.10**	-.10**	-.10**
Not in the Equation												
College Generation: FG			-.16	-.05	-.06	-.06	-.05	-.03	-.05	-.05	-.04	-.04

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.2 Predicting Undergraduate GPA (n=520) (continued)

Step	R-sq	Variables in the Equation	r	19	20	21	22	23	24
1	.10	High School GPA	.32	.18***	.18***	.18***	.18***	.17***	.18***
2	.16	SAT Composite	.31	.13***	.13***	.12***	.12**	.12**	.11**
3	.18	SIF Goal: Make theoretical contribution	-.15	-.13***	-.12***	-.12***	-.11***	-.10**	-.10**
4	.20	SIF Ant: Participate in demonstrations	.07	.12***	.12***	.11***	.12***	.11***	.12***
5	.21	SIF Ant: Work full time while in college	-.19	-.05	-.05	-.05	-.05	-.06	-.04
6	.23	Going to college: Get away from home	-.12	-.07*	-.07	-.07	-.06	-.05	-.05
7	.24	Going to college: Couldn't find a job	-.12	-.06	-.07*	-.06	-.06	-.06	-.06
8	.25	US Citizen; Yes	-.09	-.13***	-.12***	-.12***	-.13***	-.14***	-.14***
9	.26	Parental income	.11	.08*	.07	.07	.07	.05	.04
10	.26	Age	-.08	-.05	-.05	-.05	-.04	-.05	-.05
11	.32	FUS Self-rating: Drive to achieve	.30	.14***	.15***	.14***	.13***	.14***	.14***
12	.36	FUS Act Enrolled in honors courses	.36	.15***	.15***	.14***	.14***	.15***	.14***
13	.37	Faculty provided; Encouragement to pursue graduate school	.29	.13***	.13***	.12**	.12***	.12***	.12***
14	.39	FUS HHPW; Working for pay	-.23	-.11**	-.11**	-.11***	-.11***	-.11***	-.09**
15	.40	FUS Act: Intramural sports	-.10	-.17***	-.18***	-.17***	-.17***	-.18***	-.18***
16	.41	FUS Act: Felt Overwhelmed with all	-.15	-.11**	-.10**	-.10**	-.11**	-.09**	-.09*
17	.43	Utilized; Career Center	.15	.10***	.11***	.11**	.10**	.11***	.11**
18	.44	FUS HHPW; Commuting to UCLA	-.17	-.10**	-.10***	-.10**	-.10**	-.10***	-.10**
19	.44	Academic Self-Image	.36	.12**	.11**	.11**	.11**	.10**	.10*
20	.45	Utilized; Student Psych Services	-.11	-.09**	-.09**	-.09**	-.09**	-.08*	-.08*
21	.46	FUS Act; Took interdisciplinary course	.25	.07*	.08*	.08*	.06	.06	.06
22	.46	Major; Communications	.15	.08*	.08*	.07*	.07*	.07*	.07*
23	.47	Need to break away to succeed	-.17	-.13***	-.12***	-.12***	-.12***	-.12***	-.12***
24	.48	Difficulty; Financing college education	-.23	-.10**	-.10**	-.09*	-.09*	-.08*	-.08*
Not in the Equation									
		College Generation; FG	-.16	-.03	-.03	-.02	-.02	-.02	-.01

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.3 Predicting Social Adjustment (n=510)

Step	R-sq	Variables in the Equation	Beta After Step											
			1	2	3	4	5	6	7	8	9	10		
1	.08	SIF Self-rating: Self-confidence(social)	.28***	.29***	.27***	.23***	.22***	.10*	.09*	.08	.09*	.08	.09*	.09*
2	.10	Aid Source; parents or relatives	.15	.16***	.17***	.16***	.14***	.13***	.12**	.12**	.12**	.12**	.12**	.12***
3	.12	SIF Activity: Performed volunteer wk	.15	.12**	.12**	.12**	.12**	.10**	.07	.06	.06	.06	.06	.05
4	.13	SIF Self-rating: Emotional health	.22	.14**	.13**	.13**	.13**	.08*	.08*	.06	.05	.05	.05	.04
5	.14	College Advice: Parents	.15	.13**	.10*	.10*	.10*	.07	.07	.08*	.07*	.08*	.07*	.06
6	.22	FUS Rating: Self-confidence(social)	.40	.35***	.33***	.32***	.31***	.31***	.30***	.28***	.27***	.28***	.27***	.25***
7	.28	HPW: Student clubs/org	.31	.29***	.27***	.27***	.27***	.28***	.26***	.27***	.26***	.27***	.26***	.25***
8	.34	FUS Act: Felt lonely/homesick	-.29	-.26***	-.26***	-.25***	-.25***	-.22***	-.23***	-.23***	-.27***	-.23***	-.27***	-.27***
9	.38	Live with parents 1 & 2nd years	-.20	-.21***	-.21***	-.21***	-.20***	-.20***	-.18***	-.22***	-.22***	-.22***	-.22***	-.21***
10	.40	Professor/admin./staff took interest	.27	.24***	.22***	.21***	.21***	.17***	.15***	.15***	.15***	.15***	.15***	.15***
11	.41	FUS Activity: Studied w/other students	.28	.26***	.25***	.24***	.23***	.19***	.16***	.15***	.15***	.15***	.12***	.11**
12	.42	FUS Activity: Joined fraternity/sorority	.21	.17***	.16***	.17***	.16***	.15***	.11**	.10**	.09**	.10**	.09**	.09**
13	.43	FUS Activity: Held leadership position	.26	.24***	.22***	.22***	.22***	.19***	.09*	.10**	.10**	.10**	.10**	.10**
14	.44	FUS HPW: Socializing with friends	.23	.21***	.19***	.18***	.17***	.15***	.13***	.13***	.13***	.13***	.11**	.10**
15	.44	FUS self-Rating: Understanding of others	.11	.06	.05	.03	.03	-.08	-.07	-.07	-.07	-.07	-.07	-.08*
16	.45	Faculty Provided: Emotional support/encouragement	.22	.19***	.17***	.16***	.15***	.12**	.11**	.13***	.12***	.12***	.12***	.08*
17	.47	Experienced culture shock	-.21	-.21***	-.20***	-.19***	-.18***	-.20***	-.20***	-.15***	-.15***	-.15***	-.15***	-.15***
18	.48	Opinion: Feel part of the academic community	.29	.25***	.23***	.21***	.21***	.18***	.17***	.16***	.16***	.16***	.16***	.14***
19	.49	Strongly ID with culture	.13	.10*	.11**	.10**	.11**	.07	.06	.07	.08*	.07	.08*	.08*
Not in the Equation														
		College Generation: FG	-.11	-.10*	-.05	-.04	-.01	-.01	.00	.01	.02	.01	.02	.03

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.3 Predicting Social Adjustment (n=510) (continued)

Step	Req	Variables in the Equation	Simple																
			r	11	12	13	14	15	16	17	18	19							
1	.08	SIF Self-rating; Self-confidence(social)	.28	.09*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	
2	.10	Aid Source; parents or relatives	.15	.12***	.11**	.10**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	
3	.12	SIF Activity; Performed volunteer wk	.15	.04	.05	.04	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	
4	.13	SIF Self-rating; Emotional health	.22	.03	.03	.03	.02	.03	.02	.03	.02	.01	.00	.00	.00	.00	.00	.00	
5	.14	College Advice; Parents	.15	.05	.05	.05	.04	.04	.04	.04	.04	.01	.01	.01	.01	.01	.01	.01	
6	.22	FUS Rating; Self-confidence(social)	.40	.23***	.23***	.22***	.21***	.25***	.24***	.25***	.24***	.25***	.25***	.25***	.25***	.25***	.25***	.24***	
7	.28	HPW; Student clubs/org	.31	.24***	.22***	.17***	.17***	.16***	.16***	.16***	.16***	.16***	.16***	.16***	.16***	.16***	.16***	.16***	
8	.34	FUS Act; Felt lonely/homesick	-.29	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	-.26***	
9	.38	Live with parents 1 & 2nd years	-.20	-.20***	-.19***	-.20***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	-.19***	
10	.40	Professor/admin./staff took interest	.27	.14***	.14***	.14***	.14***	.14***	.14***	.14***	.14***	.11**	.11**	.11**	.11**	.11**	.11**	.10**	
11	.41	FUS Activity; Studied w/other students	.28	.11**	.10**	.10**	.08*	.08*	.08*	.08*	.08*	.09**	.09**	.09**	.09**	.09**	.09**	.08*	
12	.42	FUS Activity; Joined fraternity/sorority	.21	.09**	.09**	.10**	.10**	.10**	.10**	.11**	.10**	.09**	.09**	.09**	.10**	.10**	.10**	.10**	
13	.43	FUS Activity; Held leadership position	.26	.09*	.11**	.11**	.12**	.12**	.12**	.12**	.12**	.11**	.11**	.11**	.11**	.11**	.11**	.11**	
14	.44	FUS HPW; Socializing with friends	.23	.09*	.08*	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	
15	.44	FUS self-Rating; Understanding of others	.11	-.08*	-.08*	-.09*	-.09*	-.09*	-.09*	-.09*	-.09*	-.09*	-.09**	-.09**	-.09**	-.09**	-.09**	-.09**	
16	.45	Faculty Provided; Emotional support/encouragement	.22	.08*	.07	.07	.07*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.08*	.07	
17	.47	Experienced culture shock	-.21	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.16***	-.15***	
18	.48	Opinion; Feel part of the academic community	.29	.13***	.14***	.13***	.12***	.13***	.13***	.13***	.13***	.12***	.12***	.12***	.12***	.12***	.12***	.11**	
19	.49	Strongly ID with culture	.13	.07*	.08*	.08*	.09*	.09*	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.09**	.08*	
Not in the Equation																			
College Generation; FG			-.11	.02	.03	.03	.03	.03	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06	

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.4 Predicting Academic Adjustment (n = 507) (continued)

Step	R-sq	Variables in the Equation	Simple																
			r	11	12	13	14	15	16	17	18	19	20						
1	.06	Race: White/Caucasian	.24	.06	.06	.06	.04	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02
2	.09	SIF Self-rating: Academic ability	.22	.08	.07	.06	.05	.01	-.00	-.00	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.00	.01
3	.12	Chouse UCLA: Grads go to top grad school,	-.17	-.20***	-.20***	-.20***	-.16***	-.17***	-.17***	-.17***	-.17***	-.17***	-.17***	-.17***	-.17***	-.17***	-.16***	-.16***	-.15***
4	.14	SIF Activity: Felt overwhelmed	-.19	-.15**	-.16***	-.16***	-.05	-.05	-.05	-.05	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.04
5	.16	SIF Self-rating: Writing ability	.19	.13**	.13**	.12**	.13***	.13***	.13***	.13***	.11**	.10**	.10**	.10**	.10**	.10**	.08*	.07*	.07
6	.18	SIF Anticipate: Change career choice	.12	.13***	.13***	.13***	.11**	.10**	.10**	.11**	.11**	.12***	.12***	.11***	.11***	.11***	.11**	.11**	.11**
7	.19	SAT Composite	.22	.17***	.16***	.13**	.10*	.02	.04	.03	.03	.02	.02	.04	.03	.02	.04	.03	.03
8	.21	SIF Self-rating: Emotional Health	.15	.14***	.13***	.12**	.07	.06	.05	.05	.06	.05	.05	.06	.05	.06	.05	.06	.05
9	.22	SIF HIPW: Working for pay	-.13	-.10**	-.10**	-.10**	-.10**	-.10**	-.08*	-.08*	-.08*	-.08*	-.08*	-.08*	-.08*	-.08*	-.07*	-.08*	-.08*
10	.22	Race: Asian American/Asian	-.09	-.13**	-.12**	-.12**	-.08*	-.06	-.07	-.07	-.07	-.06	-.06	-.06	-.06	-.05	-.05	-.08	-.08
11	.23	High School GPA	.16	.11*	.12**	.13**	.13**	.12**	.13**	.12**	.13**	.13**	.13**	.13**	.12**	.12**	.12**	.12**	.11**
12	.24	Going to college: Couldn't find a job	-.14	-.09*	-.09*	-.09*	-.08*	-.07*	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.07	-.05	-.05
13	.25	College Generation: FG	-.18	-.10*	-.10*	-.10*	-.08*	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.06	-.06
14	.35	FUS Activity: Felt Overwhelmed	-.45	-.36***	-.35***	-.36***	-.36***	-.36***	-.34***	-.33***	-.33***	-.33***	-.33***	-.33***	-.33***	-.33***	-.31***	-.30***	-.30***
15	.39	FUS Self-rating: Academic Ability	.37	.25***	.25***	.25***	.21***	.21***	.21***	.20***	.20***	.20***	.20***	.20***	.20***	.19***	.19***	.20***	.20***
16	.40	Prof./Admin./Staff took personal interest	.19	.17***	.16***	.16***	.14***	.12**	.12**	.12**	.12**	.12**	.12**	.12**	.12**	.12**	.10**	.10**	.10**
17	.41	FUS Activity: Taken Remedial	-.16	-.11**	-.11**	-.11**	-.10**	-.11**	-.11**	-.11**	-.11**	-.11**	-.11**	-.11**	-.11**	-.12***	-.12***	-.13***	-.13***
18	.42	Faculty Provided: Honest Feedback	.23	.15***	.15***	.15***	.14***	.11**	.11**	.11**	.09*	.09*	.10**	.10**	.10**	.10**	.10**	.10**	.10**
19	.43	FUS HIPW: Student clubs/org.	-.14	-.12**	-.12**	-.12**	-.07*	-.07*	-.07*	-.08*	-.08*	-.09*	-.09*	-.09*	-.09*	-.09*	-.09*	-.08*	-.08*
20	.44	Experienced culture shock	-.22	-.16***	-.15***	-.14***	-.12**	-.13***	-.13***	-.13***	-.13***	-.14***	-.14***	-.14***	-.14***	-.14***	-.14***	-.14***	-.14***
21	.46	Difficulty: Financing college education	-.29	-.23***	-.22***	-.21***	-.15***	-.14***	-.13***	-.13***	-.13***	-.13***	-.13***	-.13***	-.12***	-.12***	-.12***	-.12***	-.12***
22	.46	Faculty underestimate ability	-.22	-.16***	-.16***	-.16***	-.14***	-.13***	-.13***	-.12***	-.12***	-.12***	-.12***	-.12***	-.12***	-.11**	-.11**	-.10**	-.10**
23	.47	Need to break away from family	-.25	-.18***	-.18***	-.17***	-.13***	-.12***	-.12***	-.12***	-.12***	-.12***	-.12***	-.12***	-.11**	-.11**	-.10**	-.10**	-.10**
24	.48	Values of UCLA reflect your own	.14	.14**	.14***	.14***	.12**	.12***	.12***	.10**	.10**	.10**	.10**	.10**	.10**	.10**	.10**	.09**	.09**

***p < .001, **p < .01, *p < .05

Appendix E.4 Predicting Academic Adjustment (n = 507) (continued)

Step	R-sq	Variables in the Equation	Simple										
			r	21	22	23	24						
1	.06	Race: White/Caucasian	.24	.02	.02	.02	.02						
2	.09	SIF Self-rating: Academic ability	.22	.02	.02	.02	.02						
3	.12	Chwse UCLA: Grads go to top grad school,	-.17	-.15***	-.15***	-.15***	-.15***						
4	.14	SIF Activity: Felt overwhelmed	-.19	-.04	-.04	-.04	-.04						
5	.16	SIF Self-rating: Writing ability	.19	.08*	.08*	.09*	.10**						
6	.18	SIF Anticipate: Change career choice	.12	.10**	.09**	.09**	.09**						
7	.19	SAT Composite	.22	.01	.01	.01	.01						
8	.21	SIF Self-rating: Emotional Health	.15	.05	.05	.05	.04						
9	.22	SIF HIPW: Working for pay	-.13	-.06	-.06	-.07	-.07						
10	.22	Race: Asian American/Asian	-.09	-.07*	-.07	-.06	-.07						
11	.23	High School GPA	.16	.11**	.10**	.10**	.10**						
12	.24	Going to college: Couldn't find a job	-.14	-.05	-.04	-.04	-.04						
13	.25	College Generation: FG	-.18	-.05	-.05	-.04	-.04						
14	.35	FUS Activity: Felt Overwhelmed	-.45	-.28***	-.28***	-.27***	-.27***						
15	.39	FUS Self-rating: Academic Ability	.37	.19***	.19***	.18***	.19***						
16	.40	Prof./Admin./Staff took personal interest	.19	.09*	.07*	.07	.06						
17	.41	FUS Activity: Taken Remedial	-.16	-.12***	-.11***	-.11**	-.11**						
18	.42	Faculty Provided: Honest Feedback	.23	.10**	.10**	.09*	.09*						
19	.43	FUS HIPW: Student clubs/org.	-.14	-.08*	-.08*	-.08*	-.08*						
20	.44	Experienced culture shock	-.22	-.13***	-.12***	-.12***	-.12***						
21	.46	Difficulty: Financing college education	-.29	-.12***	-.12***	-.11**	-.11**						
22	.46	Faculty underestimate ability	-.22	-.09**	-.09**	-.08*	-.08*						
23	.47	Need to break away from family	-.25	-.09**	-.08*	-.08*	-.08*						
24	.48	Values of UCLA reflect your own	.14	.08*	.08*	.08*	.08*						

***p < .001, **p < .01, *p < .05

Appendix E.5 Predicting Social Self-Image (n = 520)

Step	R-sq	Variables in the Equation	Beta After Step									
			1	2	3	4	5	6	7	8	9	
1	.31	Prestig: Social self-image	.55***	.56***	.55***	.54***	.55***	.54***	.48***	.54***	.44***	.42***
2	.33	Sex: Female	-.15***	-.15***	-.14***	-.14***	-.12***	-.12***	-.11***	-.12***	-.11***	-.06*
3	.34	SIF Anticipate: Transfer to another college	-.11**	-.09**	-.09**	-.09**	-.09**	-.09**	-.06	-.09**	-.03	-.03
4	.34	Race: Asian American/Asian	-.07*	-.07	-.07*	-.07*	-.07*	-.10**	-.10**	-.08*	-.07*	-.05
5	.35	SAT Composite	.08*	.05	.05	.09*	.09*	.06	.04	.05	.05	-.03
6	.35	College Generation: FG	-.10**	-.09**	-.09**	-.09**	-.08*	-.08*	-.09**	-.08*	-.08*	-.06*
7	.47	FUS Self-rating: Drive to achieve	.36***	.35***	.35***	.34***	.34***	.34***	.34***	.34***	.30***	.21***
8	.52	FUS Self-Rating: Understanding of others	.31***	.31***	.30***	.30***	.30***	.30***	.24***	.30***	.24***	.21***
9	.55	Academic self-image	.38***	.37***	.36***	.37***	.39***	.38***	.27***	.38***	.23***	.23***
10	.56	FUS Activity: Held leadership position	.17***	.16***	.16***	.17***	.17***	.17***	.13***	.17***	.12***	.13***
11	.58	FUS Activity: Taken an ethnic studies course	.09*	.13***	.12***	.12***	.13***	.14***	.14***	.14***	.12***	.13***
12	.59	FUS Activity: Felt lonely/homesick	-.14***	-.12**	-.11**	-.11**	-.10**	-.10**	-.10**	-.10**	-.10**	-.09**
13	.60	Difficulty: Making friends	-.20***	-.19***	-.19***	-.18***	-.18***	-.18***	-.15***	-.18***	-.14***	-.14***
14	.60	There is a lot of racial tension	.12***	.13***	.13***	.12***	.12***	.12***	.09**	.12***	.09**	.09**
15	.61	To fit in have to change personal	-.10**	-.11**	-.11**	-.11**	-.10**	-.10**	-.10**	-.10**	-.10**	-.08**

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.5 Predicting Social Self-image (n = 520) (continued)

Step	R-sq	Variables in the Equation	Simple												
			r	10	11	12	13	14	15						
1	.31	Pretest: Social self-image	.55	.40***	.39***	.38***	.36***	.35***	.34***						
2	.33	Sex: Female	-.14	-.06*	-.09**	-.07*	-.08*	-.08**	-.08**						
3	.34	SIF Anticipate: Transfer to another college	-.15	-.03	-.02	-.01	.00	.00	.00						
4	.34	Race: Asian American/Asian	-.13	-.06	-.05	-.05	-.05	-.03	-.03						
5	.35	SAT Composite	.01	-.05	-.03	-.05	-.04	-.04	-.04						
6	.35	College Generation: FG	-.14	-.07*	-.07*	-.07*	-.07*	-.07*	-.07*						
7	.47	FUS Self-rating: Drive to achieve	.44	.20***	.19***	.20***	.19***	.18***	.18***						
8	.52	FUS Self-Rating: Understanding of others	.43	.20***	.19***	.18***	.18***	.19***	.18***						
9	.55	Academic self-image	.45	.24***	.25***	.24***	.24***	.24***	.24***						
10	.56	FUS Activity: Held leadership position	.26	.13***	.12***	.13***	.13***	.13***	.13***						
11	.58	FUS Activity: Taken an ethnic studies course	.14	.12***	.12***	.13***	.12***	.12***	.10***						
12	.59	FUS Activity: Felt lonely/homesick	-.20	-.10***	-.11***	-.11***	-.09**	-.09**	-.08**						
13	.60	Difficulty: Making friends	-.33	-.13***	-.12***	-.11***	-.11***	-.12***	-.10***						
14	.60	There is a lot of racial tension	.16	.09**	.07*	.08**	.09**	.09**	.09**						
15	.61	To fit in have to change personal	-.21	-.08**	-.09**	-.07*	-.05	-.07*	-.07*						

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.6 Predicting Academic Self-image (n = 516)

Step	R-sq	Variables in the Equation	Beta After Step									
			1	2	3	4	5	6	7	8	9	10
1	.27	Pretest: Academic self image	.52***	.45***	.41***	.40***	.41***	.38***	.33***	.33***	.32***	.31***
2	.31	SAT composite	.23***	.23***	.21***	.17***	.22***	.23***	.23***	.24***	.23***	.22***
3	.34	Sex: Female	-.20***	-.17***	-.17***	-.19***	-.17***	-.17***	-.18***	-.15***	-.12***	-.13***
4	.36	When decision was made to go to college	.16***	.10**	.13***	.13***	.12***	.12**	.11**	.09**	.09**	.07*
5	.37	Race: Asian American/Asian	-.04	-.14***	-.12**	-.12**	-.12**	-.11**	-.09**	-.06	-.07*	-.06
6	.37	SIF Self-rating: Competitiveness	.08	.11**	.10**	.09*	.09*	.09*	-.03	-.07	-.07*	-.07*
7	.46	FUS Self-rating: Drive to Achieve	.34***	.36***	.36***	.36***	.35***	.36***	.36***	.28***	.27***	.25***
8	.53	Social self-image	.37***	.38***	.37***	.38***	.35***	.35***	.25***	.25***	.26***	.24***
9	.54	FUS Activity: Taken women's studies course	-.11**	-.08*	-.04	-.04	-.05	-.05	-.07*	-.10**	-.10**	-.10**
10	.55	FUS Self-rating: Writing ability	.26***	.24***	.26***	.24***	.23***	.22***	.15***	.09**	.10**	.10**
11	.55	Faculty provided: Emotional support/encouragement	.00	.01	.03	.02	.01	.01	-.04	-.07*	-.07*	-.07*
12	.56	FUS Activity: Tutored another student	.11**	.10**	.09**	.09**	.10**	.10**	.08*	.06*	.06*	.07*
13	.57	Not ready for the academic demands	-.20***	-.17***	-.18***	-.17***	-.16***	-.16***	-.14***	-.13***	-.13***	-.12***
Not in the Equation												
College Generation: FG			-.19	-.12**	-.06	-.04	-.04	-.04	-.05	-.01	-.01	-.01

***p ≤ .001, **p ≤ .01, *p ≤ .05

Appendix E.6 Predicting Academic Self-image (n = 516) (continued)

Step	R-sq	Variables in the Equation	Simple				
			r	11	12	13	
1	.27	Pretest: Academic self image	.52	.32***	.31***	.30***	
2	.31	SAT composite	.37	.22***	.21***	.19***	
3	.34	Sex: Female	-.31	-.12***	-.12***	-.12***	
4	.36	When decision was made to go to college	.22	.08*	.07*	.07*	
5	.37	Race: Asian American/Asian	.02	-.06	-.06*	-.05	
6	.37	SIF Self-rating: Competitiveness	.23	-.07*	-.07*	-.06	
7	.48	FUS Self-rating: Drive to Achieve	.44	.26***	.26***	.25***	
8	.53	Social self-image	.45	.25***	.24***	.25***	
9	.54	FUS Activity: Taken women's studies course	-.20	-.10**	-.10**	-.09**	
10	.55	FUS Self-rating: Writing ability	.33	.11**	.11**	.08*	
11	.55	Faculty provided: Emotional support/encouragement	.03	.07*	-.07*	-.08**	
12	.56	FUS Activity: Tutored another student	.18	.06*	.06*	.06*	
13	.57	Not ready for the academic demands	-.28	-.13***	-.13***	-.13***	
Not in the Equation							
		College Generation: FG	-.19	-.02	-.03	-.02	

***p ≤ .001, **p ≤ .01, *p ≤ .05

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