THE HURDLES WE OVERCOME:
FACTORS AND PROCESSES INFLUENCING THE SOCIAL AND ACADEMIC
INTEGRATION OF NON-TRADITIONAL COLLEGE STUDENTS

by

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ABSTRACT

This study examines the factors that lead to attrition among low-income students enrolled in the Educational Opportunity Program (EOP) at Humboldt State University, a small rural four-year residential college in northwestern California. The study encompasses three areas of investigation. Part one and two of the study is based on the leading research in the area of student attrition and is modeled after the work of Bean (1990), Tinto (1993), and Cabrera, Castaneda, Nora, and Hengstler (1992), and identifies the non-cognitive factors affecting EOP students, specifically in regard to their academic integration, their social integration, their institutional commitment, and their intent to persist at the institution.

Part three of the study identifies indicators that measure the students’ high school experiences and identifies which of those experiences correlate with the students’ subsequent college experiences. The identification of such correlations suggest that these high school indicators could serve as a predictor for the students’ subsequent college integration, institutional commitment and persistence at Humboldt State University.

And part four of this study identifies how student adaptation strategies influence the continuity of the students’ experiences between high school and college. This would provide a better understanding of how the students’ individual agency influences their
transition into college and how this individual agency affects the reliability of high school indicators as predictors for subsequent college experiences.

The results of the study confirm the findings of earlier research, showing that academic and social integration have a powerful influence on EOP students’ in regard to their institutional commitment and in regard to their intent to persist at Humboldt State University. Additional factors found to influence institutional commitment and persistence included peer and parental encouragement for attending Humboldt State University, peer group influences regarding the academic goals of the institution, and the students’ level of involvement with their academics. The study also revealed that white students benefited more from the cultural bias inherent within the institution and that students of color faced larger challenges in regard to their social and academic integration, as well as in regard to their institutional commitment and their intent to persist at Humboldt State University.

The study also found two high school measures that had strong correlations with the students’ subsequent college experiences, and which could serve as predictive indicators for entering students. These high school measures included peer group influences regarding the academic goals of the institution, and the students’ level of involvement with the academic curriculum. And finally, the study found that when students’ used an integrative adaptation strategy during their transition into college, the significant
correlations found between their high school and college experiences improved, suggesting that individual agency does influence the level of continuity during the students’ transition between high school and college.
DEDICATION

This work is dedicated to my family. For Angie, whose continuous support has made this entire task possible, and whose thoughtfulness and encouragement has made the travel down this road easier. She also served as an invaluable part of the editorial team, whose tough scrutiny allowed for neither redundancy, nor meandering, and for which I am immeasurably grateful. For mom, who is no longer here, but who with a single look celebrated my completion of this task, which she had somehow known would be inevitable. And for Michael, Mason, and Morgan…let’s go play!
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INTRODUCTION

It is commonly recognized that college provides access to society’s preferred occupations, and that with every advance in educational attainment comes a corresponding increase in annual income. A person earning a bachelor’s degree, for instance, will earn nearly twice as much per year as a person who only has a high school diploma (U.S. Census Bureau, 1998). It has also been well established that this correlation is true across class, gender, and ethnic lines, and that education provides an opportunity for everyone to achieve upward social mobility (Postsecondary Education Opportunity, Number 94, April 2000; and Number 102, December 2000).

Unfortunately, it has also been well established that access to college and the rate of college graduation is lower amongst those who are from economically disadvantaged backgrounds, who do not have family members who have gone to college, and who are students of color. Children from families with greater than $75,000 in annual income, comprising approximately 25% of all college age dependent students, are twice as likely to attend college than are those who are from families with annual incomes of less than $25,000, who also comprise approximately 25% of all college age dependent students (Postsecondary Education Opportunity, Number 94, April 2000).
It has also been found that students of color entering college immediately after graduating from high school do so at a much lower rate than do white students. Hispanic students, for instance, enroll in college at a rate of 47.5%, and black students enroll at a rate of 62.1%, as compared to white students who enroll at a rate of 70.6%.

Additionally, it has been found that with the exception of Asian/Pacific Islander students, the college graduation rate among students of color is significantly lower than it is among white students. Of students who entered college between 1992 and 2000, 53.1% of white students had earned their bachelors degree as opposed to 33.9% of black students, 29.4% of Hispanic students, and 34.1% of American Indian students. Men were only slightly more likely to have earned their 4-year degree (50.7%), than were women (49%) during this same time period (Postsecondary Educational Opportunity, Number 102, December 2000).

Because of the differences in college attendance and graduation rates, a number of federal and state funded programs were established in the 1960’s and 1970’s. These programs were designed to promote college access and graduation among underrepresented groups in the United States. Despite the creation and success of programs such as the TRIO programs and state funded Educational Opportunity Programs, there continue to be inequities in college participation and persistence rates among ethnic minorities. Low income, ethnic minority, and first generation college students who enter college continue
to be at risk and are less likely to graduate than are their more economically advantaged peers (Postsecondary Education Opportunity, April 2000; National Center for Education Statistics, May 1996; National Center for Educational Statistics, May 1998; National Center for Education Statistics, June 1998).

This study examines some of the factors that lead to attrition among low income students enrolled in the Educational Opportunity Program (EOP) at Humboldt State University.
Causal Factors in Student Attrition

There are a number of factors that contribute to differences in college attendance and graduation rates, which include the inability to afford college, the lack of familiarity with college expectations, policies, and procedures, and the quality of high school preparation (Tinto, 1993). In addition to these pre-collegiate factors are issues of social and academic integration. Because low income and first generation college students are non-traditional students, they often experience a sense of marginalization as they enter into the institutional environment. Often they do not experience the same sense of belonging that traditional students experience because of their underrepresentation, either based on their ethnicity or based on their socioeconomic background (Tinto, 1993).

When students are admitted to Humboldt State University (HSU), there are no formal indicators that measure how the student will experience the academic and social environment. It is presumed that the student has been properly assessed in regard to their academic preparation by means of their academic transcript. Measures such as the completion of college preparatory coursework, high school grade point average, and performance on standardized entrance exams such as the Scholastic Assessment Test
(SAT) or the American College Test (ACT) are commonly used to assess academic preparedness. There are, however, no standardized admissions instruments that are used by Humboldt State University admissions personnel that measure non-cognitive aptitudes of students, such as student adaptability and motivation. There are no standardized measures that gauge the level of family and peer encouragement, nor are there measures that gauge the extent in which external factors might pull the student away from their academic intent, such as family, work, or financial responsibilities. These non-cognitive factors fall within the domain of academic advisors. After the student has been admitted to the Humboldt State University, the advisors task is to consider the student’s non-academic responsibilities and aptitudes, along with their academic abilities, and assist students in developing an appropriate academic plan. These non-cognitive factors are more difficult for advisors to assess, however, because there are no available instruments that can easily identify whether or not a particular non-cognitive factor exists in a student’s life, and if it does, the extent to which it will influence the student’s subsequent progress. In order to assess the potential impact of non-cognitive factors on individual students, the advisor must rely on direct interviews with the student. Understanding which non-cognitive factors most often affect student attrition can help guide such interviews.

Student success and persistence to graduation is a complex intersection between social integration, academic integration, cultural background, peer group influences, family
encouragement, and individual autonomy (Bennett and Okinaka, 1989; Bean, 1990; Tinto, 1993; Nora and Cabrera, 1996; Elmers and Pike, 1997; Phelan, Davidson, and Yu, 1998). Attempts to understand this complex intersection have often resulted in contradictory findings, which are often attributed to the subtle inconsistencies in research measures and institutional variability (Pascarella and Chapman, 1983). There has, however, been considerable research conducted in the area of student attrition, which has successfully and consistently produced a number of findings that help explain student attrition. Predominant among this work is Tinto’s (1993) theory and research regarding the influence of social and academic integration on college attrition, a model he first developed in 1975 and which he has refined over the years.

Bean (1990) has also conducted research on student attrition, which places a greater emphasis on pre-collegiate characteristics that influence student attrition than does Tinto’s research. Where Tinto (1993) views the college experience and integration of students as being predominant in affecting student attrition, Bean (1990) views the student’s pre-collegiate beliefs as having a strong influence on student attitude, which then influences the degree in which the student engages in, and subsequently integrates into the institution. In follow up studies, Cabrera, Castaneda, Nora, and Hengstler (1992) show how Bean and Tinto’s models converge and can be used in concert to establish a more complex, longitudinal understanding of student attrition.
And finally, recent work on the part of educational anthropologists show how cultural and other marginalizing differences can be mediated by student adaptation strategies, which allow student’s to cross cultural borders and boundaries with varying levels of ease (Ladson-Billings, 1998; Phelan, Davidson, and Yu, 1998).

Given the complexity of factors involved in student attrition, it is easy to imagine that the predictability of any one model is limited and the ability to generalize based on any single study is equally limited. In much of the research conducted on student attrition, the limitations cited in many of the studies often reference the uniqueness of the institutional setting and subsequently warn against generalizing their findings.

The variability between institutions that can influence the causal factors in student attrition include size of the institution, type of institution (commuter versus residential, 2-year versus 4-year, public versus private), geographic location (rural versus urban), and the demographic characteristics of the existing student body. It has also been found that research conducted on student attrition and which use the same theoretical model can produce different findings because of these institutional variations. Tinto’s model, for instance, reveals that student attrition is more heavily influenced by social integration at 4-year, residential colleges, while at 2-year, commuter schools, academic integration proves to be more influential (Pascarella and Chapman, 1983).
Because of this institutional variation, one of the goals of this research is to replicate the previous studies and determine which of the factors specifically affect attrition rates among low-income first generation college students enrolled in the EOP program at Humboldt State University. Identifying these factors may assist EOP advisors to improve their ability to quickly identify which students are at particular risk for dropping out of the institution.

Student Adaptation

Just as institutional variation causes differing results, so too does variation among students. Not all students will experience the unique characteristics of HSU in similar ways. Gender, ethnic, and economic differences among students account for much of this variation, but even when these factors are held constant, variations persist. Because all EOP students are low income students, and many are students of color, these particular characteristics become secondary considerations for the EOP advisor. More important are the variations within these groups and the causal factors that may be found to help explain this variation.

For this reason, the second goal of this study is to add to the richness of previous work by examining the extent to which differences in student adaptation strategies, which students
practice during high school, might subsequently assist them in their social and academic integration into their new college environment. Below is a more thorough review of each of the theories guiding this research.

Student Attrition Model

In understanding student attrition as a longitudinal process, Bean (1990) suggests that one consistent factor that contributes to a student’s decision to stay or to leave an institution is how well they fit in at the institution. The better a student is matched to the institution, the more likely it is they will continue in their enrollment at the institution. Bean (1990) is careful to point out, however, that institutional fit is not the sole responsibility of the student, but is also the responsibility of the institution, which has the obligation to meet the needs of the student’s they admit.

Bean (1990) credits the development of his model of student attrition to studies of employee turnover in work organizations, and gives particular credit to the work of Price (1977). The underlying premise of Bean’s (1990) research is that student beliefs about the institution precedes and influences their attitudes about the institution. These attitudes then affect student intentions about whether or not to continue or withdraw from the institution. Bean (1990) posits that students who enter the institution with positive
attitudes do so because they already have positive beliefs about the institution. Through the process of anticipatory socialization, the student projects this positive attitude into their interactions with peers, faculty, and other campus personnel. Their already positive attitude is then enhanced and affirmed through their interactions and experiences at the institution, thus reinforcing their general belief about the institution. This reinforces their intent and likelihood of staying at the institution.

Students who enter the institution and project a negative attitude also do so based on their pre-existing beliefs about the institution. Again, through anticipatory socialization, these negative attitudes will likely result in the student perceiving their interactions with their peers, faculty, and staff in a negative light, which reinforces their pre-existing negative attitude about the institution, and which will likely result in their departure. (Bean, 1990)

Bean also asserts that external factors influence student attrition, acknowledging that not all factors influencing student attrition occur within the institution. Students may have family or work responsibilities that compete with their educational responsibilities and which pull the student away from their commitment to the college in which they are enrolled.
And finally, Bean identifies the background characteristics of high school GPA, rank, and college preparation as also having a strong influence on student attitude and intentions regarding college continuation (Bean 1990).

In subsequent studies, the environmental variables that accounted for most of the variance in attrition were identified and narrowed down to six variables. These variables include parental approval, finances, opportunity to transfer, encouragement of friends, and institutional quality and fit (Cabrera, Castaneda, Nora, and Hengstler, 1992).

**Student Integration Model**

Tinto (1993) also views student attrition as a longitudinal process but emphasizes the transition between a student’s prior community, that of high school and primary family, and their new college community. Basing his theory on Van Gennep’s (1960) work regarding the rites of passage, Tinto (1993) emphasizes three stages of passage into college. These stages include separation from the prior community (high school peers and family), the transition period into the new community (college peers and faculty), and the incorporation or integration of the new community’s beliefs and norms as their own (social and academic integration). If the student is successful in each of these three phases, the end result is full membership in the community. If the student encounters
difficulty in these phases then the end result is more likely to lead to student departure from the institution.

Tinto has also developed his model of student integration based on Durkheim’s work on suicide. Tinto parallels the causal factors that Durkheim identified as leading to suicide (choice to leave society) with the causal factors that lead to attrition (choice to leave the institution).

In drawing on Durkheim’s work, Tinto reviews each of Durkheim’s forms of suicide (altruistic, anomic, fatalistic, and egotistical) and applies them to trends in student attrition. The most interesting of Tinto’s (1993) comparisons is found in his use of egotistical suicide as an explanation for student attrition. In this comparison, Tinto lays out the foundation of Durkheim’s analysis of the social and intellectual integration of people in society. A lack of social and intellectual integration can lead towards a person’s inability to form membership in society. Such lack of membership can ultimately lead towards egotistical suicide.

When applying Durkheim’s theory of egotistical suicide to college attrition, Tinto (1993) is clear to point out that society and college campuses are not homogenous environments. Students can find membership within certain areas of the larger community without necessarily having to integrate the values and norms of the entire institution. In essence,
students can find a niche within the institution in which they become a member. There are, however, two distinct spheres of the college campus into which the student must integrate. These spheres include the academic domain, typically characterized by the formal processes occurring within the classroom, and the social domain, which takes place throughout the institution as students navigate their way through their daily life on campus.

It is Tinto’s belief that the inability of a student to become socially or academically integrated into the university will result in the student’s inability to become a fully participating member of the community. When students do not fully participate in college, their commitment to the institution and to their academic goals will likely diminish, which ultimately leads to their departure from the institution (Tinto 1993).

The factors that Tinto (1993) has found to be significant to the social integration of students include the level and frequency of peer group interactions, the level of commitment to their goal of completing college, and the level of isolation/marginalization felt by the student. Tinto (1993) also views the strength, number, and variation in the type of student involvement at the institution as critical. He also acknowledges that external commitments to work or family, as well as the level of demand in the student’s academic program, can have a negative impact on the students’
social integration as it can limit the amount of time the student has to participate in the social activities of the university.

Tinto (1993) also identifies a number of factors that directly influence a student’s academic integration into the institution. These academic integration factors include the level and frequency of learning activities that the student is engaged in outside of the classroom, the level of commitment to the respective institution, the level and frequency of interactions with faculty and staff, and the level of intellectual congruence between the student and the institution.

And finally, Tinto (1993) asserts that the quality of student effort, student involvement in the institution, student academic self-concept, student familiarity with the academic requirements and demands of college, and student perception regarding the quality of education offered by the institution can also influence student attrition.

Convergence of Two Theories

Cabrera, Castaneda, Nora, and Hengstler (1992), suggest that rather than viewing Bean and Tinto’s theories as contradictory, they should be considered as complementary models and that by converging the two approaches, a more comprehensive model can
result. In their work, Cabrera, Castaneda, Nora, and Hengstler (1992) carefully compared Bean (1982) and Tinto’s (1975;1987) models and identified similarities between the conceptualizations within each theoretical model. For instance, in their examination of the models, they determined that each included academic experience and student commitment to the institution as influential factors. They also both included the importance of peer group influences, although they differed on how and when peer influences affect student attrition.

Once Cabrera, Castaneda, Nora, and Hengstler (1992) established the overlapping conceptualizations between the models, they tested each construct and compared the separate measures to see if they produced similar results. From their findings, they concluded that the two separate models could be converged at the point of these overlapping constructs, and once converged, could provide a better understanding of college persistence as a longitudinal process.

Since the completion of Cabrera, Castaneda, Nora, and Hegstler’s (1992) study, much of the research conducted on student attrition has approached these models as convergent. The more recent writings of Tinto (1993) reflects a greater recognition that both pre-collegiate/external factors and actual student experience at the institution serve as complementary variables that enhance our understanding of college persistence as a longitudinal process. Where pre-collegiate attitudes and beliefs about an institution may
significantly shape student intentions prior to enrolling in the institution, it is likely that these attitudes and beliefs, if not affirmed, will give way to new attitudes and beliefs that are based on the students’ actual experiences.

Ethnic and Gender Variations in Student Attrition

A number of studies have examined how the common variables affecting college persistence have differential impacts across gender and ethnic lines (Nora, Cabrera, Hagedorn and Pascarella, 1996; Nora and Cabrera, 1996; Bennett and Okinaka, 1990; Elmers and Pike, 1997; Allen and Nelson, 1989). While variations have been noted, the findings are at times contradictory. These contradictory findings are presumed to occur as a result of variation among institutions, which includes variations in size, geographic location, setting, and demographic characteristics, not to mention variation in sample populations and inconsistencies in the research measures used (Nora, Cabrera, Hagedorn, and Pascarella, 1996; Elmers and Pike, 1997). Despite these inconsistencies, the continued examination of variables affecting students of color and women play an important role in expanding our understanding of college persistence and is critical for assisting institutions in meeting the differential needs of these populations (Nora, Cabrera, Hagedorn, and Pascarella, 1996).
Tinto (1993) asserts that differences in college persistence rates among students of color can be partially attributed to the difficulty they face when trying to integrate into campus life, especially at predominantly white institutions. He attributes this added difficulty in student integration to a lack of critical mass in population size. Tinto (1993) points out that the availability of peers who share similar ethnic and cultural backgrounds does not necessarily mean that they will share similar interests and values. Finding peers who share similar cultural values, social interests, and political attitudes may be more problematic within cultural groups whose population size is limited. In this regard, students of color who enroll in predominantly white institutions like HSU will typically have fewer options for establishing membership within their cultural community than will majority students.

Tinto (1993) also points out that even when students of color do establish meaningful membership with a supportive peer group, it may still have a differential affect on their persistence at the institution, especially if their group is marginalized from the central activities of the campus social life. In this case, membership in such a group might simultaneously enhance social integration among their peers while also enhancing cultural marginalization within the institution as a whole.

Not all of Tinto’s theories have been substantiated by subsequent research. In a recent national study involving 3900 students at 26 different institutions, Nora, Cabrera,
Hagedorn, and Pascarella (1996) were unable to substantiate Tinto’s theories regarding the influence of peers on the persistence rates among students of color.

Additionally, Nora, Cabrera, Hagedorn, and Pascarella (1996) found that the role of peer influences was only found to have an affect on white student persistence and did not have any significance in regard to the persistence rates among students of color. What they did find, however, was that for students of color, the greatest impact on persistence was the environmental pull factors that competed with their educational responsibilities. Students of color who often had family or off-campus work responsibilities were more likely to stop attending the institution than those who did not.

Tinto (1993) also theorized that successful integration into college life is preceded by a break between the student and their former peer, family and community ties. In contrast to this, Nora and Cabrera (1996) found that students who reported having parental encouragement and support were more likely to report positive integration, academic and intellectual development, and academic performance, than those who did not. This trend was found to exist equally among all students with no variation found among different ethnic groups. Similar findings by Elmers and Pike (1997) have also challenged Tinto’s notion that the academic and social integration of students is preceded by a break in their former family, peer, and community relationships.
In the multitude of studies conducted on student attrition, many subtle variations were found, often contradictory to the findings of other studies (see Nora and Cabrera (1996); Elmers and Pike (1997); Bennett and Okinaka (1989); Nora, Cabrera, Hagedorn, and Pascarella (1996)). After thorough review of the research regarding student attrition, these many contradictory findings, although subtle, suggest that great variation exists within the different types of institutions and among different demographic groups. These variations are most often attributed to institutional variation or demographic variation, rather than as a refutation of Tinto’s theoretical model.

As with many of the studies conducted on student persistence, Elmers and Pike (1997) point out that their findings are limited to the specific demographic characteristics of the institution in which the study was conducted and they warn against attempts to generalize their findings to the larger population. Similar caution was included Nora and Cabrera’s (1996) discussion of their findings, acknowledging that their research was based on a single institution, and more specifically, on a single cohort of entering freshman within that institution (Nora and Cabrera, 1996:138).

Tinto also acknowledges the differences in attrition patterns found among institutions, especially where the characteristics of the institution vary (two year vs. four year, commuter vs. residential, and size of institution) and the demographics of the student
population vary (students of color vs. white students, adult re-entry students vs. recent high school graduates).

Tinto also warns against generalizing institutional findings to the whole student body, or generalizing the findings within specific subgroups (i.e. students of color, re-entry students, etc.) to all individuals within those subgroups. As with each of the studies cited above, Tinto asserts that the aggregated findings of the research are compelling and consistent enough across institutions to warrant the support of a theoretical model, but he warns that attempts to implement policy at a specific institution is best informed by both theory and a sensitivity to the specific student and institutional characteristics of the institution in which this policy is intended (Tinto, 1993:72).

The current study takes into account this concern for the institutional and demographic influences in the variables affecting student persistence and incorporates the goal of establishing what those subtle differences are among EOP students enrolled at Humboldt State University.
Variations in Student Adaptation during their Transition to College

The volume of research and number of studies has contributed significantly to our understanding of institutional variation, as well as to the cultural and gender variations in student persistence. Pre-college characteristics, external pull factors, academic preparation and ability, peer and family encouragement, academic integration, and social integration all account, in part, for the variations in student persistence. The inconsistencies in the findings have frequently been attributed to institutional variation and inconsistencies within the measures used (Pascarella and Chapman, 1983). Little has been attributed, however, to the variation among individual students and their differing levels of adaptability.

Among low-income, first generation college students, the process of empowerment and the process of acculturation act simultaneously (although sometimes in contradictory ways) as students struggle to adapt and integrate into the university. If we consider the transition into college through the lens of cultural reproduction theory, then the degree of self-determination and autonomy of students is limited. By the time the first year freshman enters college they have already accumulated 12 years of educational programming. Schooling is one of society’s primary forces for socialization, and in order to be admitted to college, the student must prove their ability to be schooled.
On the other hand, if we consider the transition into college through the lens of critical theory, particularly as it applies to race relations, then we no longer view students as passive actors. Critical theory suggests that the student is not merely a vassal into which education is poured, but acknowledges that students’ can choose, upon their own merit, the validity of the academic canons with which they are being presented. They can choose the extent to which they accept or reject this canonized knowledge. Within this context, the dialectic force between student, faculty, and curriculum can provide an opportunity for knowledge and discourse to expand into new cultural understandings and knowledge.

The canons of knowledge can both inform and affirm a student’s location within society. For many students of color (and other students who are marginalized on the basis of gender, class, or sexual orientation), the eurocentric male bias underlying the American educational system can prove to be neither informing nor affirming (Solorzano and Villalpando, 1998). Rather than encountering opportunities for self-reflection, students of color are often forced to learn dominant reflections of self that do not reinforce their own cultural identity and experiences. Rather than succumbing to this process in the form of acculturation, critical theory provides us another interpretation of how students in marginalized positions can turn their positions at the margin into positions of empowerment. Students of color can begin to view their location, not as a location of exclusion, nor of deficiency, but as a location that provides a unique perspective of the
socializing forces that replicate hierarchical structures. When this perspective is validated, it can offer greater insight about the influences of social processes, which is often inaccessible to those of the dominant culture because they are fully immersed within these socializing processes and abide by them unquestioningly.

In this regard, the marginalized student can choose their site at the margin as a place of empowerment, and they can begin to voice their perspective in opposition to the dominant/center (hooks, 1990 as cited by Solarzano and Villalpando, 1998). Whether or not a student of color who enters HSU will view their position as a position of empowerment or as a position of deficiency will likely vary based on their prior experiences in crossing cultural boundaries.

In addition to the cultural transitions that are inherent in many students’ transition into college, there are a number of interpersonal transitions that students must also navigate. These interpersonal transitions include changes in peer relationships, family relationships, and school responsibilities. At HSU, for instance, two thirds of entering first year students relocate from a distance of more than 100 miles in order to attend the institution. Because they have moved such a far distance, their former peer relationships are difficult, if not impossible, to maintain. The same is true for their family relationships, which can become strained as a result of the student’s absence from the
home. Changes in family dynamics often occur when the student no longer plays a part in the daily lives of their family.

For many first year college students, relocating to HSU is their first departure from their parents’ home and their transition includes a significant increase in responsibility and independence. With this new level of independence, students must learn how to take personal responsibility for the social obligations and agreements into which they enter. These obligations include entering into contractual agreements with on-campus residence halls or into rental agreements with off-campus landlords. They will incur direct financial obligations to the institution in the form of tuition or registration fees. They will also have to take care of their own personal needs including cooking, doing laundry, cleaning and shopping.

While most first year students will experience similar types of transitions, they do not necessarily experience them in similar ways. Students who have assumed higher levels of independence while living with their parents may not experience a significant change in their personal responsibilities, such as with the chores of cooking, cleaning, shopping. On the other hand, some students will find that they are unprepared for such tasks and must first learn simple skills such as how to use a washing machine or how to balance a checkbook.
There are also students who will experience the transition to HSU as a lessening of their former burdens. It may be that their former responsibilities included having to do household chores, having to care for siblings or having to cook, clean, and do laundry for other members of their family. In some cases, students have had to help their parents with the family business. For these reasons, the transition to college may represent a lessening in their responsibilities and in their obligations to others. For some, this will be a welcomed change, while for others, this may cause an unwelcome disruption to their role identity.

The same variation in how students experience their transition to college is true in regards to their former peer relationships. Not all students rely on their high school peer relationships as heavily as others, and in some cases, their relocation to a distant college is motivated by the desire to break away from harmful or detrimental peer groups. On the other hand, students who live close to the campus in which they enroll may not experience any significant change in their high school peer relationships.

Equally so, the distancing from family can be experienced as either a loss or as a benefit. Some students will express how they miss their family, or how they feel guilty for not being able to contribute to the needs of their family in ways they have been accustomed. Other students express exuberance about their newly acquired independence or about having escaped from oppressive or abusive family dynamics. Still other students who are
from the local area will continue to live at home with their parents while they enroll at HSU. In these cases, local students will likely maintain the same familial responsibilities they had during their high school years.

Because the student experiences the transition to college differentially, the type and variations of transitional factors becomes less important than the student’s perception about these experiences and how they interpret the significance of their experiences in regard to their transition into college. The student’s ability to navigate through these transitions is influenced by two factors. The first factor is the degree in which the student experiences this transition as either a congruent/smooth transition or as an incongruent/disruptive transition. The second factor is the degree in which the student is able to adapt or cope with their transition as they experience it.

Accounting for Student Variation within the Trends of College Attrition

Much of the previous research has focused on the types of transitions that students encounter rather than on how students experience these transitions and the variability of their adaptation and adjustment skills (Phelan, Davidson, and Yu, 1998). The variability in adaptation skills has tremendous implications for whether or not the student will successfully adapt to their new environment and warrants greater attention.
In their recent work, Phelan, Davidson, and Yu (1998) have begun to explore student adaptation skills across the different cultural spheres in which students belong. Their work presumes that high school students are actively engaged in different sociocultural spheres made up by family, school, and peer groups, and that each of these sociocultural spheres has its own code of behavior, values, beliefs, and expectations. Students can experience these different social spheres as either highly congruent, where there is a lot of cross over between the values, beliefs, and expectations of the separate social spheres, or as highly differential, where there is little similarity between the values, beliefs, and expectations.

The differences in these separate spheres can either be experienced as a boundary, which prevents easy transitions from one to the other, or they can be experienced as borders, which can be more easily bridged by similarities in the values and beliefs of the different spheres. Similarities across borders can become reinforced by interactions among members of the different spheres, such as by school peers being invited into the family home or by parents volunteering in the classroom.

While it is commonly recognized that differences in the cultural spheres of home and school often lead to academic difficulty (Erickson, 1993), it is Phelan, Davidson, and Yu’s (1998) assertion that cultural incompatibility does not always result in academic
difficulty. There are endless examples of highly successful students who are from different cultural backgrounds and who succeed despite these cultural differences and in many cases, because of these cultural differences. This is supported by the attrition studies of Nora and Cabrera (1996), which have been discussed above.

It is Phelan, Davidson, and Yu’s (1998) assertion therefore, that when cultural incompatibility exists, student success is still possible because these incompatibilities are mediated by other factors. They assert that cultural compatibility theorists overlook the degree in which individual agency, through skills of adaptability, can neutralize the potentially detrimental impact of cultural incompatibilities.

Phelan, Davidson, and Yu (1998) also assert that boundaries exist not only based on cultural differences, but are also based on differences in sociocultural, socioeconomic, and psychosocial backgrounds, as well as on differences in language, gender, and sexual orientation. Again, these ideas are supported by the work of several other researchers in the field (Kondrat, 1995; Giroux, 1998; Ladson-Billings, 1998; Morrow and Torres, 1998; Popkewitz, 1998).

In order to investigate the variability of adaptation skills and strategies, Phelan, Davidson, and Yu (1998) conducted a three-year ethnographic investigation on 55
adolescents in various California high schools. From their research, they found that students typically engaged in three forms of adaptation strategies.

The first strategy described by Phelan, Davidson, and Yu (1998) is a strategy of conformity where students adapt their behavior, beliefs, and attitudes in order to fit in with the social sphere in which they are engaged. When the behaviors, beliefs, and values at school, for instance, are significantly different from that of their family, they often engage in code switching behavior, where they enact a different set of behaviors, beliefs, and values depending upon the social sphere in which they are currently engaged.

The second strategy is a strategy of enculturation, where students assume the behaviors, beliefs, and values of their new environment as their own. If there are significant differences in the behaviors, beliefs, and values of the new social sphere from that of their family, then the family values are abandoned. The reverse can also be true. As individuals cross from family to school, they may not be able to adapt or accept the behaviors, beliefs, or values of the new social sphere and refuse, or become unable, to integrate into their new environment. In either case, individuals choose one set of behaviors, beliefs, and values as preferential to the other and either abandon their former belief system or refuse to integrate into the new belief system (Phelan, Davidson, and Yu, 1998).
The third strategy is the development of a multicultural identity where individuals accept that the different spheres have common and conflicting behaviors, values, and beliefs, and no attempt is made to value one sphere over the other. Individuals who integrate the behaviors, values, and beliefs of multiple worlds can often see the strengths and weaknesses inherent in both, and often integrate varying elements of each as part of their multicultural identity (Phelan, Davidson, and Yu, 1998).

Phelan, Davidson, and Yu (1998) believe that each of these adaptation strategies have emotional costs associated with their practice, and that by understanding these emotional costs, educators can better address their students’ needs and assist them in turning boundaries into borders. Their focus on student experience, rather than on background characteristics, helps to reduce the determinism of many cultural models that identify language, culture, and economic factors as primary forces affecting student success, yet which fail to account for individual variation within cultural groups. Although they do not dispute that these cultural factors have significant impact on student experiences, their emphasis on adaptation skills is an attempt to enhance the understanding of how students can mediate these sociocultural forces by actively using integrative adaptation strategies.

By drawing from the work of Phelan, Davidson, and Yu (1998), this research is particularly interested in what the researchers identify as Type I and Type VI transitions.
Both of these forms of transition are characterized as smooth transitions from one sphere to the other. Type I transitions are experienced as smooth transitions by students whose family, peer, and school spheres are highly congruent. They are uncomplicated transitions in which the commonalities of the different spheres override the differences. This form of transition is also frequently accompanied by crossover between the student’s affiliation within the different spheres, with peers coming to the student’s home, parents actively involved with the school, and teachers valuing the student, their home life, and the extracurricular activities in which the student is involved.

Type VI transitions are also experienced as smooth transitions but by students’ whose family, peer, and school spheres differ significantly. Despite these cultural differences, there are no adverse impacts on the students’ integration into their school and among their peers. Students in this category tend to have parents who model successful border crossing skills and expect their children to develop these skills as well. Parents do not view external cultural values as a threat to their own cultural or familial values and encourage their children to engage in cross-cultural activities. In the same vein, students do not devalue their cultural background among their peers or in their school. Students often express that their teachers take an active interest in their cultural heritage and are encouraged to share their cross-cultural experiences as part of their classroom interactions. For both Type I and Type IV transitions, students are characterized as
experiencing relative ease in their attempts to integrate the various spheres in which they are involved (Hemmings, 1998; Phelan, Davidson, and Yu, 1998).

The other transition types outlined by Phelan, Davidson, and Yu (1998) in their typology are characterized by transitions that are managed with some or great difficulty, or are resisted altogether. In each of these other types, students are characterized as having greater difficulty in crossing the boundaries between their family, peer, and school spheres, and the differences among these spheres are predominant over their commonalities. While these types of transitions can still result in student success, such success is less frequent, is more problematic, and is often limited in scope. Students whose transition fall within these other types are more likely to engage in code switching behavior between spheres or to devalue one sphere over the other. There are less frequent interactions across spheres by other actors involved in the student’s life, such as parental involvement in the schools or peer encouragement towards academics.

Returning to Tinto’s model of academic and social integration, this study presumes that students who actively cross over boundaries during high school, as typified by Phelan, Davidson, and Yu’s (1998) Type I and Type VI transitions, will have had an opportunity to accumulate experiences which will serve to positively reinforce their subsequent social and academic transition into college. If integrative adaptation strategies are to be viewed as skills that are developed, then students who have experience using these skills
successfully would be likely to continue with these strategies during their transition into
college.

In this regard, this study hypothesizes that students who report high levels of integration
across spheres during their pre-collegiate years will be able to replicate this integration in
their new college setting, which will have a positive influence on their academic and
social integration, and subsequently, on their persistence. A full review of each of the
hypotheses included in this study are detailed in the next section.
HYPOTHESES

Part One: A Longitudinal Model of Retention

Part one of this study is largely guided by the theoretical models of student retention developed by Bean (1990) and Tinto (1987, 1993), which have since been converged into a single model of student retention (Cabrera, Castaneda, Nora, and Hengstler, 1992; Tinto, 1993). This converged model of student retention has been used in a number of previous studies (Allen and Nelson, 1989; Cabrera, Castaneda, Nora, and Hengstler, 1992; Davis, 1994; Nora, Cabrera, Hagedorn, and Pascarella, 1996; Nora, and Cabrera, 1996) and is duplicated in this study in order to examine the validity of the model among EOP students enrolled at Humboldt State University.

There are four hypotheses that are encompassed within this first part of the study:

Hypothesis 1: The level of the students’ social integration into the institution will positively correlate with the students’ intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals.
Hypothesis 2: The level of the students' *academic integration* into the institution will positively correlate with the students' intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals.

Hypothesis 3: *Pre-entry attributes* will positively correlate with the students' intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals. In this study, pre-entry attributes include measures of family encouragement, peer encouragement, and financial support.

Hypothesis 4: *External factors* will negatively correlate with the students' intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals. In this study, external factors include measures of environmental and family pull factors.

Part Two: The Influence of Attitudes and Behaviors on Retention

The second part of this study is largely guided by Tinto's longitudinal model (1993) and examines the extent in which the students’ university experiences influence their integration into college. Tinto categorizes student experiences as occurring within two separate systems within the institution, the academic sphere and the social sphere. Each
of these systems has a formal and an informal venue where student experiences can occur. Most of the prior research modeled after this longitudinal model have used measures to identify the frequency of student experiences in both the formal and informal venues of both of these separate spheres and typically include items that measure the extent in which the student is involved in extra-curricular activities, the quality of the student’s peer group interactions, the frequency of the student’s out of classroom interactions with faculty and staff, and the student’s academic performance. The findings in these studies have supported Tinto’s assertions that greater student involvement within the academic and social systems of an institution positively correlate with student persistence.

Institutional analysis at Humboldt State University has also shown that EOP students who participate in first-year structured activities are also more likely to persist at the institution than those who do not (Institutional Reports, EOP Program First Year Persistence 1993-2000, Humboldt State University). These first-year structured activities include a Fall Bridge program that is designed to assist students in their academic integration into the university and a Fall Mentoring program that is designed to assist students in their social integration into the university. Both of these programs are based on a philosophical view that is consistent with Tinto’s assertion that students are more likely to persist if they become integrated into the academic and social systems of the university.
Because of the success of the FOP Fall Bridge and mentoring programs at Humboldt State University, this study diverges slightly from Tinto’s model and places a greater focus on the students’ code of behavior, values, beliefs, and expectations, and the extent in which these match the institutions code of behavior, values, beliefs, and expectations. This match between student and institution also takes into consideration the multiple spheres that influence the student’s life and examines the continuity between the student, the student’s family, the student’s peer group, and the student’s cultural heritage with the academic values, beliefs, and expectations of the institution. This shift in focus towards student values, beliefs, and expectations drifts away from Tinto’s focus on student experience and is loosely based on the dimensions identified in the multiple worlds model of Phelan, Davidson, and Yu (1998).

This study anticipates that the higher the continuity is between the student, the student’s family, the student’s peer group, and the student’s cultural heritage, with that of the institution as a whole, the greater the likelihood is for the student to become easily integrated into Humboldt State University and to choose to persist at the institution.

There are four hypotheses encompassed within this second part of the study:

Hypothesis 5: The level of continuity reported by students between their personal values and the values expressed within the university classroom will positively correlate with the
students’ social and academic integration into the university, with their intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals.

Hypothesis 6: The level of continuity reported by students between their cultural heritage and the culture of the university will be found to positively correlate with the students’ social and academic integration into the university, with their intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals.

Hypothesis 7: The level of continuity reported by students between their peers’ commitment to their academic goals and the academic goals of the institution will positively correlate with the students’ social and academic integration into the university, with their intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals.

Hypothesis 8: The level of continuity reported by students regarding their parents’ familiarity with the university will positively correlate with the students’ social and academic integration into the university, with their intent to persist, with their level of commitment to the institution, and with their level of commitment to their academic goals.
Part Three: Pre-Collegiate Values and Beliefs as a Predictor for Retention

The third part of this study examines the extent to which the students’ pre-collegiate code of behavior, values, beliefs, and expectations influence their subsequent integration and retention at the institution. The dimensions included in this section of the study are also loosely based on the dimensions outlined by Phelan, Davidson, and Yu (1998) in their multiple worlds model. The focus of this part of the study is similar to the previous section in that it also examines the students’ code of behavior, values, beliefs, and expectations, however, in this section, the examination is framed in a historical reference which places focus on the students’ assessment of the continuity of their experiences during their high school years. The items used to measure this assessment of their high school years parallel the items used to measure their assessment of their college years.

This study anticipates that the higher the continuity between the student, the student’s family, the student’s peer group, and the student’s cultural heritage during their high school years, the higher their subsequent continuity will be at Humboldt State University.

There are four hypotheses encompassed within the third part of the study:

Hypothesis 9: The level of continuity reported by students between their personal values and the values expressed within their high school classroom will be found to positively correlate with the level of continuity reported by students between their personal values
and the values expressed within their courses at Humboldt State University. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 5).

Hypothesis 10: The level of continuity reported by students between their cultural heritage and the culture of their high school will be found to positively correlate with the level of continuity reported by students between their cultural heritage and the culture of Humboldt State University. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 6).

Hypothesis 11: The level of continuity reported by students between their academic goals and their peers’ commitment to their academic goals during high school will be found to positively correlate with their academic goals and their peers’ commitment to the academic goals at Humboldt State University. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 7).

Hypothesis 12: The level of continuity reported by students regarding their parents’ understanding of the high school challenges they face and the level of encouragement they receive for completing academic tasks will be found to positively correlate with the level of continuity reported by students regarding their parents’ understanding of the academic challenges at Humboldt State University and the extent to which their parents’
are able to offer meaningful advice and encouragement. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 8).

Part Four: The Influence of Student Adaptation Strategies on Retention

Part four of this study is also loosely guided by the dimensions included in the multiple worlds model of Phelan, Davidson, and Yu (1998). In their qualitative studies, Phelan, Davidson, and Yu found that students’ transitioned between the different spheres of family, school, and peers differently, with some students transitioning smoothly across these spheres and others transitioning with greater difficulty, experiencing distinct boundaries between the spheres of family, peers, and school.

As students transition between spheres, students were also found to employ different strategies of adaptation. These different strategies of adaptation include code switching (the use of different codes of behavior depending upon the social setting of the actor), negation (the denial of membership with a group that the actor is associated with and which is usually ascribed by the larger society), and synthesis (a process where neither denial or code switching behavior is prominent and where the actor easily negotiates among potentially conflicting group norms and behavioral expectations) (Phelan, Davidson, and Yu, 1998; Hemmings, 1998).
This study assumes that students who integrate the different spheres of family, peers, and school (synthesis) during their high school years will continue to practice this adaptation strategy during their college transition, which will strengthen the predictability of the high school indicators on their subsequent integration into the university.

There is one hypothesis encompassed within this fourth part of the study:

Hypothesis 13: The continuity between the students’ high school experiences and their subsequent experiences at Humboldt State University will be stronger among students who practiced integrative adaptation strategies during their high school years.
METHODS

Background: The Education Opportunity Program and Humboldt State University

Humboldt State University is a small, primarily residential 4-year public institution located in the furthest northwestern region of California. The university enrolls approximately 7,000 students, only about 16 percent of whom are identified as ethnic minority students. The university is located in a rural setting with the closest metropolitan area located approximately 250 miles away. About two thirds of the student body relocate from a significant distance, traveling well over 100 miles to attend the university. The university admits and enrolls approximately 700 new first time entering freshman college students each year, just under 10 percent of whom are admitted through the Educational Opportunity Program.

The EOP program was first established in the late 1960’s in order to increase access and retention of low-income students in the California State University (CSU) System. All students who are admitted into the EOP program must meet the low-income criterion established by the CSU in order to be eligible for admission into the program. At HSU, over 90 percent of EOP students are both low-income and first generation college students and approximately 70 percent are also students of color. Roughly one-third of
EOP students at HSU are admitted to the university by exception, either because they did not meet the minimum eligibility index for regular admissions (a combination of high school grade point average and college entrance exam test scores) or because they did not complete the necessary college preparatory high school courses required for regular admissions. The remaining students admitted to the EOP program at HSU are selected because they have demonstrated a need for either cultural or social support services.

Student Sample

This study is based on a sample of first year college students admitted through the Educational Opportunity Program (EOP) at Humboldt State University (HSU) and who entered the institution during the Fall Semesters 1998, 1999, 2000 and 2001. The total target population consisted of 437 students, each of whom were mailed a questionnaire (approved by the Committee for the Protection of Human Subjects in Research, IRB number 01-82, November 13, 2001) during the Fall Semester 2001. Of the 437 questionnaires sent, 16 were returned as undeliverable, reducing the total number of students with a working mailing address to 421. There were a total of 92 responses, representing a 24 percent response rate. The typical response rate for mailed questionnaires without follow up is 20 to 40 percent.
Most of the students in the total target population were students of color (67%), which accounted for 48 percent of the total respondents. Most of the students in the total target population were women (63%), which accounted for 74 percent of all respondents. And finally, between 20-25 percent of the total target population entered the university in each of the 4 years included in this study, and accounted for between 15-36 percent of respondents for each academic year.

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<th>Table 1: Demographic Comparisons of Respondents and the Total Population</th>
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Instrument Design

The instrument for this study was developed from the questions and findings of numerous studies that have been conducted in regard to student attrition (Allen and Nelson, 1989; Cabrera, Castaneda, Nora, and Hengstler, 1992; Davis, 1994; Nora, Cabrera, Hagedorn, and Pascarella, 1996; Nora, and Cabrera, 1996). These studies were carefully examined, with particular focus given to the dimensions and questions included in each.

The questionnaire consisted of 59 items, with 48 items using a 6-point, forced response Likert scale to measure the responses. The 6-point Likert scale eliminates the neutral response and forces the respondent to agree or disagree with statements. The range of responses available were strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree, and not applicable. There were an additional 11 categorical items included for the identification of gender, ethnicity, household responsibilities, enrollment status, parental education, and year of college entry. Each of the 59 items used in this study are included in the appendix and are also described in the results portion of this study.
Measures

Many of the measures included in this study were based upon the theoretical models of Tinto (1993) or Bean (1990) and have been included in numerous other studies that are also based on the theoretical models of Tinto and Bean (Allen and Nelson, 1989; Cabrera, Castaneda, Nora, and Hengstler, 1992; Davis, 1994; Nora, Cabrera, Hagedorn, and Pascarella, 1996; Nora, and Cabrera, 1996). The measures included in these previous studies were thoroughly reviewed and those measures that most frequently produced significant correlations were selected for inclusion in this study. The dimensions identified for inclusion in part one and two of this study included the following:

- Institutional commitment
- Goal commitment
- Level of parent and peer encouragement
- Family and environmental pull factors
- Financial constraints
- Social integration
- Academic integration.

Additional dimensions were included part three of this study in order to further examine the relationship between the student’s pre-collegiate attitudes and behaviors, and how those attitudes and behaviors influenced the student’s subsequent attitudes and behaviors.
in college. These dimensions, which are loosely based on the work of Phelan, Davidson, and Yu (1998), included the following:

- Level of congruity between the student and their academic environment.
- Level of congruity between the student's culture and their school environment.
- Level of congruity between the academic goals of their peer group and the academic goals of the institution.
- Level of congruity between their parents' knowledge of academic expectations and the academic expectations of the institution.

In part four of this study, measures were included in order to examine how adaptation strategies used by the student during their high school years influenced their subsequent integration into college. These dimensions are also loosely based on the work of Phelan, Davidson, and Yu (1998) and included the following:

- Code switching techniques.
- Negation techniques.
- Synthesis techniques.

The specific questions used for measuring each of the above dimensions are available in the appendix and are also described in the results portion of this study.
Survey Administration

The EOP office provided the name and address of each first year student who had entered the institution through the EOP program during the fall semesters 1998, 1999, 2000, and 2001. The EOP office also permitted the use of their program letterhead, which was used in the letters sent to students and which detailed the description and purpose of the study. The EOP office also provided mailing and postage paid return address envelopes. In an effort to improve the response rate of students, a drawing was held for respondents who elected to fill out and return a separate drawing card, which was included with the survey. Respondents were given the opportunity to win one prize from a list of prize choices (DVD player, Hand Held Personal Data Assistant (PDA), VCR, or portable CD player). Students were asked to complete the survey as part of their eligibility for the prize drawing but were given the opportunity to either return the drawing card with their survey (in the postage paid envelope provided) or as part of a separate mailing, thus providing an opportunity for students to ensure their anonymity.

Data Analysis

Survey responses were entered into SPSS (Statistical Package for the Social Sciences), which was used for data analysis. Most of the questions included in the survey used a 6-
point Likert-type scale for measuring student responses, which provided measurable results ranging from strongly disagree to strongly agree. While these measures provide an ordinal type rank ordering of responses, the 6-point Likert-type scale provides a sufficient range to treat the measure as an interval ratio measure (Nunally, 1978). In treating these responses as an interval ratio measure, Pearson’s product-moment correlation coefficient was used to measure the strength of the relationship between variables. The correlation coefficient produced by Pearson’s range in value from —1.0 (a perfect negative association) to 1.0 (a perfect positive correlation). In nearly all instances, the correlation coefficients were found to be somewhat less than perfect, and measures of association with correlations between +/- .20 and .30 were treated as moderately strong evidence of a relationship between variables, with greater interest given to those correlations whose strength of association was greater than .30.

The Pearson’s correlation coefficients produced in this study were also measured for variance. When the Pearson’s correlation coefficient is squared, it provides “a measure of the proportion of variance in one variable as ‘explained’ by the other” (Nie, 1975:279). This variance is important in determining “the extent to which variation in one variable is linked to variation in the other (referred to as concomitant variation)” (Nie, 1975:279). Correlation coefficients that were not found to be significant at the .05 level were mostly excluded in the analysis, although moderate levels of significance found to be at least at the .10 level were occasionally reported in order to provide additional reference.
In some cases, a composite index was created using the responses from a number of different questions. These indices were created using the compute command in the SPSS program, adding the combined measures together and excluding students with one or more missing responses. In other instances, some measures were recoded in order to improve the ease by which the data could be meaningfully analyzed. Examples include the recoding of parental educational level from a 5-level ordinal response (ranging from less than a high school diploma to BA/BS Degree or higher) into a nominal response of attended college/never attended college. Other instances where the data was recoded into nominal categories included measures of ethnicity and mode of adaptation.

Limitations of the Study

As with other research conducted on student attrition, attempts to generalize from the current findings should be done with caution. The student population included in this study was limited to EOP students attending HSU. While many of the findings are consistent with the predominant theories of attrition, and in many ways, replicate the findings in other studies, these findings should not be decontextualized from the unique characteristics of the institution (small, rural, residential, predominantly white, four year college) or from the unique demographic characteristics of the target population (low-
income, first generation, EOP participants). The relatively low response rate may also limit the ability to generalize from the findings, even within the student population at HSU, however, given that these response rates are drawn from the total population of EOP students who entered between the Fall 1998 and Fall 2001, rather than from a random sample of a subgroup of students, it is believed that this study provides an accurate depiction of EOP student attitudes regarding their academic experiences at HSU.

And finally, it is also important to note that given the size of the entering cohort in each of the years included in this study, and given the relatively small size of the institution, patterns found to emerge in the current study may vary considerably in subsequent years. Such changes may occur with the simple hiring of a single faculty or staff person who becomes actively involved with students and who may subsequently influence those students in positive ways, enhancing the likelihood that they will persist at the institution. This is particularly true among smaller subgroups within the institution, such as with Asian American, Native American, and African American students attending HSU.
RESULTS OF PART ONE OF THE STUDY

The Dependent Variables

In this first part of the study, the longitudinal model of retention developed by Tinto (1993) is duplicated in order to examine the validity of the model for EOP students enrolled at Humboldt State University. A preferred method for examining student persistence is achieved by conducting a longitudinal study that follows a particular cohort from the time they enter the institution to the time they graduate or depart from the institution. Short of conducting a longitudinal study and short of using actual student persistence data, a number of studies have used the student’s intent to persist in place of actual persistence data (Loo and Rolison, 1986; Bean, 1990; Elmers and Pike, 1997). A number of additional studies have also found that the student’s intent to persist is the strongest indicator for actual persistence (Allen and Nelson, 1989; Cabrera, Castaneda, Nora, and Hegstler, 1992; Cabrera, Nora, and Castaneda, 1993).

For purposes of this study, the student intent to persist is being used as a dependent variable. In order to remain consistent with Tinto’s (1993) model of student retention, the level of the students’ institutional commitment and their goal commitment were also used as dependent variables.
Intent to Persist

The student’s intent to persist was measured by a single question (“I will re-enroll at HSU next fall”). Nine respondents disagreed with the statement (10.7%), of which six respondents strongly disagreed (7.1%). Nine respondents somewhat agreed (10.7%), 18 respondents agreed (21.4%), and 48 respondents strongly agreed with the statement (57.1%).

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<th>Table 2: Intent to Persist</th>
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<td>Student Responses</td>
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<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Somewhat Agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

Institutional Commitment.

According to Tinto’s model, the level of student commitment to the institution has an equally heavy influence on student persistence and precedes the student’s actual decision...
about whether to continue or depart from the institution (Tinto 1993). The findings from different studies have supported Tinto’s assertion, finding that institutional commitment has a strong positive influence on student persistence (Allen and Nelson, 1989; Cabrera, Nora, and Castaneda, 1993).

Within the current study, the level of student commitment to HSU was measured by a single question (“I am confident I made the right decision by choosing to attend HSU”). This single measure was consistent with Tinto’s (1993) model and proved to have the strongest correlation with the student’s intent to persist. The stronger the level of the students’ institutional commitment, the greater the likelihood they planned to continue their enrollment at HSU in the following academic year ($r = .629, p < .01$). This means that the variance in level of the student’s institutional commitment accounts for 40 percent of the variance in the student’s intent to persist.

While the student’s intent to persist is the best indicator for actual persistence, adding institutional commitment as a dependent variable allows for the substantiation of findings in regard to the strength and nature of association between the independent variables and their subsequent influence on student persistence and is consistent with Tinto’s (1993) theoretical model. In some instances, the use of both intent to persist and institutional commitment provided for a more complex understanding of how certain independent variables influenced student persistence and institutional commitment differentially.
Goal Commitment

Tinto also identifies goal commitment as having a heavy influence on student persistence. Two questions were included in this study to measure the level of student commitment to their college goals. One question specifically measured the student’s goal to complete college (“It is important for me to get a college degree”) and the other question measured their commitment to their field of study (“I am certain I have made the right choice about my academic major”).

When analyzing the data, no significant correlations were found to exist between either measure of goal commitment and the students’ level of institutional commitment, nor with the students’ intent to persist. This absence of any correlation between either measure of goal commitment and with student persistence and institutional commitment devalues the measure of goal commitment as an adequate indicator for student persistence among EOP students enrolled at HSU and has therefore been excluded from this study as a dependent variable.
Social and Academic Integration

According to Tinto’s model of student attrition, both social integration and academic integration into the university are critical for establishing student commitment to the institution, to their academic goals, and to their intent to persist. In this section of the study, this relationship between variables is re-examined for their validity among EOP students enrolled at Humboldt State University.

Social Integration

Hypothesis 1. The level of the students’ social integration into the institution will positively correlate with the students’ intent to persist and with their level of commitment to the institution.

Measures. In this study, social integration was measured by the student’s perception about their experiences with their peers at HSU and how their peer relationships influenced them. Two questions were included in this study to measure the quality of student relationships (“It has been easy for me to meet and make friends with other HSU students” and “Since coming to HSU, I have developed close personal relationships with other students”). Two additional questions were included in this study to measure the influence of those relationships on the student’s growth (“My interpersonal relationships...
with other HSU students have had a positive influence on my personal growth”, and “My interpersonal relationship with other HSU students have had a positive influence on my intellectual growth”). These measures are consistent with previous studies that have been based on Tinto’s (1987;1993) longitudinal model of retention.

**Results.** Three of the four measures regarding social integration were found to have a strong correlation with institutional commitment. The first measure was the extent in which the respondents’ peers had been a positive influence on their personal growth \( (r = .548, p < .01) \), which accounted for 30 percent of the variance in their level of institutional commitment. The second measure was the extent in which the respondents’ peers had been a positive influence on their intellectual growth \( (r = .509, p < .01) \), which accounted for 26 percent of the variance in their level of institutional commitment. And the third measure was the respondents’ ability to develop close relationships with other students \( (r = .376, p < .01) \), which accounted for 14 percent of the variance in their level of institutional commitment. No significant correlation was found between institutional commitment and the ease in which students were able to make friends at HSU.

The same three measures of social integration were also found to have a positive correlation with the student’s intent to persist. The strongest correlation was found with the extent in which the respondent felt their peers were a positive influence on their intellectual growth \( (r = .360, p < .01) \), which accounted for 13 percent of the variance in
their intent to persist. The second strongest correlation was found with the level in which the respondent reported that their peers had been a positive influence on their personal growth \((r = .349, p < .01)\), which accounted for 12 percent of the variance in their intent to persist. And the third strongest correlation was found with the respondents’ ability to develop close personal relationships \((r = .261, p < .05)\), which accounted for 7 percent of the variance in their intent to persist. As with institutional commitment, no significant correlation was found between the students’ intent to persist and the ease in which they were able to make friends at HSU.

The three measures that were found to have a significant correlation with both the students’ institutional commitment and their intent to persist were combined into a single index (social integration index). An equally strong correlation was found between this index and the level of the students’ institutional commitment \((r = .548, p < .01)\), which accounted for 30 percent of the variance between measures. The strength of the correlation with the students’ intent to persist, however, improved when using the social integration index \((r = .370, p < .01)\) and accounted for 14 percent of the variance between the measures.
Table 3: Influence of Social Integration on Institutional Commitment and Persistence.

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>It has been easy to meet and make friends at HSU</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Since coming to HSU, I have developed close personal relationships.</td>
<td>.376**</td>
<td>.261*</td>
</tr>
<tr>
<td>My peers at HSU have had a positive influence on my personal growth.</td>
<td>.548**</td>
<td>.349**</td>
</tr>
<tr>
<td>My peers at HSU have had a positive influence on my intellectual growth.</td>
<td>.509**</td>
<td>.360**</td>
</tr>
<tr>
<td>Social Integration Index</td>
<td>.548**</td>
<td>.370**</td>
</tr>
</tbody>
</table>

* level of significance < .05, ** level of significance < .01

Significance of the results. These findings support the first hypothesis, which anticipated that the level of the students’ social integration would positively correlate with their institutional commitment and with their intent to persist. These findings are also consistent with Tinto’s (1993) longitudinal model of student retention, which posits that the social integration of the student into the institution precedes and positively influences
their subsequent level of commitment to the institution and their subsequent intent to persist.

Additional findings. In order to further examine the influence of social integration, further analysis was conducted by adding controls for ethnicity, gender, and the year in which the student entered Humboldt State University. When controlling for ethnicity, it was found that the correlation between the social integration index and the student’s institutional commitment was strongest among white students \( r = .651, p < .01 \), which accounted for 42 percent of the variance in their institutional commitment, and among Mexican American/Hispanic students \( r = .505, p < .05 \), which accounted for 25 percent of the variance in their institutional commitment. No correlations were found to exist among other cultural groups.

When the control for ethnicity was added in regard to the students’ intent to persist at Humboldt State University, the only significant correlation found to exist was among white respondents \( r = .377, p < .05 \), which accounted for 14 percent of the variance. No other correlations were found among other cultural groups, or with the items measuring goal commitment (see table 4).

The differences in the strength of correlations and the absence of correlations among different ethnic groups may be attributed to what Tinto (1993) describes as the need for
Table 4: Influence of Ethnicity on Social Integration.

<table>
<thead>
<tr>
<th>Influence of Social Integration among:</th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>- White Students</td>
<td>.651**</td>
<td>.377*</td>
</tr>
<tr>
<td>- Mexican American/Hispanic Students</td>
<td>.505*</td>
<td>---</td>
</tr>
</tbody>
</table>

* level of significance < .05, ** level of significance < .01

“critical mass”. According to the critical mass theorem, the populations of a given cultural group must be sufficient enough in size to accommodate for both the cultural and interpersonal needs of students. In other words, the size of the ethnic/cultural population on campus must be large enough to provide students with the opportunity to establish peer relationships that are not only based on shared cultural backgrounds, but are based on shared personal interests, beliefs, and philosophies. When cultural populations are not large enough to provide for a critical mass, then students may find it more difficult to establish meaningful relationships because of the limited individual variability within their cultural group of students. At HSU, the largest cultural groups are made up of white students (80.9%) and Mexican American/Hispanic students (7.5%). Asian American/Pacific Islander students only make up 3.3 percent of the HSU population, followed by Native American students (2.6%) and African American students (2.5%).
When controlling for Gender, women who scored higher on the social integration index reported a higher level of institutional commitment to HSU ($r = .597$, $p < .01$), which accounted for 36 percent of the variance in their institutional commitment. For men, the strength of this correlation was similar, although slightly weaker ($r = .505$, $p < .05$), accounting for only 25 percent of the variance in their institutional commitment.

When analyzing the results on the student’s intent to persist, the opposite trend was found. Men who scored higher on the social integration index were slightly more likely to report that they intended to persist at HSU ($r = .464$, $p < .05$) than did women ($r = .385$, $p < .01$). The social integration index accounted for 21 percent of the variance in the intent to persist among men, as compared to 15 percent of the variance in the intent to persist among women.

<table>
<thead>
<tr>
<th>Table 5: Influence of Gender on Social Integration.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Social Integration among:</td>
</tr>
<tr>
<td>- Women</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>- Men</td>
</tr>
</tbody>
</table>

* level of significance < .05, ** level of significance < .01
These findings suggest that while social integration has a strong influence among women in regard to their institutional commitment, it does not have as great an influence on their intent to persist at HSU. These findings are consistent with what Tinto (1993) reports in regard to the varying withdrawal patterns found among men and women. According to Tinto (1993), women are more likely to voluntarily depart from the institution because of external social pressures than are men. He posits that these larger societal forces put greater external social pressure on women (marriage, family responsibilities, and occupational gender typing) as opposed to the occupational attainment pressures placed on men (Tinto, 1993:77).

When controlling for the year the student first entered HSU, it was found that the correlation between social integration and institutional commitment became stronger over time. For first year students (entered HSU in the fall 2001), the correlation between the social integration index and their institutional commitment was strong \( r = .665, p < .01 \), and accounted for 44 percent of the variance between the measures. Among third year students it was slightly stronger \( r = .705, p < .01 \), and accounted for 50 percent of the variance between the measures. And among fourth year students it was strongest \( r = .796, p < .01 \), and accounted for 63 percent of the variance between the measures. No significant correlation was found amongst second year students.
When analyzing the influence of social integration on the student's intent to persist, the only significant correlation found was among first year students \( (r = .505, p < .01) \), which accounted for 25 percent of the variance in their intent to persist.

<table>
<thead>
<tr>
<th>Influence of Social Integration among:</th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>- First Year Students</td>
<td>.665**</td>
<td>.505**</td>
</tr>
<tr>
<td>- Second Year Students</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>- Third Year Students</td>
<td>.705**</td>
<td>---</td>
</tr>
<tr>
<td>- Fourth Year Students</td>
<td>.796**</td>
<td>---</td>
</tr>
</tbody>
</table>

* level of significance < .05,  ** level of significance < .01

These findings suggest that social integration is considerably more important among first year EOP students in regard to their persistence at Humboldt State University. As students advance in their education, the importance of social integration continues to be a factor in their institutional commitment, but not in their actual intent to persist. This suggests that factors other than social integration have a greater influence on student persistence as the student advances in their education.
Academic Integration

Hypothesis 2: The level of the students’ academic integration into the institution will positively correlate with the students’ intent to persist and with their level of commitment to the institution.

Measures. Equally important as the student’s social integration into Humboldt State University, is the student’s academic integration. Three questions were included in this study to measure the level of the student’s academic integration into the institution, each of which have already been found to correlate with student persistence in previous studies (Allen and Nelson, 1989; Cabrera, Castaneda, Nora, and Hegster, 1992; Nora and Cabrera, 1996; Nora, Cabrera, Hagedorn, and Pascarella, 1996).

Of the three items used to measure academic integration, one item measured student satisfaction (“I am satisfied with my academic experience at HSU”), one item measured the ease of establishing relationships with faculty (“The HSU faculty I have had contact with are willing to spend time outside of class to discuss issues of importance to me”) and one item measured the extent to which the students’ academic experience had influenced their intellectual growth (“My academic experience has had a positive influence on my intellectual growth”).
Results. Two of the three questions were found to have statistically significant influences on both institutional commitment and persistence. The level of academic satisfaction that students reported had a strong correlation with both the students’ institutional commitment ($r = .587$, $p < .01$), which accounted for 34 percent of the variance between the measures, and with their intent to persist at HSU ($r = .592$, $p < .01$), which accounted for 35 percent of the variance between the measures.

Students who reported that their academic experience had a positive influence on their intellectual growth were also more likely to report a higher level of institutional commitment ($r = .375$, $p < .01$), which accounted for 14 percent of the variance between measures, and a higher level in their intent to persist at HSU ($r = .469$, $p < .01$), which accounted for 22 percent of the variance between measures.

No significant correlation was found between the third measure of academic integration (willingness of faculty to spend time with the student outside of class) and either the students’ institutional commitment or their intent to persist.

The two measures that were found to have a significant correlation with institutional commitment and persistence were combined into a single index measuring academic integration overall. This academic integration index improved upon the strength of the correlation with the student’s intent to persist, which accounted for 38 percent of the
variance between the measures, and generally improved the strength of the correlation with the student’s institutional commitment, which accounted for 32 percent of the variance between the measures.

Table 7: Influence of Academic Integration on Institutional Commitment and Persistence.

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Satisfaction</td>
<td>.587**</td>
<td>.592**</td>
</tr>
<tr>
<td>Academics Positively Influenced Intellectual Growth</td>
<td>.375**</td>
<td>.469**</td>
</tr>
<tr>
<td>Academic Integration Index</td>
<td>.570**</td>
<td>.619**</td>
</tr>
</tbody>
</table>

** level of significance < .01

Significance of the results. These findings support the second hypothesis of this study, which anticipated that the level of the students’ academic integration would positively influence their institutional commitment and their intent to persist. These findings are also consistent with Tinto’s (1993) longitudinal model of student retention, which posits that the academic integration of the student into the institution precedes and positively influences their subsequent level of commitment to the institution and their subsequent intent to persist.
Additional findings. In order to further examine the influence of academic integration, further analysis was conducted by adding controls for ethnicity, gender, and the year in which the student entered Humboldt State University. When controlling for ethnicity, the correlations found between the academic integration index and institutional commitment were found to be strongest among Asian/Pacific Islander students (r = .904, p < .01), followed by Mexican American/Hispanic students (r = .673, p < .01) and white students (r = .600, p < .05). No significant correlations were found among Native American and African American students.

The only significant correlation found between the academic integration index and the students’ intent to persist was among white students (r = .699, p < .01), which accounted for 49 percent of the variance between variables (see table 8).

These findings suggest that while academic integration is a strong indicator for institutional commitment and persistence at HSU, this is not necessarily the case across all ethnic groups. Especially in regard to the students’ intent to persist, academic integration was only found to have a significant influence among white students. As with the social integration index, there appear to be other factors that influence the intent to persist among students of color.
When controlling for gender, the level of academic integration was found to have a slightly stronger correlation with institutional commitment among men ($r = .646, p < .01$), which accounted for 42 percent of the variance in institutional commitment, than among women ($r = .534, p < .01$), which accounted for 28 percent of the variance in institutional commitment.

When controlling for gender, no significant difference was found in regard to the correlation between academic integration and the students’ intent to persist. The correlation found among men was only slightly stronger ($r = .665, p < .01$) than the correlation found among women ($r = .636, p < .01$), and accounted for 44 percent of the variance in their intent to persist, as compared to 40 percent of the variance among women.

Table 8: Influence of Ethnicity on Academic Integration.

<table>
<thead>
<tr>
<th>Academic Integration Index</th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Students</td>
<td>.570**</td>
<td>.619**</td>
</tr>
<tr>
<td>Asian/Pacific Islander Students</td>
<td>.600*</td>
<td>.699**</td>
</tr>
<tr>
<td>Mexican American/Hispanic Students</td>
<td>.904**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>.673**</td>
<td>---</td>
</tr>
</tbody>
</table>

*Level of significance < .05, ** level of significance < .01
These findings suggest that academic integration plays a lesser part in influencing the institutional commitment among women at HSU than it does for men, and an equal part in influencing their intent to persist. This is particularly interesting given that the opposite was found in regard to social integration, which accounted for 36 percent of the variance in institutional commitment among women, as opposed to only 26 percent of the variance among men. In this regard, it may be that social integration plays a slightly greater role in fostering institutional commitment among women than does academic integration, where as among men, academic integration may play a slightly greater role in fostering institutional commitment than does social integration.

When controlling for the term in which the student first entered the institution, interesting results were found among the different cohorts. Students who had most recently entered the institution (enrolled in their first semester) had a very strong correlation between

<table>
<thead>
<tr>
<th>Table 9: Influence of Gender in Academic Integration.</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Academic Integration Index</td>
</tr>
<tr>
<td>Men</td>
</tr>
<tr>
<td>Women</td>
</tr>
</tbody>
</table>

**level of significance < .01
academic integration and both their institutional commitment ($r = .801, p < .01$), which accounted for 64 percent of the variance in institutional commitment, and with their intent to persist ($r = .778, p < .01$), which accounted for 60 percent of the variance in their intent to persist. Strong correlations were also found among fourth year students where their level of academic integration accounted for 42 percent of the variance in their institutional commitment ($r = .649, p < .05$) and 43 percent of the variance in their intent to persist ($r = .656, p < .05$). No significant correlations were found among second and third year students.

| Table 10: Influence of First Year of Attendance on Academic Integration. |
|---------------------------------|-----------------|-----------------|
|                                 | Institutional   | Intent to       |
|                                 | Commitment      | Persist         |
| **Academic Integration Index**  |                 |                 |
| First Year Students             | $.801**         | $.778**         |
| Second Year Students            | ---             | ---             |
| Third Year Students             | ---             | ---             |
| Fourth Year Students            | $.649*           | $.656*           |
|                                 |                 |                 |
| * Level of significance < .05, **level of significance < .01 |

These findings confirm that academic integration is an important variable in determining both the level of the students’ institutional commitment and their intent to persist,
particularly among first year EOP students at HSU. When considering that social integration was also found to have strong correlations among first year students, the importance of early integration becomes paramount. This is consistent with Tinto’s (1993) theory, which posits that both academic and social integration into the institution precedes and reinforces the students’ subsequent commitment to the institution, to their academic goals, and to their actual persistence at the institution.

The absence of significant correlations in academic integration among second and third year students, combined with the strong correlations found among fourth year students may suggest that academic integration wanes during the intermediary years and becomes more critical as students’ approach their graduation. In this regard, academic integration may be seen as fluctuating in its level of importance among students, with particular significance occurring during transitional periods when they are either beginning their college education or as they approach the conclusion of their undergraduate education.

Pre-Entry Attributes

According to both Tinto’s (1993) and Bean’s (1990) model of student attrition, the student’s pre-collegiate attributes such as academic skills and family background have a heavy influence on the student’s subsequent integration into the university. In previous
studies, pre-collegiate attributes have often included measures such as high school GPA, high school rank, college entrance exam scores, parental income, parents’ level of education, peer encouragement, and parental encouragement. Academic measures such as high school GPA, college entrance exam scores, and English and math placement scores are readily available to EOP advisors and are already being utilized for advising EOP students at HSU. Because of this, the pre-college attributes included in this study were limited to those that were not already available to the EOP advisor, and included parental encouragement, peer encouragement, and the financial constraints on the student.

**Hypothesis 3.**

Pre-entry attributes will positively correlate with the students’ intent to persist and with their level of commitment to the institution. The pre-entry attributes included in this study are family encouragement, peer encouragement, and financial constraints for the student.

**Parental Support**

**Measures.** Because HSU typically enrolls students from distant geographic locations, questions were included for measuring the level of encouragement the student received to
attend college in general, as well as to attend HSU in specific ("My parents encourage me to get a college degree" and "My parents support my decision to attend HSU").

Results. Nearly all respondents reported a high level of support from their parents regarding their decision to attend college in general (89 percent agreed or strongly agreed with the statement regarding parental support) and a high level of parental support for attending HSU in specific (83 percent agreed or strongly agreed with the statement regarding parental support for attending HSU). Although there were high levels of parental support reported by students, no correlation was found between parental support for college in general and the students’ level of institutional commitment or their intent to persist.

Modest correlations were found to exist between the measure of parental support for attending HSU in specific and both the students’ level of institutional commitment ($r = .230, p < .05$) and their intent to persist ($r = .239, p < .05$). These modest correlations account for 5 percent of the variance in the students’ institutional commitment and 6 percent of the variance in their intent to persist at HSU (see table 11).

Significance of the results. These findings support the hypothesis, which anticipated that parental encouragement would have a positive influence on the students’ institutional commitment and on their intent to persist. Although the correlations between the
variables are quite modest, they do highlight how differences in parental encouragement influence students’ and their experiences at HSU differentially. When parental encouragement is specific to HSU, this encouragement has a small but direct influence on the students’ institutional commitment to HSU and on their intent to persist at HSU, where as parental encouragement for attending college in general has no significant influence on the students’ institutional commitment, nor on their intent to persist at HSU. These modest, but positive correlations suggest that the specificity of parental encouragement is a determining factor for the level of the influence this encouragement has on the students’ subsequent experience at HSU. This finding is consistent with both Bean and Tinto’s models, in that Bean posits that parental influence can be a precursor to the students’ subsequent integration into the institution by influencing the student’s attitudes regarding the institution, and with Tinto’s model, which posits that pre-collegiate factors, such as parental encouragement, will eventually give way to other

<table>
<thead>
<tr>
<th>Parental Support</th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>For College in General</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>For Attending HSU</td>
<td>.230*</td>
<td>.239*</td>
</tr>
</tbody>
</table>

*Level of significance = .05, **level of significance = .01
factors which have a more direct impact on the student, such as the students’ actual experiences at the institution.

Additional findings. As with the previous measures, further analysis was conducted by adding controls for ethnicity, gender, and the year in which the student entered Humboldt State University. When controlling for ethnicity, gender, and first attendance period, no meaningful differences in the correlations were found to exist.

Peer Support

Measures. Items used to measure the level of peer support parallel those used to measure parental support and include one measure for the degree of encouragement the student received to attend college in general ("My close friends are supportive of my decision to get a college degree"), and one measure for the degree of encouragement the student received to attend HSU in specific ("My close friends support my decision to attend HSU").

Results. A large proportion of students indicated that they received a high level of peer support for attending college in general (94% agreed or strongly agreed with the statement), however, a much lower proportion of students reported receiving a high level of peer support for attending HSU in specific (78% agreed or strongly agreed). This
difference in the level of peer support was found to be directly correlated with both the student’s institutional commitment and with their intent to persist at HSU and is detailed below.

Peer support for attending college in general was found to have a modest correlation on the student’s institutional commitment (r = .290, p < .01), which accounted for 8 percent of the variance between the measures. No significant correlation was found in regard to the student’s intent to persist.

When peer support was directed specifically to the student’s attendance at HSU, the correlations with institutional commitment and the students’ intent to persist were much stronger. Students who reported that their peers supported their decision to attend HSU were also more likely to report higher levels of institutional commitment (r = .565, p < .01), which accounted for 32 percent of the variance in institutional commitment. They were also more likely to report that they intended to persist at HSU (r = .401, p < .01), which accounted for 16 percent of the variance in the intent to persist (see table 12).

Significance of the results. These findings support the hypothesis, which anticipated that peer encouragement would have a positive influence on the students’ institutional commitment and on their intent to persist. As with parental support, it is apparent that the more specific the peer encouragement is to HSU, the greater the influence that
encouragement has on the students' institutional commitment to HSU and on their intent to persist at HSU.

It is also interesting to note that peer encouragement was found to have a stronger correlation than parental encouragement with each of the measures regarding commitment and persistence. Although it is not clear why this is the case, it may be that this measure reflects ambiguity within the question. Because the generalized term “peer” does not differentiate between pre-college peers and college peers, these measures may reflect either Bean’s (1990) model of student attrition, which posits that pre-collegiate influences determine the students’ subsequent experiences at the institution, or Tinto’s (1993) model, which places greater emphasis on peer encouragement within the daily interactions of the student at the institution, which facilitates greater student integration, or both. Because of the strength of the correlations, it is believed that these results reflect the latter, and largely reflect the level of the students’ integration.

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For College in General</td>
<td>.290**</td>
<td>---</td>
</tr>
<tr>
<td>For Attending HSU</td>
<td>.565**</td>
<td>.401**</td>
</tr>
</tbody>
</table>

*Level of significance = .05, **level of significance = .01
**Additional findings.** As with the previous measures, further analysis was conducted by adding controls for ethnicity, gender, and the year in which the student entered Humboldt State University. When controlling for gender and ethnicity, no meaningful differences were found in the correlations. When controlling for first attendance period, however, the correlation between peer encouragement, which was specific to HSU, and the students’ institutional commitment was found to strengthen as the years of attendance at HSU increased. The correlation with peer encouragement accounted for 20 percent of the variance in the institutional commitment among first year students \((r = .450, p < .05)\), for 62 percent of the variance among third year students \((r = .788, p < .01)\), and for 79 percent of the variance among fourth year students \((r = .887, p < .01)\).

<table>
<thead>
<tr>
<th>First Attendance Period</th>
<th>Institutional Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Students</td>
<td>.450*</td>
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<td>Second Year Students</td>
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<tr>
<td>Third Year Students</td>
<td>.788**</td>
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<tr>
<td>Fourth Year Students</td>
<td>.887**</td>
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</tbody>
</table>

*Level of significance < .05, **level of significance < .01

Again, these results may reflect ambiguity within the question. In this case, the correlation among first year likely reflects a mixture of interpretation of “peer
encouragement” as both encouragement from their pre-collegiate peers and as encouragement from their college peers. The interpretation among third and fourth year students, however, would more likely be interpreted as “college peers”. In either case, the findings are consistent with Tinto’s (1993) model of student attrition, which posits that social integration is an important influence on the students’ subsequent institutional commitment, which in the above results, re-confirm the findings reported in regard to the measure of social integration (see table 6 and corresponding discussion).

Financial Constraints.

Measures. Because the target population for this study was limited to EOP students who were attending HSU, all of whom met the low-income guidelines required for admission into the EOP program, it was determined that questions regarding specific family income would be redundant. Given the probability that students may have limited knowledge of their parents income, requesting such information may have led to errors based on the student’s misreporting of parental income. Additionally, a number of studies have already determined that low-income students are less likely to persist to graduation in college than are students who are from higher socio-economic backgrounds (National Center for Education Statistics, May 1996; Postsecondary Education Opportunity, December 2000).
Because of these reasons, questions in this study were specifically designed to measure the student’s perception about their financial ability to pay for college (“My parents are able to help me pay for college” and “I can afford to attend HSU without receiving financial aid”) and about their satisfaction with the amount of financial aid they received (“I am satisfied with the amount of financial aid I receive at HSU”).

Results. Only one correlation was found between all of the measures regarding the students’ financial status and the measures of commitment and persistence. Students who reported that their parents were able to help them pay for college were slightly more likely to report that they intended to persist at HSU ($r = .244$, $p < .05$), which accounted for 6 percent of the variance in the students’ intent to persist.

Significance of the findings. The surprising absence of any other correlations between income and persistence among students should not be construed as evidence that income does not affect student persistence. An overwhelming amount of data has already proven that low income students are significantly more likely to drop out of college (Postsecondary Education Opportunity, April 2000; National Center for Education Statistics, May 1996; National Center for Educational Statistics, May 1998; National Center for Educational Statistics, June 1998).
Given the findings in previous studies, the results of this study are somewhat surprising. One reason for these findings may be that the results are skewed because of the timeframe in which the study was conducted. Surveys were sent out to students at the end of their first semester, perhaps during an early enough time in the academic year when their financial aid funds had not been completely exhausted. It may also be possible that these findings accurately reflect the experiences of EOP students at HSU, given the commitment of the HSU financial aid office in targeting limited financial aid funding to students with the greatest need, among which EOP students are often included. In other words, it may be that the institutional commitment at HSU for awarding students with the greatest financial need has countered the negative affects typically associated with limited family resources.

**Additional findings.** Each of the measures regarding financial constraints on students were further examined by controlling for ethnicity, gender, and first term of attendance. No meaningful correlations were found to exist.

**Environmental and Family Pull Factors.**

A number of studies have found that student persistence is affected by external demands placed on students while they are enrolled in college (Bean, 1990; Nora, Cabrera,
These external demands are commonly referred to as “pull factors”, which pull the student away from their academic responsibilities. These pull factors vary in specificity, ranging from the environmental surroundings of the student, which directly compete for their time on a daily basis (such as household chores, work, and family responsibilities) to more generalized family obligations, which may only exist as a belief among students that their attendance in college has a negative influence on their relationships with distant family or friends. This is especially true for students who have relocated from distant geographic areas in order to attend HSU. Students living far from home may experience a pull from their family if they believe their absence has placed a hardship on them. Students may also have significant relationships with distant friends and significant others, which may also pull them from their commitment to college and HSU.

**Hypothesis 4**: External factors will negatively correlate with the students’ intent to persist and with their level of commitment to the institution. In this study, external factors include measures of environmental and family pull factors.

**Measure**: Four questions were included in order to measure the level in which daily environmental pull factors affected students (“Are you currently working off campus”, “Are you currently responsible for the care of others”, “Do part of your current household responsibilities include cooking, cleaning, or doing laundry for other members of your
family”, and “Are you currently living at home”). And three questions were included to measure the level in which students felt a continued responsibility to their family (“I am concerned that by attending HSU, I am putting a financial hardship on my family”, “I send a portion of my financial aid home to help my parents financially”, and “I am concerned that while I am attending HSU, I cannot be as close to my family as I should be”). One question was included to measure the student’s sense of obligation to distant friends or significant others (“I am concerned that while I am attending HSU, I cannot be as close to my friends as I should be”).

Results. Of these eight questions, none were found to have any meaningful or significant correlation with the student’s institutional commitment or intent to persist.

Significance of the results. Although no correlations were found in the current study, prior studies have found that external factors can have a negative influence on student persistence. The absence of findings in this study may be partially due to the fact that most respondents (87 percent) were not living at home, and are therefore distanced from the family responsibilities they might otherwise be obligated to fulfill, such as doing household chores or having to care for others.

HSU is also a residential campus, which houses a majority of first year students in on-campus residences. The residential environment offers a more enclosed environment,
and accommodates many of the students’ needs. This enclosed environment may further limit the negative influences of external factors, such as having to work off-campus, or having to cook, shop, or do household chores.

Additional findings: As with the previous measures, further analysis was conducted by adding controls for ethnicity, gender, and the year in which the student entered Humboldt State University. Whereas no correlations were found among the sample as a whole, when controlling for ethnicity, two significant correlations emerged. Students of color who were not living at home with their parents tended to have higher levels of institutional commitment ($r = .510, p < .001$), which accounted for 26 percent of the variance in their institutional commitment. Additionally, students of color who reported that attending HSU caused financial hardship for their family had higher levels of institutional commitment ($r = .346, p < .05$), which accounted for 12 percent of the variance in institutional commitment. No significant correlations were found among white students in regard to institutional commitment, nor were any significant correlations found regarding the intent to persist for either students of color or for white students.

The reasons for these variations in the correlations among students of color cannot be known within the context of the current study, however, a possible explanation may be that students of color experience greater anxiety in their decision to attend HSU not only
because they are separating from family, but because they are separating from their cultural base as well. Students of color who choose to separate from their family by leaving home and who also recognize that this decision will cause a financial hardship on their family, may force them to take greater care in making this decision, thus leading to a higher level of commitment to their decision to enroll at the institution. The fact that no correlations are found to exist with the students’ intent to persist also suggests that this level of institutional commitment is not lasting.

When controlling for gender, only one significant correlation was found. Men who reported that attending HSU caused a financial hardship on their family were more likely to report higher levels of institutional commitment (r = .625, p < .01), which accounted for 39 percent of the variance in institutional commitment among men. No correlation was found to exist in regard to institutional commitment among women, nor was any significant correlation found to exist in regard to the intent to persist for either men or women. Again, the reason for this variation in the correlation among men and women cannot be known within the context of this study.

No significant correlations were found when controlling for first year of attendance.
Summary Discussion: Part One of the Study

The findings within the first part of this study largely affirm Tinto’s (1993) theory regarding student attrition and shows how his theoretical model can provide insight into the institutional commitment and persistence trends among EOP students attending Humboldt State University. Consistent with Tinto’s theory, this study finds that the social and academic integration of EOP students at Humboldt State University have had a significant influence on the students’ level of institutional commitment and on their intent to persist at the institution. This study also finds that both academic and social integration have had equal influence on the students’ institutional commitment. When it comes to the students’ intent to persist, however, academic integration accounted for a much higher percentage of the variance in the students’ intent to persist (38 percent) than did their social integration (14 percent).

This difference between the correlations found among students in regard to the academic and social integration index is also consistent with Tinto’s (1993) model, which posits that while student integration is critical for student persistence, integration into both the social and academic sphere is not necessarily experienced equally. It is possible for students to integrate into these spheres differentially, which can be attributed to both interpersonal variations among students (focus on social vs. academic integration) as well
as institutional variations (emphasis on academic scholarship vs. social integration)
(Tinto, 1993:120).

When controls for ethnicity were added to the above measures, it was found that the
influence of social integration on the students’ level of institutional commitment and
intent to persist were strongest among cultural groups that were largest in population size.
These findings are consistent with what Tinto refers to as the need for critical mass
within each cultural group’s population.

Among women, social integration was found to have a slightly stronger influence on
institutional commitment than for men, but a slightly weaker influence on their intent to
persist. Academic integration, on the other hand, had a stronger influence on the level of
institutional commitment among men than it did for women, and a similar influence on
intent to persist for both men and women.

These findings suggest that in regard to institutional commitment, social integration is a
more important influence for women and academic integration is a more important
influence for men. In regard to actual persistence, however, academic integration is
equally important for both genders and has a much greater influence on persistence than
does the students’ social integration.
When controlling for the year in which the student first entered the institution, social integration was found to have an increasingly stronger correlation with the students’ level of institutional commitment as the student advanced in their years at HSU. This increase in the strength of the correlation highlights the importance of social integration as an influence on the students’ long-term institutional commitment to HSU.

The students’ level of academic integration also had a strong influence among first year students and students closest to graduation, but no significant correlations were found among second and third year students.

The findings in this study also affirm Tinto’s (1993) theory in regard to parental and peer encouragement, especially when that parental and peer encouragement was specifically directed at the students’ decision to attend HSU. It is interesting to note that when parental and peer encouragement were not specifically directed at the students’ decision to attend HSU, but was more generalized towards the students’ enrollment in college, this encouragement had little to no impact on the students’ level of institutional commitment nor on their intent to persist. This suggests that for EOP students’ attending HSU, the type of parental and peer encouragement the student receives is a critical differentiating factor in the influence and value of that encouragement.
When controls were added for the first term of attendance, it was found that peer encouragement had a stronger correlation with the students’ level of institutional commitment as the student advanced in their years of attendance at HSU. Among first year students, peer encouragement accounted for 20 percent of the variance in institutional commitment. This correlation improved among third year students’, accounting for 62 percent of the variance between the variables, and improved further among fourth year students, accounting for 79 percent of the variance between the variables.

This increase in the correlation between peer encouragement and institutional commitment among EOP students who had attended HSU the longest highlights the important role peer relationships have on the students’ long-term institutional commitment to HSU. With these findings in mind, the combination of peer encouragement and social integration together may have the greatest implications for long-term institutional commitment to HSU and its subsequent influence on student persistence. Additional investigation into the nature of peer encouragement is included in part two of this study.

Although only a limited number of significant findings emerged among EOP students in regard to income factors, family pull factors, and environmental pull factors, previous studies have established that these factors do influence student attrition at Humboldt State
University, however, these factors may have been mitigated by the institution’s support services, by local financial aid awarding policies, and by the social environment of HSU as a residential campus.
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<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
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<tbody>
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<td><strong>Social Integration</strong></td>
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<td>.505**</td>
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<td>Fourth Year Students</td>
<td>.796**</td>
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<td>.619**</td>
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<td>First Year Students</td>
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<td>.778**</td>
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<tr>
<td>Fourth Year Students</td>
<td>.649*</td>
<td>.656*</td>
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<td><strong>Encouragement for Attending HSU</strong></td>
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<td>Parental Encouragement</td>
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<td>.239*</td>
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<td>Peer Encouragement</td>
<td>.565**</td>
<td>.401**</td>
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<tr>
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<td>Third Year Students</td>
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<tr>
<td>Fourth Year Students</td>
<td>.887**</td>
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</table>

*Level of significance = .05, **level of significance = .01
RESULTS OF PART TWO OF THE STUDY

Overview

The second part of this study focuses on the fit between the student and the institution in regard to the codes of behavior, values, beliefs, and expectations at the institution. This examination of the match between the values, beliefs, and expectations of the student and the institution includes sensitivity to the multiple spheres that can influence a student’s life. These multiple spheres not only include the student, but the student’s family, the student’s peer group, and the student’s cultural background.

This study anticipates that the higher the continuity in values, beliefs, and expectations between the student and the institution, between the student’s family and the institution, between the student’s peer group and the institution, and between the student’s cultural heritage and the institution, the greater the likelihood that the student will more easily integrate into Humboldt State University and will choose to persist at the institution.
Academic Affinity: The Continuity Between Student and Classroom

The measures for academic affinity are included in order to determine the extent to which the continuity between the student's values and the values of their professors and the values within their course curriculum can influence the student's experience at HSU.

Hypothesis 5:

The level of continuity reported by students between their personal values and the values expressed within the university classroom will positively correlate with the students' social and academic integration into the university, with their intent to persist, and with their level of commitment to the institution.

Measures

Two items were included in the study to measure the similarity between the student and their classroom experiences. One item measured the similarity of values between the student and their professor ("I believe my values are similar in general to those of my HSU professors"), and the other item measured the value or meaningfulness of the
curriculum for the student ("The things I am learning in my college classes are meaningful to my life").

Results

Approximately one-third (32.1%) of the respondents either agreed or strongly agreed that their values were similar to those of their professors. A much higher proportion of respondents either agreed or strongly agreed that their classes were meaningful to their life (61.6%).

Students who reported that they believed their values were similar to those of their professor’s were more likely to report higher levels of institutional commitment (r = .441, p < .01), which accounted for 19 percent of the variance between the measures, and that they intended to persist at HSU (r = .401, p < .01), which accounted for 16 percent of the variance between the measures.

Students who reported that their classes were meaningful to their life were also more likely to report higher levels of institutional commitment (r = .414, p < .01), which accounted for 17 percent of the variance between the measures. They were also more likely to report higher levels in their intent to persist at HSU (r = .395, p < .01), which accounted for 16 percent of the variance between the measures.
Additional analysis was conducted, combining the two separate measures of academic affinity (similarity of values with professors and meaningfulness of classes) into a single index (academic affinity index). When re-examining the correlation between the academic affinity index and the measures of student commitment and intent to persist, the correlations were found to improve. The correlation between the academic affinity index and the students' institutional commitment accounted for 26 percent of the variance between the measures ($r = .512$, $p < .01$), representing an improvement of 7 to 9 percent over the individual measures that make up the index.

In regard to the students' intent to persist, the academic affinity index accounted for 22 percent of the variance between the measures ($r = .474$, $p < .01$), representing an improvement of 5 to 6 percent over the individual measures that make up the index.

<table>
<thead>
<tr>
<th>Table 15: Influence of Continuity between Student and School</th>
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<tr>
<td>Similar Values as Faculty</td>
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<tr>
<td>Classes are Meaningful</td>
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<tr>
<td>Academic Affinity Index</td>
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*Level of significance < .05, **level of significance < .01
Because these measures relate directly to the student’s perception of their academic environment (faculty have similar values and classes are meaningful to their life), further analysis was conducted to determine if these measures correlated with the student’s academic integration. The analysis showed that students who reported having similar values with their professors were also more likely to score higher on the academic integration index ($r = .433, p < .01$), which accounted for 19 percent of the variance in academic integration. Students who reported that their classes were meaningful to their life were also more likely to report higher levels of academic integration ($r = .548, p < .01$), which accounted for 30 percent of the variance in academic integration. When using the academic affinity index, the correlation with academic integration was strongest ($r = .585, p < .01$), which accounted for 34 percent of the variance between the measures.

Analysis was also conducted to determine if these measures also influenced the students’ social integration into Humboldt State University. Students who reported that their faculty had similar values to their own were more likely to score higher on the social integration index ($r = .373, p < .01$), which accounted for 14 percent of the variance in social integration. Students who reported that their classes were meaningful to their life were also more likely to score higher on the social integration index ($r = .506, p < .01$), which accounted for 26 percent of the variance in social integration. As with academic integration, when using the academic affinity index, the correlation with social
integration was strongest (r = .546, p < .01), and accounted for 30 percent of the variance between the measures.

| Table 16: Influence of Continuity between Student and School on Integration |
|--------------------------------------------------|------------------|------------------|
| Similar Values as Faculty | .433** | .373** |
| Classes are Meaningful | .548** | .506** |
| Academic Affinity Index | .585** | .546** |

*Level of significance < .05, **level of significance < .01

Significance of the Findings

These findings support the hypothesis that the level of continuity between the student and their academic environment can have a positive influence on their academic and social integration within the institution, their institutional commitment, and their intent to persist. These findings also support Tinto’s (1993) model of student attrition, which posits that the more similarity there is between the student and the academic environment, the greater the institutional commitment will be and the greater the likelihood that the student will persist at the institution.
While the measures of academic affinity parallel the items measuring academic integration there is a subtle difference. Where the items measuring academic integration primarily focused on student satisfaction and personal growth (an outcome of their academic experiences), these latter findings focus on the similarity of values and the meaningfulness of the student's courses to their life (a continuity between the student and the academic environment). When analysis was conducted to measure the correlation between the academic integration index and the academic affinity index, it was not surprising to find a strong correlation existed ($r = .585$, $p < .01$), which accounted for 34 percent of the variance between the measures. While this strong correlation suggests that these measures are interrelated, it is not so strong as to suggest that these indices are measuring the same phenomenon. What cannot be determined, however, is the direction of the correlation between these indices. It is assumed that the correlation between academic integration and academic affinity is a bi-directional correlation.

**Additional Findings**

Further analysis was conducted on the measures of academic affinity, controlling for ethnicity, gender, and first year of attendance.

**Ethnicity.** When controlling for ethnicity, a higher percentage of students of color agreed or strongly agreed that their faculty had similar values to their own (35.7 %) and that
their classes were meaningful to their life (69.8%). White students were less likely to agree or strongly agree with both the measure regarding similarity in values (28.2%) and the measure regarding the meaningfulness of their classes (52.4%).

Despite the fact that students of color were more likely than white students to report higher levels of affinity with their faculty and curriculum, no significant correlations were found to exist among students of color. Among white students, however, those who scored higher on the academic affinity index were also more likely to report a higher level of institutional commitment ($r = .631, p < .01$), which accounted for 40 percent of the variance between the measures. They were more likely to report a stronger intent to persist at HSU ($r = .479, p < .01$), which accounted for 23 percent of the variance between the measures. They were more likely to report a higher level of academic integration ($r = .675, p < .01$), which accounted for 45 percent of the variance between the measures. And they were more likely to report a higher level of social integration ($r = .602, p < .01$), which accounted for 36 percent of the variance between the measures (see table 17).

These findings suggest that, regardless of the students’ perceptions of their affinity with their faculty and their courses, white EOP students, more than students of color, will benefit from having a continuity in values and a continuity in their course curriculum. This finding is consistent with the leading theories regarding cultural reproduction, which
posit that majority students’ are privileged within the educational system because of the inherent bias that underlies the educational structure and which replicate the power inequalities in society. It is also consistent with critical theory, as it applies to the educational process, which also posits that students of color are marginalized within the formal educational institution.

| Table 17: Influence of Ethnicity on Academic Affinity, Commitment, and Persistence |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                 | Institutional Commitment | Intent to Persist | Academic Integration | Social Integration |
| Academic Affinity               |                  |                  |                  |                  |
| Students of Color               | ---              | ---              | ---              | ---              |
| White Students                  | .631**           | .470**           | .675**           | .602**           |

*Level of significance < .05, **level of significance < .01

Gender. When controlling for gender, no differences were found in the percentage of men and women who agreed or strongly agreed with the measures regarding academic affinity. In regard to the item measuring the similarity of values between the student and their faculty, an equal percentage of men agreed or strongly agreed with the statement (31.8%) as compared with the percentage of women who either agreed or strongly agreed (32.8%). In regard to the item measuring the meaningfulness of their classes, an equal
percentage of men agreed or strongly agreed with the statement (60.8%) as compared with the percentage of women who agreed or strongly agreed with the statement (61.2%).

Despite the fact that men and women reported similar levels of academic affinity, men were consistently more likely to benefit from having higher levels of academic affinity than were women. The correlation between the academic affinity index and institutional commitment was stronger among men ($r = .594, p < .01$) and accounted for 35 percent of the variance between the measures, as opposed to the correlation found among women ($r = .449, p < .01$), which accounted for 20 percent of the variance between the measures.

Similar differences were found in regard to the students’ intent to persist. Men who scored higher on the academic affinity index were also more likely to report a stronger intent to persist at Humboldt State University ($r = .537, p < .05$), which accounted for 29 percent of the variance among men, as opposed to the correlation found among women ($r = .469, p < .01$), which accounted for 22 percent of the variance.

When controlling for gender on the items measuring social and academic integration, differences were also found. Men who scored higher on the academic affinity index were also more likely to score higher on the academic integration index ($r = .716, p < .01$), which accounted for 51 percent of the variance among men, as opposed to the correlation
found among women ($r = .520, p < .01$), which accounted for 27 percent of the variance. Additionally, men were also more likely to score higher on the social integration index ($r = .709, p < .01$), which accounted for 50 percent of the variance among men, as opposed to the correlation found among women ($r = .442, p < .01$), which accounted for 19 percent of the variance.

| Table 18: Influence of Gender on Academic Affinity, Commitment, and Persistence |
|---------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
|                                                              | Institutional Commitment & Intent to Persist | Academic Integration | Social Integration |
| Academic Affinity                                             |                                                |                                |                                |
| Men                                                          | .594**                                         | .537*                          | .716**                          | .709**                          |
| Women                                                        | .449**                                         | .469**                         | .520**                          | .495**                          |

*Level of significance $< .05$, **level of significance $< .01$

Despite the proportional similarities in the reported levels of academic affinity, these findings suggest that men are more likely to benefit from having an affinity with their in-class academic experiences than are women. This suggests, that when comparing students based on gender, the in-class experiences of women are not as primary a source for their academic or social integration into the university, nor is it as primary a source for their institutional commitment and their intent to persist as it is for men. This is not to suggest, however, that academic integration is a secondary factor for women. The earlier
findings reported in part one of this study clearly indicate that academic integration has an equal influence on the students' intent to persist at Humboldt State University, regardless of gender (see table 9 and corresponding discussion). Perhaps, however, the strongest source of academic integration among women occurs in venues other than in the university classroom. Further examination between the differences in academic integration and gender are included in a latter part of this study.

The fact that stronger correlations were found among men in every instance also suggest that men, more than women, will benefit from having a continuity in values and a continuity in their course curriculum. These findings are consistent with theories of cultural reproduction and critical theory which both posit that the power inequalities inherent in society are replicated through the educational system, in this case, privileging men more than women.

**Year of attendance.** When controlling for the year in which the student first entered Humboldt State University, strong correlations were found to exist among first year students in regard to their institutional commitment and in regard to their intent to persist. First year students who scored higher on the academic affinity index were more likely to report a higher level of institutional commitment \( (r = .781, p < .01) \), which accounted for 61 percent of the variance in their institutional commitment. They were also more likely to report that they intended to persist at Humboldt State University \( (r = .747, p < .01) \),
which accounted for 56 percent of the variance in the students’ intent to persist. No significant correlations were found among students who had entered the university in previous years.

These findings clearly indicate that the in-classroom experiences of students have the greatest influence on institutional commitment and persistence during the students’ first year at Humboldt. This is consistent with the correlations found between academic integration and institutional commitment and persistence among first year students reported earlier in this study. In both instances, academic integration, which measures the outcome of the students’ academic experiences, and academic affinity, which measures the similarity of values, are most critical during the transitional period when the student first enters the institution.

Affinity of Culture and Values

Because EOP students are non-traditional students (low-income, first in their family to attend college, a majority of whom are students of color) they often describe experiencing culture shock upon their initial enrollment at HSU. Especially during their first semester, this transition is often a surprise to students as they encounter different values, different expectations, and different patterns of behavior in their new environment. Because of
these transitional issues, several questions were included to measure the continuity
between the values of the university overall, and the values of the student, their family,
and their peers.

**Hypothesis 6**

The level of continuity reported by students between their cultural heritage and the
culture of the university will be found to positively correlate with the students’ social and
academic integration into the university, with their intent to persist and with their level of
commitment to the institution.

**Measures**

There were 3 items included in the study to measure the level of affinity between the
student’s culture and the school’s culture. The first measure compared the continuity of
the students’ demographic experiences, (“During my high school years, the racial
composition of my high school was similar to the current racial composition of HSU”).
The second measure compared the continuity of their culture within the social
environment at the institution, (“At HSU, university sponsored social activities include
events that recognize my cultural heritage”), and the third measure compared the
continuity of the students’ culture within the academic environment at the institution,
("At HSU, my professors have included aspects of my cultural heritage as part of their course content").

Results

The first measure of cultural affinity is a simple comparison of the student’s perception of the demographic characteristics of HSU as compared to the demographic characteristics of their high school. In this regard, only 15.4% of students agreed or strongly agreed that the racial composition of their high school was similar to the racial composition of HSU. Additionally, over half of all students (58.3%) disagreed or strongly disagreed that the racial composition between their high school and HSU was similar.

When controlling for ethnicity, a strong level of disagreement was found across all of the ethnic groups with the highest reported dissimilarity occurring among Mexican American/Hispanic students (78.2%), followed by Asian/Pacific Islander students (71.5%), African American students (60%), Native American (50%), and white students (47.6%). This speaks strongly to how students, particularly students of color, experience their transition to HSU as a transition of change, as opposed to a transition of continuity (see table 19).
In regard to the other measures of affinity between the student and the school’s culture, over half of all respondents (52.7%) either agreed or strongly agreed that the social activities sponsored by the institution included events that recognized their cultural heritage. When controlling for ethnicity, Mexican American/Hispanic students had the highest proportion of those who agreed or strongly agreed (73.9%), followed by Asian/Pacific Island students (50%), white students (42.8%), African American students (37.5%) and Native American students (33.3%).
When looking at in-class experiences, a much lower percentage of students (27.4%) agreed or strongly agreed that their college coursework included aspects of their cultural heritage, with white students agreeing the most (37.9%), followed by Asian/Pacific Island students (33.4%), Mexican American/Hispanic students (27.3%), and African American students (11.1%).

The differences in the rate at which students agreed or disagreed with the above measures suggest that students of color are more likely to find culturally relevant activities as part of their social activities rather than as part of their classroom activities (see table 20).

Analysis was conducted to see whether any of the measures of cultural affinity produced statistically significant correlations with the students’ social and academic integration into the university, with their intent to persist, and with their level of commitment to HSU. In every case, the significant correlations found between the above measures were found to be skewed by the responses from white students. When controlling for ethnicity, each of the correlations found in regard to cultural affinity occurred exclusively among white students, with no significant correlations found to exist among students of color. These results are detailed below.
Students who reported that their culture was included in the university sponsored social activities were more likely to report a higher level of institutional commitment ($r = .383$, $p < .01$), which accounted for 15 percent of the variance between the measures. They were also more likely to report a higher degree in their intent to persist at Humboldt State University ($r = .333$, $p < .01$), which accounted for 11 percent of the variance between the measures.

### Table 20: Differences in Cultural Representation within Social and Academic Spheres

<table>
<thead>
<tr>
<th></th>
<th>Cultural Heritage is Represented in Social Activities</th>
<th>Cultural Heritage is Included in Coursework</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agree or Strongly Agree</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Students</td>
<td>52.7</td>
<td>27.4</td>
<td>25.3</td>
</tr>
<tr>
<td>White Students</td>
<td>42.8</td>
<td>37.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Students of Color</td>
<td>60.0</td>
<td>22.5</td>
<td>37.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>37.5</td>
<td>11.1</td>
<td>26.4</td>
</tr>
<tr>
<td>Asian/Pacific Isl.</td>
<td>50.0</td>
<td>33.4</td>
<td>16.6</td>
</tr>
<tr>
<td>Mexican Amer./Latino</td>
<td>73.9</td>
<td>27.3</td>
<td>46.6</td>
</tr>
<tr>
<td>Native American</td>
<td>33.3</td>
<td>0.00</td>
<td>33.3</td>
</tr>
</tbody>
</table>
When controlling for ethnicity, it was found that the above correlation was skewed by white respondents, with no correlations found to exist among students of color. White students who reported that their culture was included in the university sponsored social activities reported a high level of institutional commitment ($r = .632$, $p < .01$), which accounted for 40 percent of the variance in institutional commitment, and a high degree of intent to persist at Humboldt ($r = .447$, $p < .05$), which accounted for 20 percent of the variance in their intent to persist.

<table>
<thead>
<tr>
<th>Table 21: Cultural Inclusion in Social Activities: Commitment &amp; Persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>All Students</td>
</tr>
<tr>
<td>Students of Color</td>
</tr>
<tr>
<td>White Students</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

Similar correlations were found in regard to the item measuring cultural inclusion within the classroom. Students who reported that their faculty included aspects of their cultural heritage within their course curriculum were more likely to indicate a higher level of institutional commitment ($r = .360$, $p < .01$), which accounted for 13 percent of the variance in institutional commitment.
When controlling for ethnicity, it was found that the above correlation was skewed by white respondents, with no correlations found to exist among students of color. White students who reported that their culture was included in their course curriculum reported a high level of institutional commitment ($r = .648$, $p < .01$), which accounted for 42 percent of the variance in institutional commitment. Additionally, where no significant correlation had been found regarding the students’ intent to persist among all students, when controlling for ethnicity a significant correlation was found to exist among white students ($r = .475$, $p < .05$), which accounted for 23 percent of the variance in their intent to persist.

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>.360**</td>
<td>---</td>
</tr>
<tr>
<td>Students of Color</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>White Students</td>
<td>.648**</td>
<td>.475*</td>
</tr>
</tbody>
</table>

*Level of significance $< .05$, **level of significance $< .01$

Additional analysis was conducted to see whether the cultural affinity measures influenced the social and academic integration of students. Students who indicated that their culture was represented in university sponsored social activities were more likely to
score higher on both the social integration index ($r = .379$, $p < .01$), which accounted for 14 percent of the variance between the measures, and on the academic integration index ($r = .370$, $p < .01$), which also accounted for 14 percent of the variance between the measures.

When controlling for ethnicity, no significant correlations were found in regard to social integration among either students of color or white students. The correlation with academic integration index, however, was again found to be skewed by white respondents. White students who reported that university activities recognized their cultural heritage were more likely to score higher on the academic integration index ($r = .445$, $p < .05$), which accounted for 20 percent of the variance between the measures. No significant correlations were found among students of color.

| Table 23: Influence of Cultural Inclusion in Social Activities on Integration |
|-----------------|-----------------|-----------------|
|                  | Social          | Academic        |
|                  | Integration     | Integration     |
| All Students     | .379**          | .370**          |
| Students of Color| ---             | ---             |
| White Students   | ---             | .445*           |

*Level of significance < .05, **level of significance < .01
Students who indicated that their culture was included within their course curriculum were also more likely to score higher on both the social integration index ($r = .326, p < .01$), which accounted for 11 percent of the variance between the measures, and on the academic integration index ($r = .301, p < .01$), which accounted for 9 percent of the variance between the measures.

Again, when controlling for ethnicity, the above correlations were found to be skewed by white respondents. White students who reported that their Humboldt courses included aspects of their cultural heritage were also more likely to score higher on both the social integration index ($r = .504, p < .01$), which accounted for 25 percent of the variance between the measures, and on the academic integration index ($r = .564, p < .01$), which accounted for 30 percent of the variance between the measures. No significant correlations were found among students of color.

| Table 24: Influence of Cultural Inclusion in Academic Curriculum on Integration |
|-----------------------------------|-----------------|-----------------|
|                                   | Social Integration | Academic Integration |
| All Students                      | .326**           | .301**           |
| Students of Color                 | ---              | ---              |
| White Students                    | .504**           | .564**           |

*Level of significance < .05, **level of significance < .01, NS = No Significance
No significant correlations were found in regard to the item measuring the similarity of the racial composition between high school and Humboldt State University.

<table>
<thead>
<tr>
<th>Cultural Inclusion in:</th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
<th>Social Integration</th>
<th>Academic Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Students</td>
<td>.632**</td>
<td>.447*</td>
<td>---</td>
<td>.445*</td>
</tr>
<tr>
<td>Students of Color</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Academic Curriculum</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Students</td>
<td>.648**</td>
<td>.475*</td>
<td>.504**</td>
<td>.564**</td>
</tr>
<tr>
<td>Students of Color</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

**Significance of the Findings**

The findings partially support the hypothesis which posits that the inclusion of the students’ cultural heritage in the university’s social activities and in their academic curriculum have a positive correlation with the students’ social and academic integration,
and with their institutional commitment and their intent to persist. Unfortunately, the correlations found were exclusive to white students and are presumed to represent the cultural homogeneity of HSU as a predominantly white institution.

While all students reported that Humboldt has a racial composition that differs from the racial composition of their high school, this difference was significantly more profound among students of color, with 70 percent of students of color either disagreeing or strongly disagreeing with the measure, as opposed to 48 percent of white students who disagreed or strongly disagreed with the measure.

For those familiar with the cultural make-up of HSU, these findings should not be surprising. As a predominantly white institution, many of the social-cultural activities available to students at HSU reflect and favor those from the dominant culture. This is also true in regard to the academic setting. Critical theorists have long pointed out that the academic canons are inherently biased and privilege those from the dominant social class giving them preferential treatment through a process of cultural reproduction. Despite these long standing trends, it is still somewhat surprising that recent pedagogical efforts to mitigate these cultural biases have not resulted in any measurable differences among EOP students of color at Humboldt, especially given that 74 percent of Mexican American/Hispanic respondents agreed or strongly agreed that the social activities at Humboldt State University acknowledged their cultural heritage. Even with this strong
indication of social-cultural inclusion among Mexican American/Hispanic students, no significant correlations were found to exist with any of the measures regarding commitment, persistence, and integration when specifically controlling for Mexican American/Hispanic students.

These findings strongly suggest that students of color face greater challenges during their transition into HSU, especially within the formal social and academic settings of the university.

**Additional Findings**

Additional analysis was conducted, controlling for gender and first year of attendance. Because of the significance of ethnicity on these particular measures, the control for ethnicity was included in this additional analysis.

**Gender.** When controlling for gender, men who reported that the social activities at Humboldt State University acknowledged their cultural heritage were more likely to report a higher level of institutional commitment ($r = .593, p < .01$), which accounted for 35 percent of the variance, as opposed to the 15 percent of the variance found among students in general. No significant correlations were found among women in regard to institutional commitment.
When adding a control for ethnicity, the difference in the above correlation was found to occur exclusively among white respondents, with even a greater difference in correlation among gender. White males who reported that the university’s social activities acknowledged their cultural heritage were much more likely to report a higher level of institutional commitment ($r = .885, p < .01$), which accounted for 78 percent of the variance in institutional commitment, than were white females ($r = .444, p < .05$), which accounted for 20 percent of the variance in institutional commitment among women. No significant correlations were found among students of color, regardless of gender.

When analysis was conducted on the students’ intent to persist, a positive correlation was found between women who reported that university sponsored social activities acknowledged their cultural heritage and their intent to persist at HSU ($r = .340, p < .05$), which accounted for 11 percent of the variance between the measures. No significant correlations were found among men. When a control for ethnicity was added, no significant correlations were found, regardless of ethnicity and gender.
The measures regarding the students' social and academic integration were also re-examined, adding a control for gender. Men who reported that the social activities at Humboldt State University acknowledged their cultural heritage were also more likely to score higher on the social integration index ($r = .585$, $p < .01$), which accounted for 34 percent of the variance between the measures among men. The correlation found among women was considerably weaker ($r = .307$, $p < .05$), which accounted for only 9 percent of the variance among women. A similar trend was found in regard to the academic integration index, with men more likely to score higher on the index ($r = .498$, $p < .05$), which accounted for 25 percent of the variance between the measures among men, than

| Table 26: Influence of Gender on Social-Cultural Affinity and Student Commitment |
|---------------------------------|------------------|------------------|
|                                 | Institutional Commitment | Intent to Persist |
| All Students                    | .383**             | .333**           |
| Men                             | .593**             | ---              |
| Women                           | ---                | .340*            |
| White Students by Gender        |                   |                  |
| Men                             | .885**             | ---              |
| Women                           | .444*              | ---              |

*Level of significance < .05, **level of significance < .01
were women \( (r = .312, p < .05) \), which accounted for only 10 percent of the variance between the measures among women.

When adding a control for ethnicity to the above measures, no significant differences were found to exist among the different genders.

Men who reported that their course curriculum included aspects of their cultural heritage were also more likely to score higher on the social integration index \( (r = .574, p < .05) \), which accounted for 33 percent of the variance between the measure among men. No significant correlation was found to exist among men in regard to their academic integration, and no correlations were found with any of the measures among women.

When adding a control for ethnicity, the above correlation was found to occur exclusively among white respondents, with white men scoring significantly higher on the academic integration index \( (r = .856, p < .05) \), which accounted for 73 percent of the variance, as opposed to white females \( (r = .536, p < .05) \), which only accounted for 29 percent of the variance among women. White men were also more likely to score higher on the academic integration index \( (r = .519, p < .05) \), which accounted for 27 percent of the variance between the measures. No significant correlations were found among women, regardless of ethnicity.
These correlations further support the earlier findings regarding cultural reproduction, and further suggest that cultural reproduction differentially privileges white males above women and students from other ethnic groups. White males are twice as likely to benefit from the influences of cultural inclusion within the institution as a whole, and are about
one-third more likely to benefit from the influences of cultural inclusion within the classroom than are white females.

Year of Attendance. When adding a control for the year in which students first entered Humboldt State University, many of the above correlations were found to exist among students who were enrolled in their first year and in their fourth year. First year students who reported that their culture was acknowledged within the social activities sponsored by the university were more likely to report a higher level of institutional commitment ($r = .578$, $p < .01$), which accounted for 33 percent of the variance in institutional commitment. They were also more likely to report a higher level in their intent to persist at Humboldt ($r = .663$, $p < .01$), which accounted for 44 percent of the variance in their intent to persist. First year students were also more likely to score higher on both the social integration index ($r = .604$, $p < .01$), which accounted for 37 percent of the variance between the measures, and on the academic integration index ($r = .711$, $p < .01$), which accounted for 50 percent of the variance between the measures.

Similar correlations were found among students enrolled in their fourth year at Humboldt State University. Fourth year students who reported that their culture was acknowledged within the social activities sponsored by the university were more likely to report a higher level of institutional commitment ($r = .819$, $p < .01$), which accounted for 67 percent of the variance in institutional commitment. They were also more likely to score higher on
both the social integration index (r = .651, p < .05), which accounted for 42 percent of the variance between the measures, and on the academic integration index (r = .669, p < .05), which accounted for 45 percent of the variance between the measures.

The only other significant correlation found was among third year students. Third year students who reported that their culture was acknowledged within the social activities sponsored by the university were more likely to report a higher level of institutional commitment (r = .580, p < .05), which accounted for 34 percent of the variance in institutional commitment.

<table>
<thead>
<tr>
<th>Table 28: Influence of Year of Attendance on Social-Cultural Affinity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>All Students</td>
</tr>
<tr>
<td>First Year Students</td>
</tr>
<tr>
<td>Second Year Students</td>
</tr>
<tr>
<td>Third Year Students</td>
</tr>
<tr>
<td>Fourth Year Students</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01
The strength of the correlations among first year and fourth year students highlights the importance of the transitional periods when students are first entering college and when they are closest to completing their undergraduate degree. The importance of cultural inclusion during the students first year is clearly demonstrated by the strength and consistency of the correlations on their institutional commitment, their intent to persist, and their integration into the university.

The strong correlations found among fourth year students are also compelling. One possible explanation for the strength of these correlations may be that upper class students tend to have a greater influence on the type of social programming that occurs at Humboldt, especially through the assumption of leadership positions within student based clubs and organizations. The assumption of such leadership positions may be adding to the saliency of this measure.

When a control for the first year of attendance was added to the measures regarding the inclusion of the students’ culture in their academic curriculum, the only significant correlations found occurred with the students’ institutional commitment. First year students who reported that their course curriculum included aspects of their culture were more likely to report a higher level of institutional commitment ($r = .407, p < .05$), which accounted for 17 percent of the variance in their institutional commitment. Fourth year students were also more likely to report a higher level of institutional commitment ($r =$
.713, p < .05), which accounted for 51 percent of the variance in their institutional commitment. When adding a control for ethnicity, these correlations were found to be heavily skewed by white respondents with no significant correlations found among students of color.

<table>
<thead>
<tr>
<th>Table 29: Influence of Year of Attendance on Academic-Cultural Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>All First Year Students</td>
</tr>
<tr>
<td>White Students (First Year Students)</td>
</tr>
<tr>
<td>Students of Color (First Year Students)</td>
</tr>
<tr>
<td>All Fourth Year Students</td>
</tr>
<tr>
<td>White Students (Fourth Year Students)</td>
</tr>
<tr>
<td>Students of Color (Fourth Year Students)</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

These correlations suggest that white students are more likely to benefit from cultural inclusion within the classroom than are students of color, which is consistent with theories of cultural reproduction and critical theory.
The measures for the affinity of peer group attitudes towards their academics were constructed in order to determine the extent to which the respondents’ peer group was committed to their academic endeavors and the subsequent influence this peer group commitment had on the respondent. It was anticipated that peer group influences would have a more positive affect on the respondent when the respondents’ peers were strongly committed to their own academic goals.

Hypothesis 7

The level of continuity reported by students between their peers’ commitment to their academics goals and the academic goals of the institution will positively correlate with the students’ social and academic integration into the university, with their intent to persist and with their level of commitment to the institution.

Measures

Two items were included to measure the extent in which the respondents perceived that their immediate peers were committed to their educational goals. One item specifically measured the extent to which respondents believed that their friends were committed to
the academic goals of the institution (“I believe many of my HSU friends are serious about their academic work”), and the other item measured the extent to which respondents believed that their friends were committed to the institution (“I believe many of my HSU friends plan to continue at HSU {they do not intend to transfer to another campus}”).

Results

Over half of the respondents either agreed or strongly agreed that their HSU friends were serious about their academic work (57.2%) and that their friends planned to continue at HSU (53.6%). Students reporting that their friends were serious about their coursework were more likely to report a higher level of institutional commitment ($r = .440$, $p < .01$), which accounted for 19 percent of the variance between the measures. They were also more likely to report a higher degree in their intent to persist ($r = .388$, $p < .01$), which accounted for 15 percent of the variance between the measures.

Similar correlations were found to exist with the second item measuring peer group affinity. Students who reported that their friends were planning to continue at HSU were also more likely to report a higher level of institutional commitment ($r = .461$, $p < .01$), which accounted for 21 percent of the variance between the measures, and reported a
higher degree in their intent to persist at Humboldt ($r = .414, p < .01$), which accounted for 17 percent of the variance between the measures.

When these separate measures were combined into a single index, the correlations were found to improve. This combined index accounted for 25 percent of the variance in institutional commitment ($r = .500, p < .01$) and 20 percent of the variance in the students’ intent to persist ($r = .444, p < .01$).

| Table 30: Influence of Peer Group Goals on Commitment and Persistence. |
|-------------------------------------------------|----------------|----------------|
|                                                 | Institutional Commitment | Intent to Persist |
| Friends are Serious About Academic Work          | .440**              | .388**          |
| Friends Plan to Continue at HSU                 | .461**              | .414**          |
| Peer Group Goals Index                          | .500**              | .444**          |

*Level of significance < .05, **level of significance < .01

These findings support the hypothesis, showing that the academic goals of the respondents’ peer group have a positive influence on the respondents’ own academic goals regarding institutional commitment and persistence.
Additional analysis was conducted to examine whether or not the students’ peer group goals influenced the respondents’ social and academic integration. Students’ who reported that their peers were serious about their academic work were more likely to score higher on the social integration index ($r = .487$, $p < .01$), which accounted for 24 percent of the variance between the measures. They were also more likely to score higher on the academic integration index ($r = .384$, $p < .01$), which accounted for 15 percent of the variance between the measures.

Stronger correlations were found to exist among students who reported that their friends planned to graduate from Humboldt State University in regard to both their social integration ($r = .610$, $p < .01$), which accounted for 37 percent of the variance between the measures, and in regard to their academic integration ($r = .421$, $p < .01$), which accounted for 18 percent of the variance between the measures.

When these separate measures were combined into a single index, the correlations were found to slightly improve with both the social integration index ($r = .614$, $p < .01$) and the academic integration index ($r = .442$, $p < .01$).
Significance of the Findings

These findings support the hypothesis which predicted that the level of the respondents’ peer group commitment to the academic goals of the institution would positively influence the respondents’ own commitment to the institution, to their intent to persist at Humboldt, and to their subsequent academic and social integration into the university.

These findings suggest that indirect peer support, such as peer commitment to the academic goals of the institution, plays an equally significant role in influencing student persistence as do more direct forms of peer support, such as peer encouragement. When students are involved with peers who are serious about their academics and are

<table>
<thead>
<tr>
<th>Table 31: Influence of Peer Group Goals on Student Integration</th>
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<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Friends are Serious About Academic Work</td>
</tr>
<tr>
<td>Friends Plan to Continue at HSU</td>
</tr>
<tr>
<td>Peer Group Goals Index</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01
committed to staying at the institution, these relationships have a positive influence on the academic goals of the student, as well as on their academic and social integration into the institution.

Additional Findings

Additional analysis was conducted, adding controls for ethnicity, gender, and the year in which the student first entered the institution.

Ethnicity. When adding a control for ethnicity, it was found that the correlation of peer group goals with both institutional commitment and the students’ intent to persist was slightly stronger among white respondents, which accounted for 24 and 20 percent of the variance between the measures, than it was among students of color, which accounted for 19 and 13 percent of the variance between the measures (see table 32).
When adding the control for ethnicity to the measures regarding the students’ social and academic integration into the university, it was found that the correlations were stronger among white students for both measures, than it was among students of color. White respondents who scored higher on the peer group goal index were also more likely to score higher on the social integration index ($r = .636$, $p < .01$), which accounted for 40 percent of the variance in their social integration, than were students of color ($r = .485$, $p < .01$), which accounted for 23 percent of the variance in their social integration.

Similar trends were found in regard to the academic integration index. White respondents who scored higher on the peer group goals index were also more likely to score higher on the academic integration index ($r = .426$, $p < .01$), which accounted for 18 percent of the variance in their academic integration.

| Table 32: Influence of Ethnicity on Peer Group Goals, Commitment, and Persistence |
|---------------------------------|-------------------------------|-------------------------------|
| Peer Group Affinity Index       | Institutional Commitment     | Intent to Persist             |
| All Students                    | .500**                        | .444**                        |
| White Students                  | .494**                        | .441**                        |
| Students of Color               | .435**                        | .361*                         |

*Level of significance < .05, **level of significance < .01
variance in their academic integration, than were students of color (r = .355, p < .05),
which accounted for 13 percent of the variance in their academic integration.

| Table 33: Influence of Ethnicity on Peer Group Goals and Student Integration |
|------------------------|------------------------|------------------------|
|                        | Social Integration    | Academic Integration   |
| Peer Group Affinity Index | .614**                | .442**                |
| White Students          | .636**                | .426**                |
| Students of Color       | .485**                | .355*                 |

*Level of significance < .05, **level of significance < .01

Although differences are found between white EOP students and EOP students of color, it is clear that the nature of peer group relationships and their peers’ corresponding commitment to the goals of the institution have a powerful influence on institutional commitment, persistence, and academic/social integration among all students. It may be that the differences between cultural groups, especially in regard to academic and social integration, is more a reflection of the differing levels of ease in which white students and students of color become integrated into HSU, rather than as a reflection of differences in the importance of peer group influences. In this regard, peer group influences may be seen as a critically important vehicle for helping EOP students of color become better integrated within the institution by fostering stronger continuity between student peer
group goals and the academic goals of the institution. If a positive academic environment can be fostered within the students peer group, this will likely have a positive influence on the students’ commitment to the institution and on their intent to persist.

**Gender.** When controlling for gender, the correlation between the peer group goals index and institutional commitment was found to be stronger among men ($r = .578, p < .01$), which accounted for 33 percent of the variance in institutional commitment, than it was among women ($r = .458, p < .01$), which accounted for 21 percent of the variance in institutional commitment. A stronger correlation among men was also found in regard to their intent to persist. Men who scored high on the peer group goals index were much more likely to report a higher degree in their intent to persist ($r = .561, p < .05$), which accounted for 31 percent of the variance between the measures, than were women ($r = .385, p < .01$), which accounted for only 15 percent of the variance in their intent to persist.

The opposite trends were found in regard to the students’ social integration. When a control for gender was included in the analysis of the correlation between peer group goals and social integration, a much stronger correlation was found to exist among women ($r = .698, p < .01$), which accounted for 49 percent of the variance in their social integration. The correlation among men was much weaker ($r = .484, p < .05$), which accounted for only 23 percent of the variance between the measures.
Only a slight difference was found in the correlations among men and women in regard to academic integration. Women who scored high on the peer group goals index had a slightly stronger correlation \((r = .474, p < .01)\), which accounted for 22 percent of the variance in their intent to persist, than did men \((r = .420, p < .05)\), which accounted for 18 percent of the variance in the intent to persist among men.

<table>
<thead>
<tr>
<th>Table 34: Influence of Gender on Peer Group Goals, Commitment, and Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Commitment</strong></td>
</tr>
<tr>
<td>All Students</td>
</tr>
<tr>
<td>Men</td>
</tr>
<tr>
<td>Women</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

These findings suggest that men and women are influenced differently by their peers’ commitment towards the academic goals of the institution. Where men appear to benefit more directly in regard to their commitment to the institution and in regard to their intent to persist at the institution, women appear to benefit more indirectly through an increase in their social and academic integration within the institution.
Year of Attendance. When controlling for the year in which the respondent first entered the institution, it was found that the correlation between the academic goals of the respondents’ peer group and the respondents’ institutional commitment was strongest among third and fourth year students. When examining the correlation with the respondents’ intent to persist, however, the only significant correlation found was among first year students.

Table 35: Influence of Year Entered on Peer Group Goals, Commitment, and Persistence

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Group Affinity Index</td>
<td>.500**</td>
<td>.444**</td>
</tr>
<tr>
<td>First Year Students</td>
<td>.499**</td>
<td>.551**</td>
</tr>
<tr>
<td>Second Year Students</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Third Year Students</td>
<td>.703**</td>
<td>---</td>
</tr>
<tr>
<td>Fourth Year Students</td>
<td>.568*</td>
<td>---</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

When re-analysis was conducted on the correlation between peer group commitment and the social/academic integration of students, adding the control for first year of attendance,
the correlations were found to be strongest among first and second year students. No significant correlations were found among third and fourth year students in regard to their social or academic integration.

<table>
<thead>
<tr>
<th>Table 36: Influence of Year Entered on Peer Group Goals and Student Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Group Affinity Index</td>
</tr>
<tr>
<td>First Year Students</td>
</tr>
<tr>
<td>Second Year Students</td>
</tr>
<tr>
<td>Third Year Students</td>
</tr>
<tr>
<td>Fourth Year Students</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

These findings suggest that the academic commitment of the students’ peer group has the broadest influence on students’ during their first year at Humboldt State University. Not only do strong levels of peer group commitment towards the goals of the institution have a strong influence on the level of institutional commitment and persistence among first year students, it also has a strong influence on their academic and social integration into the university.
These findings also suggest that new students are most subject to peer group influences during their transition into the institution than in subsequent years. Once they become established, peer group influences become less critical in regard to the students’ intent to persist and in regard to their level of social and academic integration within the institution.

Among third and fourth year students, it is not surprising to find that the correlation between the respondents’ institutional commitment to Humboldt and their peer group’s commitment to Humboldt becomes stronger in subsequent years, presumably because of attrition. Students with lower levels of institutional commitment are likely to have already left the institution by the beginning of their third or fourth year of attendance.

Parental Affinity with University Life

The measures for parental affinity were constructed in order to determine the extent to which the respondents’ believed that their parents understood the demands and challenges of the university. It was anticipated that respondents’ who believed their parents understood the demands of university life would experience greater continuity between their home life and their life at the university. This would subsequently have a positive affect on the respondents’ own attitudes about the institution.
Hypothesis 8

The level of continuity reported by students regarding their parents’ familiarity with the university will positively correlate with the students’ social and academic integration into the university, with their intent to persist, and with their level of commitment to the institution.

Measures

Two items were used to measure the continuity between the respondents’ parents and the expectations of the university. One measure was specific to the academic demands of college (“My parents {or guardians} understand the academic challenges I face at HSU”) and the second measure was more generalized (“My parents {or guardians} offer me meaningful advice about how to be successful at HSU”).

Results

Students who reported that their parents understood the academic challenge they faced at Humboldt State University were more likely to also report a higher level of institutional commitment ($r = .307$, $p < .01$), which accounted for 9 percent of the variance between the measures. They were also more likely to report a higher level of academic integration ($r = .303$, $p < .01$), which accounted for 9 percent of the variance in academic integration.
Only a slight correlation was found in regard to the students’ intent to persist (r = .230, p < .05), which accounted for only 5 percent of the variance between the measures. No significant correlations were found in regard to the students’ social integration, or with the item measuring whether or not the students’ parents offered them meaningful advice about how to be successful at HSU.

Table 37: Influence of Parental Continuity with College Environment

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
<th>Academic Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents Understand the Academic Challenges of HSU</td>
<td>.307**</td>
<td>.230*</td>
<td>.303**</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01

Significance of the Findings

These findings only partially support the hypothesis, showing only slight correlations in regard to the respondents’ institutional commitment and persistence at Humboldt State University. These findings are consistent with Tinto’s model of attrition (1993), which posits that external influences typically have less of an influence on the students’
academic and social integration into the university than do their actual experiences at the institution.

Additional Findings

Additional analysis was conducted in regard to the influence of continuity between the respondents’ parents and the expectations of the university, adding controls for ethnicity, gender, and the year in which the student first entered the institution.

Ethnicity. When controlling for ethnicity, the results indicate that the correlations are skewed by the responses of white students, with each correlation strengthening among white respondents and no significant correlation having been found among students of color. (see table 38)

It is difficult to determine from these findings whether white students benefit more from the type of parental support they receive than do students of color. It may be that among students of color, parental support is insufficient for overcoming the social/cultural barriers that they encounter during their transition to HSU. It may also be that the parents of students of color experience similar marginalization in predominantly white institutions, and therefore, do not have equal access to the teachers, staff, and
administrators within the institution as do parents of white students. Presumably, this more limited access would also limit the sphere of influence that parents of students of color might have in regard to their children's experiences within these institutions. These suppositions are speculative, however, and are beyond the scope of this study.

**Gender.** When controlling for gender, the correlations were found to be skewed by the responses of women, with each of the correlations strengthening among women, and no significant correlations being found among men. Additionally, the second item measuring whether or not the students' parent offered meaningful advice about how to be successful at HSU were also found to have a small, but positive influence among women in regard to their institutional commitment ($r = .310, p < .01$), their intent to persist ($r = .261, p < .05$), and their academic integration ($r = .378**, p < .01$).

| Table 38: Influence of Ethnicity on Parental/College Continuity and Persistence |
|-----------------------------|-----------------------------|-----------------------------|
|                             | Institutional Commitment    | Intent to Persist           | Academic Integration       |
| Parents Understand Academic Challenge, HSU |                      |                             |                             |
| All Students                | .307**                     | .230*                      | .303**                     |
| White Students              | .543**                     | .397*                      | .477**                     |
| Students of Color           | ---                        | ---                        | ---                        |

*Level of significance < .05, **level of significance < .01
While this variation among gender is interesting, the overall strength of the correlations are relatively weak. It is speculated that these differences in the correlations among gender may be attributed to differences in communication patterns typical among men and women in the larger society, however, this speculation is beyond the scope of this study.

**Year of Attendance.** When adding the control for the year in which the student first entered Humboldt State University, no significant patterns were found.
Summary Discussion: Part Two of the Study

Social Integration

In part one of this study, it was found that social integration within the university had a positive influence on the students’ institutional commitment, accounting for 30 percent of the variance between the measures. It was also found that social integration had a positive influence on the students’ intent to persist, which accounted for 14 percent of the variance between the measures. When a control for ethnicity was added, the correlations between social integration and institutional commitment and persistence were found to exist primarily among white students.

In part two of this study, the social/cultural continuity between the student and the institution was analyzed to see how the students’ experiences differed when there existed a continuity between the cultural activities formally sponsored by the institution and the cultural heritage of the student (“At HSU, university sponsored social activities include events that recognize my cultural heritage”).

Proportionately, a higher percentage of students of color reported that their cultural heritage was represented in the university sponsored social activities (60 %) than what was reported by white students (43%), yet had no measurably significant influence on the
institutional commitment, persistence, or social/academic integration among EOP students of color. This is particularly surprising given the high rate in which Mexican American/Hispanic students had specifically agreed or strongly agreed that their culture was included in the social activities sponsored by the university (74%). Even though this strong acknowledgement of cultural inclusion existed among Mexican American/Hispanic respondents, no correlations were found with any of the measures regarding institutional commitment, persistence, and social or academic integration.

Among white respondents, the social/cultural affinity measure was found to have a positive correlation with the students institutional commitment (accounting for 40 percent of the variance between the measures), with their intent to persist (accounting for 20 percent of the variance between the measures), and with their academic integration into the institution (accounting for 20 percent of the variance between the measures).

The differences in correlation found between white EOP students and EOP students of color strongly suggest that the social/cultural environment of HSU greatly benefits majority students, despite the low rate in which white students acknowledge how these activities at the university include their cultural heritage. This finding is consistent with what has been reported as “white privilege” (McIntosh 1988). In essence, the privileges afforded to those of the dominant culture are not as visibly apparent as they are to those who are not being afforded the same privileges.
Along with the findings in regard to academic/cultural affinity, which were reported in the previous section of this study, it is evident that processes of cultural reproduction are having a powerful affect, which is predominantly positive for white EOP students and predominantly negative for EOP students of color in regard to their persistence, institutional commitment, and social/academic integration at HSU.

**Academic Integration**

In part one of this study, it was found that academic integration had a positive influence on the students' institutional commitment, which accounted for 32 percent of the variance between the measures, and on their intent to persist at Humboldt State University, which accounted for 38 percent of the variance between the measures.

In part two of this study, the academic/cultural continuity between the student and the institution was analyzed to see how the students' experiences differed when there existed a cultural continuity between the academic curriculum and the cultural heritage of the student (“At HSU, my professors have included aspects of my cultural heritage as part of their course content”).

Proportionately, a higher percentage of white students reported that their culture was included in the academic curriculum at HSU (38%) than what was reported by students of
color (22%). Consequently, the correlations found between the academic/cultural affinity measure and the measures regarding institutional commitment, persistence, and academic/social integration were skewed by white respondents.

Among white EOP students, the academic/cultural affinity measure was found to have a strong correlation with the students’ institutional commitment (which accounted for 42 percent of the variance between the measures), with their intent to persist (which accounted for 23 percent of the variance between the measures), with their social integration into the university (which accounted for 25 percent of the variance between the measures), and with their academic integration into the university (which accounted for 32 percent of the variance between the measures). No measurably significant correlations were found among EOP student of color.

When a control for gender was added, it was found that the correlations were strongest among white males in regard to the influence on their institutional commitment, persistence, social, and academic integration into the university. These findings further suggest that the process of cultural reproduction has an equally powerful influence in regard to gender, as it does in regard to ethnicity among EOP students at Humboldt State University.
Peer Group Influences

In part one of this study, it was found that peer encouragement for attending college in general had a small but positive influence on the students’ institutional commitment (which accounted for 8 percent of the variance between the measures). When peer encouragement was directed specifically at the students’ choice to attend HSU, however, this encouragement had a much stronger influence on the students’ institutional commitment (which accounted for 32 percent of the variance between the measures) and a strong influence on their intent to persist (which accounted for 16 percent of the variance between the measures).

In part two of this study, the continuity between the academic goals of the students’ peer group and the goals of the institution was analyzed to see how the students’ experiences differed when there existed a continuity in the academic goals of the students’ peer group (“I believe many of my HSU friends are serious about their academic work”, “I believe many of my HSU friends plan to continue at HSU…”).

Strong correlations were found between both measures, which improved when the measures were combined into a single index. The peer/academic continuity index produced strong correlations in the students’ institutional commitment (which accounted for 25 percent of the variance between the measures), in their intent to persist (which
accounted for 20 percent of the variance between the measures), with their social integration (which accounted for 38 percent of the variance between the measures), and with their academic integration (which accounted for 19 percent of the variance between the measures).

These findings suggest that indirect peer support, such as peer commitment to the academic goals of the institution, plays an equally significant role in influencing student persistence as do more direct forms of peer support, such as peer encouragement. When students are involved with peers who are serious about their academics and are committed to staying at the institution, these relationships have a positive influence on the academic goals of the student, as well as on their academic and social integration into the institution.

It was further found that when a high level of peer and academic continuity exists, it has an equally powerful influence among EOP students of color, and may provide the type of supportive environment that can help EOP students of color overcome the negative impact of cultural bias within the institution which has been reported earlier in this study.

It is interesting to note that when controlling for gender, it was found that men who scored higher on the peer/academic continuity index were more likely to benefit in regard to their institutional commitment and their intent to persist, than were women. Women,
on the other hand, were found to benefit more in regard to their social and academic integration within the institution. The fact that women who are experiencing higher levels of social and academic integration, but are not subsequently experiencing higher levels of institutional commitment and persistence may suggest that other factors have a greater influence in regard to institutional commitment and persistence among women at HSU.

It is also interesting to note that when controls were added for the year in which the student first entered the institution, it was found that peer/academic continuity had a more powerful influence among first and second year students. Once students became established at the institution (third and fourth year students), peer group influences were found to become less critical in regard to the students’ personal intent to persist at HSU and in regard to their academic and social integration at the institution.

**Parental Influences**

In part one of this study, it was found that parental encouragement had only a small influence on the students’ institutional commitment (which accounted for 5 percent of the variance between the measures), and on their intent to persist at Humboldt State University (which accounted for 6 percent of the variance between the measures), and only when that encouragement was specific to the students’ decision to attend Humboldt.
Parental encouragement for attending college in general had no influence on the students’ institutional commitment or persistence at Humboldt.

In part two of this study, analysis was conducted to see how the students’ experiences differed when there existed a continuity between their parents’ familiarity with the challenges of the university and the actual challenges students encountered while at HSU (“My parents…understand the academic challenges I face at HSU”, “My parents offer me meaningful advice about how to be successful at HSU”).

In regard to parental understanding of the academic challenges faced at HSU, the findings showed only a slight correlation with the students’ intent to persist at HSU, which accounted for 5 percent of the variance between the measures. The correlations were slightly stronger in regard to the students’ institutional commitment, accounting for 9 percent of the variance between the measures. Parental familiarity with the academic demands was also found to have a modest correlation with the students’ academic integration into the university, which also accounted for 9 percent of the variance between the measures.

These findings suggest that continuity between parental understanding of the academic demands of the university and the students’ actual experiences with those demands have a slightly greater influence on institutional commitment than does parental
encouragement for the students’ choice in attending HSU. Parental familiarity with the institution also had a positive influence on the students’ academic integration, which suggest that efforts to familiarize parents with the academic demands of the institution may help to improve student integration, institutional commitment, and subsequently, persistence among EOP students at HSU.

Table 40: Summary Table: Correlations Found in Part Two of the Study

<table>
<thead>
<tr>
<th></th>
<th>Institutional Commitment</th>
<th>Intent to Persist</th>
<th>Social Integration</th>
<th>Academic Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social/Cultural Continuity</strong></td>
<td>.383**</td>
<td>.333**</td>
<td>.379**</td>
<td>.370**</td>
</tr>
<tr>
<td>Students of Color</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>White Students</td>
<td>.632**</td>
<td>.447*</td>
<td>---</td>
<td>.445*</td>
</tr>
<tr>
<td><strong>Acad/Cultural Continuity</strong></td>
<td>.360**</td>
<td>---</td>
<td>.326**</td>
<td>.301**</td>
</tr>
<tr>
<td>Students of Color</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>White Students</td>
<td>.648**</td>
<td>.475*</td>
<td>.504**</td>
<td>.564**</td>
</tr>
<tr>
<td><strong>Parental Continuity</strong></td>
<td>.307**</td>
<td>.230*</td>
<td>---</td>
<td>.303**</td>
</tr>
<tr>
<td><strong>Peer/Academic Continuity</strong></td>
<td>.500**</td>
<td>.444**</td>
<td>.614**</td>
<td>.442**</td>
</tr>
<tr>
<td>Students of Color</td>
<td>.435**</td>
<td>.361*</td>
<td>.485**</td>
<td>.355*</td>
</tr>
<tr>
<td>White Students</td>
<td>.494**</td>
<td>.441**</td>
<td>.636**</td>
<td>.426**</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **Level of significance < .01
RESULTS OF PART THREE OF THE STUDY

Historical Continuity of Culture and Values

Upon entering the university, every student brings his or her own personal experiences and abilities, which is likely to influence their transition into the institution (Bean, 1990; Tinto 1993). Students will also bring a set of pre-developed social skills, which have either helped or hindered their academic and social integration during their high school years. Presumably, these social skills are available for use by the student as they attempt to become integrated into their new college environment. In order to measure whether or not these skills were transferable from high school to college, several questions were included in this study to measure whether or not the student’s level of social, academic, cultural, and parental integration during their high school years influenced the student’s subsequent integration into Humboldt State University.

Because the continuity between a students’ high school years and their college years is likely to have a stronger significance during the students’ first year in college, a control was added for the year in which the student first enrolled at Humboldt State University. As students continue beyond their first year at Humboldt State University, and as they accumulate greater college experience, it is anticipated that their high school experiences
Continuity of Personal Values between High School and in College

Overview

In part two of this study, it was established that students’ who reported that they shared values with their college faculty and that their classes were meaningful to their life were 26 percent more likely to have a stronger level of institutional commitment, were 22 percent more likely to have a stronger intent to persist at Humboldt State University, and were between 30 and 34 percent more likely to become academically and socially integrated into the institution. In this next part of the study, analysis will be conducted to determine whether or not these trends correlate with the students’ high school experiences and whether their high school experiences might serve as an adequate predictor for their subsequent college experiences.
Hypothesis 9

The level of continuity reported by students between their personal values and the values expressed within their high school classroom will be found to positively correlate with the level of continuity reported by students between their personal values and the values expressed within their courses at Humboldt State University. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 5).

Measures

For comparative purposes, the questions used to measure the continuity of values during high school were designed to parallel those used for measuring continuity at Humboldt State University. One item measured the similarity of values they shared with their high school teachers (“During my high school years, I believe my values were similar in general to those of my high school teachers”), and one item measured the meaningfulness of their high school classes to their life (“During my high school years, the things I learned in class were meaningful to my life”).
Results

The proportion of students who agreed or strongly agreed (34.1%) that their high school teachers had values similar to their own was nearly the same as the proportion of students who agreed or strongly agreed (32.6%) that their college professors had values similar to their own. The proportion of students who agreed or strongly agreed (36.5%) that their high school classes had been meaningful in their life, however, was much lower than the proportion of students who agreed or strongly agreed (61.2%) that their college classes were meaningful to their life.

| Table 41: Similarity in Values: Proportion of Students who Agree/Strongly Agree |
|-----------------------------------|--------|--------|--------|
| Teachers have Similar Values to My Own | High School | College | Difference |
| Classes were Meaningful to My Life     | 34.1    | 32.6    | -1.5    |
|                                      | 36.5    | 61.2    | 24.7    |

Students who reported that their high school classes were meaningful to their life were slightly more likely to also report that their college classes were meaningful to their life \( (r = .348, p < .01) \), which accounted for 12 percent of the variance between the measures. No significant correlation was found in regard to the items measuring the similarity of values with their high school teachers and college professors.
When a control was added for the year in which the student first enrolled at Humboldt State University, the above correlation was found to improve among first year students \((r = .529, p < .01)\), and accounted for 28 percent of the variance between the measures. No significant correlations were found amongst second, third, or fourth year students, nor was a significant correlation found in regard to the similarity of values with high school teachers and college faculty.

**Table 42: Continuity of Personal Values, High School to College**

<table>
<thead>
<tr>
<th>High School Classes were Meaningful</th>
<th>College Classes are Meaningful</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>( .348** )</td>
</tr>
<tr>
<td>First Year Students</td>
<td>( .529** )</td>
</tr>
</tbody>
</table>

**Level of significance < .01**

**Significance of the Findings**

These findings support the hypothesis, showing that EOP students who find value and meaning in their classes during high school is a strong predictor for their subsequent experiences in college, at least during their first year at Humboldt State University. This suggests that EOP students have a certain level of personal agency in regard to their
ability to derive meaning from their classroom instruction, and that they can bring this ability with them during their transition from high school to college. Subsequently, these findings also suggest that first year students’ who report that their high school courses were meaningful to their life are also more likely to experience higher levels of institutional commitment and persistence as reported in part two of this study. Consequently, students who do not report that their high school classes were meaningful to their life are likely to be at greater risk during their transition into Humboldt State University.

Additional Findings

Additional analysis was conducted in order to determine the influence of ethnicity and gender on the predictive value of the measure.

Ethnicity. When a control was added for ethnicity, it was found that a higher proportion of students of color (40.9%) agreed or strongly agreed that their high school classes were meaningful to their life, than did white respondents (31.8%). A similar trend was found in regard to their college classes, with a larger proportion of students of color (69.8%) having agreed or strongly agreed that their college classes were meaningful to their life, than did white respondents (52.4%).
When allowing for a moderate level of error (p < .10), the correlations among white students and students of color were found to be the same. First year white students’ who reported that their high school classes were meaningful to their life were more likely to report that their college courses were also meaningful (r = .532, p < .01), which parallels the correlation found among all students. This correlation accounted for 28 percent of the variance between the measures. A similar, although less reliable correlation was also found among first year students of color (r = .523, p = .081), which accounted for 27 percent of the variance between the measures.

| Table 43: Ethnicity and Continuity of Personal Values, High School to College |
|---------------------------------------------|---------------------------------|
| College Classes are Meaningful              |                                 |
| High School Classes were Meaningful         |                                 |
| All First Year Students                     | .529**                          |
| First Year White Students                   | .532**                          |
| First Year Students of Color                | .523                            |

** Level of significance < .01

Despite the lower level of reliability in the correlation found among students of color, this measure provides a strong enough correlation between the high school and college classroom experiences among all EOP students to be considered a valuable indicator of risk for students as they enter Humboldt.
Gender. When adding a control for gender, it was found that the correlation between first year students who reported that their high school classes were meaningful to their life and first year students who reported that their college classes were meaningful to their life was heavily skewed by the responses of male students. First year male respondents were found to have a very strong correlation between their high school and college experiences ($r = .827$, $p < .05$), accounting for 68 percent of the variance between the measures. No significant correlation was found among first year female respondents.

First year male students who reported that their high school teachers had similar values to their own were also considerably more likely to report that their college professors had similar values to their own ($r = .808$, $p < .05$), which accounted for 65 percent of the variance between the measures.

These findings suggest that the predictive value of the measure for the students’ subsequent college experiences may be limited to male students. These strong correlations found among male students may also reflect the underlying structural biases inherent in both high school and college classrooms, which in this case, favors men.
Table 44: Gender and Continuity of Personal Values, High School to College

<table>
<thead>
<tr>
<th></th>
<th>College Courses are Meaningful</th>
<th>College Faculty have Similar Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Classes were Meaningful</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>.827*</td>
<td>.775*</td>
</tr>
<tr>
<td>Women</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>High School Teachers had Similar Values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>.863*</td>
<td>.808*</td>
</tr>
<tr>
<td>Women</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

* Level of significance < .05

Continuity of Culture Between High School and College

Overview

In this study, the continuity of culture is conceptualized as a measure of student perception, rather than as an objective measure of actual cultural and demographic characteristics. While Humboldt State University is recognized as being a predominantly
white institution, this study is interested in the students’ perception about the availability of their culture within the institution.

In part two of this study, it was established that students’ who reported that their culture was included in the social activities at Humboldt State University were more likely to become socially and academically integrated into the institution, and were more likely to have stronger levels of institutional commitment and intent to persist at Humboldt. These correlations, however, were found to be exclusive to white respondents and are believed to reflect the social-cultural bias inherent in the institution of American education.

In part three of this study, analysis will be conducted to determine whether or not these same trends were found among students’ during their high school years and whether their high school experiences might serve as an adequate predictor of their subsequent college experiences.

**Hypothesis 10**

The level of continuity reported by students between their cultural heritage and the culture of their high school will positively correlate with the level of continuity reported by students between their cultural heritage and the culture of Humboldt State University.
This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 6).

Measures

For comparative purposes, the questions used to measure the continuity of the students’ culture within their high school were designed to parallel those used for measuring the continuity of the students’ culture within Humboldt State University. One item measured the extent to which the respondents’ culture was included in the social activities of their high school (“During my high school years, school sponsored social activities included events that recognized my cultural heritage”) and one item measured the extent to which the respondents’ culture was included in their class curriculum (“During my high school years, my teachers included aspects of my cultural heritage as part of their classroom teaching). One additional item was included to measure the level of demographic continuity the respondents’ experienced when transitioning into high school (“During my high school years, the racial composition of my neighborhood was similar to the racial composition of the high school I attended”).
Results

The proportion of students who agreed or strongly agreed that their high school sponsored social activities acknowledged their culture (38.4%) was somewhat lower than the proportion of students who agreed or strongly agreed that Humboldt State University sponsored activities acknowledged their culture (52.9%). When controlling for ethnicity, a much higher proportion of students of color agreed or strongly agreed that their high school sponsored social activities acknowledged their culture (50.0%) as compared with the proportion of white students who agreed or strongly agreed with the measure (23.5%). Similar, but less drastic differences were found among students of color and white students in regard to the social activities at Humboldt State University, as reported in part two of this study. A higher proportion of students of color agreed or strongly agreed that the university’s sponsored social activities acknowledged their culture (60%) and a lower proportion of white students agreed or strongly agreed with the measure (42.8%).

When examining the continuity between the students’ academic experiences during their high school years and their subsequent academic experiences at Humboldt State University, an interesting variation emerged. The proportion of students who agreed or strongly agreed that their high school curriculum included aspects of their culture (23.1%) was only slightly lower than the proportion of students who agreed or strongly
agreed that their college curriculum at Humboldt State University included aspects of their culture (29.0%). When controlling for ethnicity, a slightly higher proportion of students of color agreed or strongly agreed that their high school curriculum included aspects of their culture (25.0%), as opposed to the proportion of white students who agreed or strongly agreed with the measure (20.6%). The opposite trend was found, however, in regard to the college curriculum at Humboldt State University, with a much higher proportion of white students having agreed or strongly agreed that their college classes included aspects of their culture (37.9%) as compared with the proportion of students of color who agreed or strongly agreed with the measure (22.5%). This proportion is actually lower than the proportion of students of color who had agreed or strongly agreed that their cultural heritage was included in their high school curriculum (25.0%) (See Table 45).

Students who reported that their high school social activities acknowledged their cultural heritage were slightly more likely to also report that the social activities at Humboldt State University also acknowledged their cultural heritage (r = .283, p < .05), which accounted for 8 percent of the variance between the measures (see table 45).

Students who reported that their high school teachers included aspects of their cultural heritage in their curriculum were also slightly more likely to report that their college
faculty included aspects of their culture within their curriculum ($r = .264, p < .05$), which accounted for 7 percent of the variance between the measures.

| Table 45: Cultural Inclusion: Proportion of Students who Agree/Strongly Agree |
|-----------------------------------------------|-----------------|----------------|-----------------|
| Social Activities Acknowledge Culture         | High School     | College        | Difference      |
| (All)                                         | 38.4            | 52.9           | 14.5            |
| White Respondents                             | 23.5            | 42.8           | 19.3            |
| Students of Color                             | 50.0            | 60.0           | 10.0            |
| Curriculum Includes Aspects of Culture        |                 |                |                 |
| (All)                                         | 23.1            | 29.0           | 5.9             |
| White Respondents                             | 20.6            | 37.9           | 17.3            |
| Students of Color                             | 25.0            | 22.5           | -2.5            |

When adding a control for ethnicity, the above correlations were found to be heavily skewed by white respondents, with strong correlations found among white students across all of the measures. White students who reported that their high school social activities acknowledged their cultural heritage were more likely to report that the social activities at Humboldt State University also acknowledged their cultural heritage ($r = .432, p < .05$), which accounted for 19 percent of the variance between the measures.
White students who reported that their high school curriculum included aspects of their cultural heritage were also more likely to report that their college course curriculum included aspects of their cultural heritage ($r = .582, p < .05$), which accounted for 34 percent of the variance between the measures.

No significant correlations were found among students of color between their social and academic experiences during high school and their subsequent social and academic experiences at Humboldt State University (See Table 46).

When a control was added for the year in which the student first entered Humboldt State University, no significant correlations were found.

The fact that these findings are exclusive to white respondents suggest that the cultural continuity reported by students between their high school experiences and their experiences at Humboldt State University do not reflect individual variation but rather, is a reflection of the process of cultural reproduction, which favors members of the dominant culture and tends to marginalize members of other cultural heritages and histories (see table 46).
Significance of the Findings

These findings partially support the hypothesis in that the level of cultural inclusion experienced by students during their high school years positively correlate with their experiences at Humboldt State University. The fact that these findings were limited to white students, however, suggest that they are a reflection of institutional biases which...
preference members of the dominant culture, rather than being a reflection of individual adaptation or differentiation.

Although no significant correlations were found among students of color, it is important to note that the proportion of students of color who reported that the social activities at Humboldt State University acknowledged their cultural heritage was higher than the proportion of students of color who reported that their high school social activities acknowledged their cultural heritage. This would suggest that students of color entering Humboldt State University have an increased exposure to social programming at HSU, which specifically acknowledges their cultural heritage, than they experienced during high school.

The reverse was true in regard to the academic environment. A lower proportion of students of color reported that their cultural heritage was acknowledged within their curriculum at Humboldt State University than what had been reported about their high school curriculum.

Additional Findings

As with previous measures, further analysis was conducted by adding controls for both gender and the year in which the student first enrolled at the institution. Because of the
strong significance of ethnicity to this measure, the control for ethnicity was also included in this additional analysis.

**Gender.** When adding a control for gender, the above correlations were found to occur almost exclusively among white female students, with no significant correlation found among female students of color or among men.

| Table 47: Influence of Gender on Continuity of Culture, High School to College |
|-----------------------------|-----------------------------|-----------------------------|
|                             | Culture included in HSU Social Activities | Culture included in HSU Curriculum |
| Culture was included within: |                             |                             |
| High School Social Activities |                             |                             |
| All White Students           | .432*                        | .462*                       |
| White Female Students        | .767**                       | .667**                      |
| High School Curriculum       |                             |                             |
| All White Students           | .511**                       | .582**                      |
| White Female Students        | .536*                        | .579**                      |

* Level of significance < .05, ** Level of significance < .01
The strong positive correlations found among white female students, and the absence of correlations found among white males, suggest that the continuity between high school and college may not be exclusively based on processes of cultural reproduction. Cultural reproduction would suggest that white males, rather than white females, would have the greatest continuity between high school and college because of the inherent bias that favors white males within these institutions and within American society overall. The strong correlations found among white female students, however, may reflect changing trends within the socio-cultural environment of educational institutions and within pedagogical practices, although this is only speculation as these issues fall outside of the scope of the current study.

Continuity of Peer Group Goals Between High School and College

Overview

In part two of this study, it was established that students’ who reported that their peers were committed to the academic goals of the institution were 25 percent more likely to have a stronger level of institutional commitment, were 20 percent more likely to have a stronger intent to persist at Humboldt State University, were 38 percent more likely to
become socially integrated into the institution, and were 20 percent more likely to become academically integrated into the institution.

In part three of this study, analysis was conducted to determine whether or not these same trends were found among students’ during their high school years and whether their high school experiences might serve as an adequate predictor of their subsequent college experiences.

**Hypothesis 11**

The level of continuity reported by students between their own commitment to their academic goals and their peers’ commitment to the academics goals of the institution during their high school years will be found to positively correlate with the students’ commitment to their academic goals and their peers’ commitment to the academics goals of Humboldt State University. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 7).

**Measures**

For comparative purposes, the questions used to measure the continuity of the respondents’ peer group commitment towards the academic goals of the institution during
high school were designed to parallel those used for measuring continuity at Humboldt State University. One item measured how serious the respondents’ peers were towards their academic tasks (“During my high school years, many of my friends were serious about their academic work”), and one item measured how committed the respondents’ peers were towards their educational advancement (“During my high school years, many of my friends planned to go to college”).

Results

Approximately one third of respondents (30.8%) either agreed or strongly agreed that their high school peers were serious about their academic work during high school. A higher proportion (45.1%) either agreed or strongly agreed that their peers had planned to attend college. These proportions were considerably higher when respondents were asked the same questions regarding their college peers, as reported in part two of this study. Over half (57.2%) of the respondents either agreed or strongly agreed that their college peers were serious about their academic work and over half (54.6%) agreed or strongly agreed that their college peers planned to continue at Humboldt State University.

When comparing the correlation of these measures between high school and college, no significant correlations were found. When adding a control for the year in which the student first enrolled at Humboldt State University, however, a moderate correlation was
found among first year students. First year students who reported that their high school peers were committed to their academic study during high school were also more likely to report that their college peers were committed to their academic study at Humboldt State University \((r = .364, p < .05)\), which accounted for 13 percent of the variance between the measures. No other significant correlations were found among the different cohorts, or in regard to the respondents peer group commitment to their educational advancement (see table 48).

**Significance of the Findings**

These findings partially support the hypothesis, which anticipated that the students’ peer group and their commitment to their academics during high school would correlate with their subsequent peer group’s commitment to their academics at Humboldt State University. Although this correlation was limited to first year students, it is consistent with Tinto’s (1993) model of student attrition, which posits that pre-collegiate influences eventually give way to the students’ accumulated experiences within the institution. Given the significance of peer group influences on student integration, institutional commitment, and persistence (as reported in part two of this study), the correlation found among first year students suggest that this measure may be an important indicator for identifying students who may encounter greater difficulty establishing positive peer relationships during their first year at Humboldt State University.
Table 48: Continuity among Peers and their Academic Goals, High School to College

<table>
<thead>
<tr>
<th>Respondents’ Peers are:</th>
<th>Agree or Strongly Agree, High School</th>
<th>Agree or Strongly Agree, College</th>
<th>Correlation, High School to College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious about Academics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Students</td>
<td>30.8%</td>
<td>57.2%</td>
<td>---</td>
</tr>
<tr>
<td>First Year Students</td>
<td>37.6%</td>
<td>46.9%</td>
<td>.364*</td>
</tr>
<tr>
<td>Committed to Educational Advancement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Students</td>
<td>45.1%</td>
<td>54.6%</td>
<td>---</td>
</tr>
<tr>
<td>First Year Students</td>
<td>48.4%</td>
<td>42.0%</td>
<td>---</td>
</tr>
</tbody>
</table>

* Level of significance < .05

Additional Findings

As with previous measures, further analysis was conducted, adding controls for both ethnicity and gender. Because the relevance of the measure was limited to students
enrolled in their first year at Humboldt State University, the control for the students’ year of attendance was also included in this additional analysis.

**Ethnicity.** When a control for ethnicity was added, no significant correlations were found. This suggests that the correlation between high school peers who were serious about their academic work and college peers who were serious about their academic work is a product of all students, regardless of their ethnic background.

**Gender.** When a control for gender was added, the above correlation was found to be skewed by male respondents. First year male students who reported that their high school peers were serious about their academic work were much more likely to also report that their college peers were serious about their academic work ($r = .873, p < .01$), which accounted for 76 percent of the variance between the measures. No significant correlation was found among first year women. This finding might suggest that males are more likely to carry their high school socialization patterns with them into college than are female students, however, because of the limited number of first year male students within this study’s sample, some caution is warranted against generalizing about gender differences among EOP students based upon these results.
Overview

In part two of this study, it was established that students’ who reported that their parents understood the academic challenges they faced in college were 9 percent more likely to have a stronger level of institutional commitment, were between 5 and 6 percent more likely to have a stronger intent to persist at Humboldt State University, and were 9 percent more likely to become academically integrated into the institution. In part three of this study, analysis was conducted to determine whether or not these same trends were found among students’ during their high school years and whether their high school experiences might serve as an adequate predictor for their subsequent college experiences.

Hypothesis 12

The level of continuity reported by students regarding their parents’ understanding of the high school challenges they face and the level of encouragement they receive for completing academic tasks will be found to positively correlate with the level of continuity reported by students regarding their parents’ understanding of the academic challenges at Humboldt State University and the extent to which their parents’ are able to
offer meaningful advice and encouragement. This will subsequently have a positive influence on their integration and persistence at the institution (see hypothesis 8).

Measures

For comparative purposes, the questions used to measure the continuity of parental encouragement and understanding during the students’ high school years were designed to parallel those used for measuring the level of parental encouragement and understanding about Humboldt State University. One item measured the extent to which respondents believed that their parents understood the academic challenges they faced in high school (“During my high school years, my parents (or guardians) understood the academic challenges I faced in high school”) and the other item measured the level of the encouragement the respondent received for completing academic tasks (“During my high school years, my parents (or guardians) encouraged me to spend time at home doing my homework”).

Results

Students who reported that their parents understood the academic challenges they faced during high school were significantly more likely to also report that their parents understood the academic challenges they faced at Humboldt State University (r = .539, p
<.01), which accounted for 29 percent of the variance between the measures. Students who reported that their parents encouraged them to do homework during high school were also more likely to report that their parents offered them meaningful advice about how to be successful at Humboldt State University (r = .450, p < .01), which accounted for 20 percent of the variance between the measures.

Two additional, and unanticipated correlations were also found regarding the continuity of parental encouragement and understanding between high school and college. Respondents who reported that their parents understood the challenges they faced in high school were also more likely to report that their parents offered meaningful advice about Humboldt State University (r = .516, p < .01), and respondents who reported that their parents encouraged them to do their high school homework also reported that their parents understood the academic demands they faced at Humboldt State University (r = .525, p < .01).

Because strong correlations were found across all of the measures, it was determined that each item was measuring a similar construct that could be generalized as parental involvement. When these separate measures were combined into a single index (parental involvement), the correlations improved. Students who scored high on the parental involvement index were much more likely to report that their parents understood the academic challenges they faced at Humboldt State University (r = .594, p < .01), which
accounted for 35 percent of the variance between the measures. They were also much more likely to report that their parents offered meaningful advice about how to be successful at Humboldt State University \((r = .548, p < .01)\), which accounted for 30 percent of the variance between the measures.

| Table 49:  Continuity of Parental Involvement, High School to College. |
|-------------------------------------------------|-----------------|-----------------|
| Parents Offer Meaningful Advice                  | Parents Understand Academic Challenges at HSU |
| Parents Understood Academic Challenges, H.S.     | **.539**        | **.516**        |
| Parents Encouraged me to do Home Work            | **.525**        | **.450**        |
| Parental Involvement Index                       | **.594**        | **.548**        |

**Level of significance < .01**

When a control was added for the year in which the student first enrolled at Humboldt State University, the correlations were found to be strong among all of the cohorts, with significant correlations found among first, second, and fourth year students. Among first year students, the correlation accounted for between 42 and 43 percent of the variance.
between the measures, and among fourth year students, the correlations accounted for
between 33 and 41 percent of the variance between the measures, as detailed in the table
below.

<table>
<thead>
<tr>
<th>Parental Involvement Index, High School</th>
<th>Parents Understand</th>
<th>Parents Offer Meaningful Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>.594**</td>
<td>.548**</td>
</tr>
<tr>
<td>First Year Students</td>
<td>.654**</td>
<td>.650**</td>
</tr>
<tr>
<td>Second Year Students</td>
<td>.421*</td>
<td>.399*</td>
</tr>
<tr>
<td>Third Year Students</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Fourth Year Students</td>
<td>.640*</td>
<td>.579*</td>
</tr>
</tbody>
</table>

*Level of significance < .05, **level of significance < .01
Significance of the Findings

These findings support the hypothesis, showing that the level of parental involvement students receive during their high school years is an adequate predictor of the continued parental involvement they will receive while attending Humboldt State University. This is especially true among first year students enrolled at the university. Additionally, the strong correlations found among fourth year students also suggests that the level of parental involvement may have a greater influence during transitional years when students are first entering the institution and when they are closest to graduating from Humboldt State University.

It is also interesting to note the correlation that was found with second year students. This correlation suggests that parental involvement between high school and college provides continuity through the students’ first two years, although with diminishing influence among second year students. Despite this diminishing influence, this correlation is of particular interest given that very few correlations were found to occur among second year students throughout much of this study. For instance, in part one of this study, no correlations were found among second year students between their social integration, academic integration, or level of peer encouragement and their subsequent institutional commitment and persistence. Similarly, in part two of this study, no correlations were found among second year students in regard to their peers’ commitment
to the educational goals of the institution, or in regard to their social/cultural continuity and their subsequent integration, institutional commitment, and persistence in the university.

These absences in significant correlations in part one and two of this study may suggest that second year students are still experiencing a significant level of transition, and that they have not yet established a strong level of integration into the institution. The continuity of parental involvement that second year students experience may suggest that parental involvement and encouragement can play an important role among second year students in regard to their subsequent institutional commitment and persistence at Humboldt State University. In this regard, programs designed to increase the institutional awareness and institutional understanding among the parents of second year students may increase the level of parental encouragement that second year students receive as they continue in their transition into becoming fully integrated into the institution. This will likely have a positive influence on their subsequent level of institutional commitment and persistence at Humboldt State University.

Additional Findings

As with previous measures, further analysis was conducted, adding controls for both ethnicity and gender.
Ethnicity. When adding a control for ethnicity, the correlations were found to be moderately skewed by the responses of students of color. Students of color who scored higher on the parental involvement index for high school were also more likely to report that their parents understood the academic challenges they faced at Humboldt State University ($r = .672, p < .01$), which accounted for 45 percent of the variance between the measures, than were white students ($r = .407, p < .05$), which accounted for 17 percent of the variance between the measures. They were also more likely to report that their parents offered meaningful advice about Humboldt State University ($r = .607, p < .01$), which accounted for 37 percent of the variance between measures, than were white students ($r = .415, p < .05$), which accounted for 17 percent of the variance between the measures (see table 51).

These findings may suggest that either EOP students of color experience a greater level of continuity in the level of parental involvement that they experience during their transition from high school to college than do white EOP students, or that EOP students of color have a more difficult time becoming integrated into Humboldt State University and therefore, rely more heavily upon parental involvement and encouragement as a continuing source of support from which they can draw.

Gender. When adding a control for gender, no significant differences were found in the correlations between male and female respondents.
Summary Discussion: Part Three of the Study

Overall, the hypotheses included in part three of this study were supported by the findings. The correlations found in regard to the continuity of the students’ personal values towards their academics, their peer group’s commitment towards their academics, and their parents’ involvement in their academic experiences show that a certain level of continuity exists between the students’ high school experiences and their subsequent
experiences at Humboldt State University. These correlations, however, have varying levels of significance in regard to their utility for becoming a measure for predicting the students’ level of risk for attrition at Humboldt State University.

Based on the findings in part three of this study, the best high school measure available for predicting subsequent college integration, institutional commitment, and persistence among EOP students at HSU is the single measure, “During my high school years, the things I learned in class were meaningful to my life”. First year students’ who reported that their high school classes were meaningful were 28 percent more likely to report that their college classes were also meaningful, which was consistent regardless of the ethnic background of the student. This is an important indicator, given the strong correlations between the meaningfulness of the students’ college classroom experiences and their subsequent integration, institutional commitment, and persistence at HSU (see hypothesis 5 and corresponding discussion).

The next best high school measure available for predicting subsequent college integration, institutional commitment, and persistence among EOP students at HSU is the single measure, “During my high school years, many of my friends were serious about their academic work”. First year students who reported that their high school friends were serious about their academic work were 13 percent more likely to also report that their college friends were serious about their academic work. This can also be an
important indicator, given the strength of the correlations between students who reported that their college peers were committed to their academic work and their subsequent integration, institutional commitment, and persistence at HSU (see hypothesis 7 and corresponding discussion).

The item measuring the cultural continuity between the high school and college experiences of EOP students was found to be largely influenced by larger social/cultural biases inherent in educational institutions, which typically favors those from the dominant culture. In this regard, individual variation was not found to be a significant factor in the measures of cultural continuity between high school and college. The continuity of experience was solely found among white students, presumably representing the cultural bias inherent at the high school and college levels of education.

And finally, parental continuity between high school and college was found to have strong correlations, during the students’ transitional years, as they entered and exited the university. Parental continuity between high school and college also appears to continue among second year students and students of color, perhaps reflecting the students’ reliance upon parental involvement and encouragement as they struggle to become integrated within Humboldt State University.
RESULTS OF PART FOUR OF THE STUDY

Influence of Adaptation Strategies on the Continuity of Student Experience

While each of the measures reported in part three of this study indicate a certain level of continuity between the students’ high school and college experiences, the analysis up to this point has assumed that all students approach their transition into Humboldt State University in a similar fashion. According to the work of Phelan, Davidson, and Yu (1998), however, it was found that students employ different adaptation strategies when crossing the boundaries between their separate worlds of family, peers, and school. Part four of this study examines how these different adaptation strategies influence the strength of the correlations reported above and the level of continuity in the students’ experiences between high school and college as they transition into Humboldt State University. These different modes of adaptation include code switching (the use of different codes of behavior depending upon the social setting of the actor), negation (the denial of membership with a group that the actor is associated with and which is usually ascribed by the larger society), and synthesis (a process where neither denial nor code switching behavior is prominent and where the actor easily negotiates among potentially conflicting group norms and behavioral expectations) (Phelan, Davidson, and Yu, 1998; Hemmings, 1998).
Hypothesis 13

The continuity between the students’ high school experiences and their subsequent experiences at Humboldt State University will be stronger among students who practice integrative adaptation strategies during their high school years.

Measures

A number of questions were included in this study to determine the mode of adaptation the respondents employed during their high school years, especially as it related to their academic experiences. Four items were included to measure the level of integration practiced by the student in regard to their experiences during high school. Two items measured the level of integration between their home-life and their life at school (“During my high school years, I would speak with my parents about the things I was involved in at school”, “During my high school years, one or more of my teachers were aware of what my life was like at home”), one item measured the level of integration between their culture and their experiences in the classroom (“During my high school years, I discussed aspects of my cultural heritage in my classes and coursework”), and
one item measured the level of integration between their peers and the students’
educational goals (“During my high school years, I would speak to friends about my goal
of going to college”).

Results

Integrative Strategies

More students indicated that they integrated the different spheres of family, peers, and
school in which they were involved during their high school years than those that did not.
Nearly two-thirds of all respondents (73.9%) agreed that they spoke with their parents
about the things they were involved in at school, which suggests that these students were
less inclined to separate, or maintain a boundary between their life at school and their life
at home than were students who disagreed with the measure. Additionally, over half of
all respondents (62.2%) agreed that their teachers were aware of what their home life was
like, which also suggests that these respondents were less inclined to separate, or
maintain a boundary between their life at school and their life at home than were students
who disagreed with the measure. Students who were not actively involved in maintaining
distinct boundaries between their life at school and their life at home are defined in this study as those who practice a more integrative adaptation strategy.

Approximately half of all respondents (53.5%) agreed that they discussed aspects of their cultural heritage in their classes and course assignments, suggesting that these respondents were more inclined to integrate aspects of their cultural heritage within their academic life than were students who disagreed with the measure. Again, these students are defined as those who practiced a more integrative adaptation strategy in regard to cultural inclusion.

And finally, nearly all of the respondents (94.6%) agreed that they spoke to their friends about their goal of attending college. The students’ willingness to discuss their long term educational goals with their peers suggests that they were less inclined to separate, or maintain a boundary between their long term goals and the long term goals of their peers than were those students who disagreed with the measure. Again, these students are defined as those who practiced a more integrative adaptation strategy (See Table 52).

The correlations found in part three of this study regarding the respondents’ high school experiences and their subsequent college experiences were re-examined. Controls were added, separating respondents into two separate categories based on whether they agreed
or disagreed with the measures above, with one exception. Because nearly all respondents indicated that they spoke with their high school peers about their goal of attending college (94.6%), insufficient variation existed among the respondents answers and the measure was excluded from additional analysis.

| Table 52: Student Responses to Measures of Integration during High School |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                              | Disagree, Strongly Disagree | Disagree                  | Agree, Strongly Agree |
| Discussed School with Parents | 13.0 %                      | 13.0 %                     | 21.7 %                     | 52.2 %                     |
| Discussed Home Life with Teachers | 25.5 %                      | 12.2 %                     | 23.3 %                     | 38.9 %                     |
| Discussed Culture in Class   | 30.9 %                      | 15.5 %                     | 23.8 %                     | 29.7 %                     |
| Discussed College Goals with Peers | 4.4 %                       | 1.1 %                      | 16.5 %                     | 78.1 %                     |

Because the pre-collegiate experiences of students are more influential during the students’ first year in college, and eventually give way to their subsequent college experiences, an additional control was added, limiting the sample of respondents to those who were enrolled in their first year of college.

It is hypothesized that stronger correlations will be found between the measures used in part three of this study (respondents high school experiences and their subsequent college
Meaningfulness of Classroom Experiences.

In part three of this study it was found that respondents who reported that their high school classes were meaningful were also more likely to report that their college classes were meaningful, accounting for 12 percent of the variance between the measures. When limiting the analysis to students who were enrolled in their first year of college, this correlation was found to be much higher, accounting for 28 percent of the variance between the measures.

Contintuity: Home to school. When adding the control for whether or not the respondent spoke with their parents about their high school experiences, the above correlations improved slightly among all respondents who agreed with the measure, \((r = .388, p < .01)\), accounting for 15 percent of the variance between the measures. This represents a 3 percent increase in the strength of the correlation when the control is added. Among first year respondents, the correlation improved more significantly \((r = .590, p < .01)\), accounting for 35 percent of the variance between the measures, and representing a 7
percent increase when the control is added. No significant correlation was found among respondents who disagreed with the measure.

**Continuity: School to home.** Additionally, the correlation was stronger among all respondents who indicated that they spoke with their teachers regarding their home life ($r = .452, p < .01$), accounting for 20% of the variance between the measures, and representing an 8 percent increase when the control is added. Among first year students, this correlation was again found to be significantly stronger ($r = .716, p < .01$), accounting for 51 percent of the variance between the measures, an increase of 23 percent when the control is added. No significant correlations were found among respondents who disagreed with the measure.

**Continuity: Culture to school.** And finally, the correlation was also stronger among all respondents who agreed that they openly discussed aspects of their cultural heritage in their classroom ($r = .490, p < .01$), accounting for 24 percent of the variance between the measures, an increase of 12 percent when the control is added. Among first year students, this correlation was again found to be significantly stronger ($r = .776, p < .01$), accounting for 60 percent of the variance between the measures, an increase of 32 percent when the control is added. Again, no significant correlations were found among those respondents who disagreed with the measure.
The above findings support the hypothesis, showing that the correlations between the students’ high school experiences and their subsequent college experiences are stronger among those respondents who were identified as having practiced integrative adaptation strategies during their high school years. No significant correlations were found among those who disagreed with the measures.

### Similarity in Values with Teachers and Faculty

In part three of this study, no significant correlations were found between the level in which all respondents reported that they had similar values to their high school teachers,
and the subsequent level in which they reported that they had similar values to their college faculty. Similarly, no significant correlations were found among first year students.

**Continuity: Home to school.** When adding a control for whether or not the respondent spoke with their parents about their high school experiences, a strong correlation was found among those who agreed with the measure ($r = .431$, $p < .05$), which accounted for 19 percent of the variance between the measures. When limiting the respondents to those who were enrolled in their first year of college, a similar correlation was found ($r = .469$, $p < .01$), accounting for 22 percent of the variance between the measures.

**Continuity: School to home.** Additionally, slight correlations were found among those respondents who indicated that they spoke with their teachers about their home life ($r = .310$, $p < .05$), which accounted for 10 percent of the variance between the measures. Among first year students, no significant correlation was found.

**Continuity: Culture to school.** Respondents who also indicated that they discussed aspects of their cultural heritage in the classroom also had slightly stronger correlations ($r = .354$, $p < .05$), which accounted for 12 percent of the variance between the measures. Among first year students, a strong correlation was found ($r = .715$, $p < .01$), which
accounted for 51 percent of the variance between the measures. No significant correlation was found among those who disagreed with the measures (see table 54).

These findings also support the hypothesis, showing that the correlations between the students' high school experiences and their subsequent college experiences are stronger among those respondents who agreed with the measures regarding their use of integrative adaptation strategies, with no significant correlations found among those who disagreed with the measures.

Table 54: Influence of Integrative Strategy on Similarity of Values.

<table>
<thead>
<tr>
<th></th>
<th>Have Similar Values as College Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Students</td>
</tr>
<tr>
<td>Had Similar Values as High School Teachers</td>
<td>---</td>
</tr>
<tr>
<td>And Spoke with Parents about H.S. Involvement</td>
<td>.431*</td>
</tr>
<tr>
<td>And Spoke with Teachers about Home Life</td>
<td>.310*</td>
</tr>
<tr>
<td>And Discussed Cultural Heritage in Class</td>
<td>.354*</td>
</tr>
</tbody>
</table>

*Level of significance < .05
Cultural Inclusion within School Social Activities.

In part three of this study, it was found that respondents who reported that their high school social activities acknowledged their cultural heritage were also slightly more likely to report that their college social activities also acknowledged their cultural heritage, accounting for 8 percent of the variance between the measures. Among first year students, no significant correlations were found.

**Continuity: Home to school.** When adding the control for the degree in which the respondent indicated that they spoke with their parents about their high school involvement, this correlation improved significantly among respondents who agreed with the measure, \( r = .431, p < .01 \), which accounted for 18 percent of the variance between the measures, or an increase of 10 percent when the control is added. Among first year students, a strong correlation was also found \( (.669, p < .01) \), which accounted for 45 percent of the variance between the measures.

**Continuity: School to home.** In contrast, no correlation was found among respondents who agreed that they had spoken with their teachers regarding their home life, and in fact, the correlation was stronger among those who disagreed with the measure \( r = .493, p < .01 \), accounting for 24 percent of the variance between the measures. Among first year
students, no significant correlations were found, regardless of whether or not the respondent agreed or disagreed with the measure.

**Continuity: Culture to school.** No significant correlations were found among all respondents in regard to whether or not the respondent indicated that they had discussed aspects of their cultural heritage in class. Among first year students, however, a strong correlation was found \( (r = .744, p < .01) \), which accounted for 55 percent of the variance between the measures (See Table 55).

The above findings generally support the hypothesis. The correlations found, especially among first year students, suggest that those students who practiced an integrative adaptation strategy during their high school years were found to have a strong correlation, and thus, a high level of continuity between their high school experiences and their subsequent college experiences. Given the earlier findings in part two and three of this study, however, this continuity is believed to reflect inherent cultural bias and is probably skewed by white respondents. Additional analysis, which adds a control for ethnicity, could not be meaningfully conducted within this study given the small student sample and the number of controls that have already been incorporated within this analysis (see table 55).
Table 55: Influence of Integrative Strategy on Social/Cultural Inclusion

<table>
<thead>
<tr>
<th>High School Social Activities Included my Culture (All Students)</th>
<th>College Activities Included my Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>And Spoke with Parents about H.S. Involvement</td>
<td>.431**</td>
</tr>
<tr>
<td>And Spoke with Teachers about Home Life</td>
<td>---</td>
</tr>
<tr>
<td>And Discussed Cultural Heritage in Class</td>
<td>---</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High School Social Activities Included my Culture (First Year Students)</th>
<th>College Activities Included my Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>And Spoke with Parents about H.S. Involvement</td>
<td>.669**</td>
</tr>
<tr>
<td>And Spoke with Teachers about Home Life</td>
<td>---</td>
</tr>
<tr>
<td>And Discussed Cultural Heritage in Class</td>
<td>.744**</td>
</tr>
</tbody>
</table>

* Level of Significance < .05, **Level of significance < .01
Cultural Inclusion within the Academic Curriculum.

In part three of this study, it was found that respondents who reported that their high school curriculum included aspects of their cultural heritage were also slightly more likely to report that their college curriculum also included aspects of their cultural heritage, accounting for 7 percent of the variance between the measures. Among first year students, no significant correlations were found between the measures.

Continuity: Home to school. When adding the control for the degree in which the respondent indicated that they spoke with their parents about their high school involvement, no significant correlations were found.

Continuity: School to home. Additionally, no significant correlation was found among all respondents who agreed that they had spoken with their teachers regarding their home life, however, the correlation was stronger among all students who disagreed with the measure ($r = .472, p < .05$), accounting for 22 percent of the variance between the measures. No significant correlations were found among first year students.
Continuity: Culture to school. No significant correlations were found in regard to whether or not the respondent indicated that they discussed aspects of their cultural heritage in class for either group.

These findings do not support the hypothesis. No significant correlations were found that showed integrative adaptation strategies strengthen the correlation regarding cultural inclusiveness within the classroom between high school and college. The only significant correlation found was in direct contradiction to the hypothesis (see table 56).
<table>
<thead>
<tr>
<th>High School Curriculum Included my Culture</th>
<th>College Curriculum Included my Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>(All Respondents)</td>
<td>.264*</td>
</tr>
<tr>
<td>And Spoke with Parents about H.S. Involvement</td>
<td>---</td>
</tr>
<tr>
<td>And Spoke with Teachers about Home Life</td>
<td>---</td>
</tr>
<tr>
<td>And Discussed Cultural Heritage in Class</td>
<td>---</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High School Curriculum Included my Culture</th>
<th>(First Year Students)</th>
<th>---</th>
</tr>
</thead>
<tbody>
<tr>
<td>And Spoke with Parents about H.S. Involvement</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>And Spoke with Teachers about Home Life</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>And Discussed Cultural Heritage in Class</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

* Level of Significance < .05, **Level of significance < .01
Parental Involvement.

In part three of this study it was found that respondents who reported that their parents were involved in their high school experiences were also more likely to report that their parents were involved in their college experiences, accounting for 37 percent of the variance between the measures. Among first year students, the correlation was slightly stronger, accounting for 47 percent of the variance between the measures.

Continuity: Home to school. When adding the control for the degree in which the respondent indicated that they spoke to their parents about their high school involvement, no discernable difference was found between respondents who agreed and those who disagreed with the measure. The correlation found among all respondents who agreed with the measure was nearly identical ($r = .583$, $p < .01$) to the correlation found among respondents who disagreed with the measure ($r = .587$, $p < .01$). Among first year students, a similar trend was discovered. When allowing for a moderate level of error ($p < .10$), it was found that the correlation among first year students who agreed with the measure ($r = .659$, $p < .01$) was similar to the correlation found among first year students who disagreed with the measure ($r = .568$, $p < .10$).
Continuity: School to home. Additionally, only a slight difference was found between all respondents who agreed that they spoke with their high school teachers about their home life \((r = .690, p < .01)\) and those who disagreed with the measure \((r = .609, p < .01)\).

Among first year students, a strong correlation was found among those who agreed with the measure \((r = .815, p < .01)\), which accounted for 66 percent of the variance between the measures. This represents an increase of 19 percent when the control for the use of an integrative adaptation strategy is added. No significant correlation was found among first year students who disagreed with the measure.

Continuity: Culture to school. And finally, a slight difference was found among all respondents who agreed that they discussed aspects of their cultural heritage in their class \((r = .669, p < .01)\), and those who disagreed with the measure \((r = .605, p < .01)\). Among first year students, an indiscernible difference was found between those who agreed with the measure \((r = .628, p < .01)\) and those who disagreed with the measure \((r = .618, p < .05)\) (see table 57).

These findings do not generally support the hypothesis, showing that the correlation between parental involvement during high school and the parents’ subsequent involvement during college is largely unaffected by whether or not the student practiced integrative adaptation strategies during their high school years.
A possible explanation for these results may be that the transition in the student/parent relationship is limited. Although the students’ relationship with their parents does undergo change during their transition to college, their relationship is on going and does

| Table 57: Influence of Integrative Strategy on Parental Involvement |
|-------------------------|-------------------------|
| Parental Involvement in High School | Parental Involvement in College |
| (All Respondents) | .609** |
| And Spoke with Parents about H.S. Involvement | Agree | Disagree |
| And Spoke with Teachers about Home Life | .583** | .587** |
| And Discussed Cultural Heritage in Class | .690** | .609** |
| And Discussed Cultural Heritage in Class | .669** | .605** |
| (First Year Students) | .668** |
| And Spoke with Parents about H.S. Involvement | Agree | Disagree |
| And Spoke with Teachers about Home Life | .659** | .568 |
| And Discussed Cultural Heritage in Class | .815** | --- |
| And Discussed Cultural Heritage in Class | .628** | .618* |

* Level of Significance < .05, **Level of significance < .01
not involve the same level of change that occurs in the students’ classroom experiences, 
with their faculty, and with their peers. In this regard, integrative adaptation strategies 
have more limited implications in regard to the students’ relationship with their parents, 
as this relationship remains relatively constant and therefore, does not require 
considerable adaptation during the students’ transition into college.

Summary Discussion: Part Four of the Study

In part three of this study, two high school measures were found to have potential value 
for predicting subsequent integration, institutional commitment, and persistence among 
EOP students at HSU as they transitioned into college. The strongest indicator was the 
item measuring academic value (“During my high school years, the things I learned in 
class were meaningful”). When the control for integrative adaptation strategies was 
added, the predictive value of the correlation improved between 7 and 32 percent.

The second high school measure found to have potential value for predicting subsequent 
integration, institutional commitment, and persistence was the item measuring high 
school peer group/academic continuity (“During my high school years, many of my 
friends were serious about their academic work”). No additional analysis was conducted
in regard to the students’ practice of integrative adaptation strategies because the peer integration measure lacked adequate variation within the sample.

Part four of this study also produced two additional measures that may have potential value for predicting subsequent integration, institutional commitment, and persistence. When the control was added for integrative adaptation strategies, strong correlations were found among first year students in regard to the students’ similarity in values with their high school teachers and their subsequent similarity in values with their college professors, which accounted for 22 and 51 percent of the variance between the measures. This finding is consistent with the measure regarding the meaningfulness of the students’ classes to their life, which together, make up the academic affinity index discussed in part two of this study.

In part four of this study, the correlations were also generally found to improve among first year students in regard to the continuity between high school and college of their cultural inclusion within the social environment of the institution. This correlation has less value because in part two of the study, it was determined that social/cultural inclusion at HSU was largely influenced by the processes of cultural reproduction, which tend to favor majority students. Because of the limited sample size of the current study, it is impossible to include an additional control for ethnicity, therefore making it impossible
to determine whether or not similar processes of cultural reproduction have influenced
the correlations found in part four of the study.

No significant correlations were found in regard to the students’ use of integrative
adaptation strategies and their subsequent experiences in regard to their academic/cultural
inclusion within their college classes. Additionally, the students’ use of integrative
adaptation strategies was found to have no influence on the level of parental
encouragement, presumably, a result of the continuity in the students’ on-going
relationship with their parents throughout their transition between high school and
college.

Overall, the findings in part four of this study suggest that the students’ use of integrative
adaptation strategies during their high school years have a narrow influence on the
predictive value of those experiences on subsequent college integration, institutional
commitment, and persistence, with the exception of the students’ experiences within the
classroom setting (Classes are meaningful to my life/Similar values as teacher/professor).
For these measures, the predictive value improved among those students who practiced
integrative adaptation strategies during high school.
The primary purpose of this study has been to identify the non-cognitive factors affecting EOP students enrolled at Humboldt State University, specifically in regard to their academic and social integration, their institutional commitment, and their intent to persist at the institution.

The secondary purpose of this study has been to identify indicators that measure the students’ high school experiences, and to identify which of the students’ experiences during high school correlate with their subsequent college experiences. The identification of such correlations would suggest that the indicators used to measure high school experiences could serve as a predictor for the students’ subsequent college integration, institutional commitment and persistence at Humboldt State University.

The third purpose of this study has been to identify how student adaptation strategies influence the continuity of the students’ experiences between high school and college. This would provide a better understanding of how the students’ individual agency influences their transition into college and how this individual agency affects the reliability of high school indicators as predictors for subsequent college experiences.
Using High School Indicators as Predictors for Subsequent College Experiences

Typically, the EOP advisor's initial interview with their students occurs during large orientation sessions when individual advising time is limited. During these times, advisors must rely on easily accessible indicators that can guide their advisement of students and which can help them to place their students in courses that match their level of academic preparedness. Test scores and academic transcripts have served as the primary measures for such academic placement. Students who are not at risk primarily because of their level of academic readiness, but who are at risk because of non-cognitive factors are not as easily identified, especially during the initial meeting with the student that takes place during large orientation sessions.

In part three of this study, several items were included to measure the students' experiences during their high school years, which were then compared with their subsequent experiences at Humboldt State University. The high school measures found to have strong correlations with the students' subsequent college experiences can serve as predictive indicators and can help guide the EOP advisor during their initial interview with their students. In this study, four high school measures were identified as having a relatively strong predictive value, each of which are summarized below.
Peer Group Commitment to their Academic Goals

First year students who reported that their high school friends were serious about their academic work were also more likely to report that their college friends were serious about their academic work, accounting for 13 percent of the variance between the measures. Although this is only a moderate correlation, it is still significant given the strong correlation between the influence of college peer groups and the students’ level of academic and social integration, institutional commitment, and intent to persist. As discussed in part two of this study, first year students who reported that their college friends were serious about their academics were significantly more likely to also report higher levels of academic integration (which accounted for 21 percent of the variance between the measures), social integration (which accounted for 40 percent of the variance between the measures), institutional commitment (which accounted for 25 percent of the variance between the measures) and intent to persist (which accounted for 30 percent of the variance between the measures).

Given the breadth of the positive influences peer groups were found to have among first year EOP students, the inclusion of a question such as, “Were your high school friends serious about their academic work”, can help the EOP advisor identify those students who are likely to have a slightly more difficult time establishing a peer support network.
of friends who are committed to the academic tasks of the institution. Students who report that their high school friends were not serious about their academics should be referred to services that foster a sense of academic commitment, particularly within a peer group environment. Such services include the EOP Fall Bridge program, courses offering supplemental group instruction, peer group tutoring, and group study hall.

**Academic Affinity**

In addition to peer group influences, this study also found that first year students who reported that their high school classes were meaningful to their life were considerably more likely to also report that their college classes were meaningful to their life, accounting for 28 percent of the variance between the measures. This correlation is particularly significant given the strong correlation between the level in which students’ found their college classes as meaningful and their level of institutional commitment and intent to persist. As discussed in part two of this study, first year students who reported that their college classes were meaningful to their life were significantly more likely to also report higher levels of institutional commitment and intent to persist at Humboldt State University, accounting for 50 to 60 percent of the variance between the measures.
Given the relevance of these measures, the inclusion of a question such as, “Were the things you learned in your high school classes meaningful to your life”, can help the EOP advisor identify whether or not their student is likely to encounter personal challenges regarding their ability to derive a sense of meaningfulness from their academic curriculum. For those students who report that their high school classes were not meaningful to their life, greater care should be given towards identifying the students’ academic interests and towards directing students to classes that may provide greater saliency to their life. This process can include careful inquiry into the students’ interests on the part of the advisor or can include referral to the on-campus Career Center for value-based or interest-based career assessments from which classes are then assigned.

Additionally, for those students who have difficulty identifying courses that might provide such saliency, or who are unclear about their academic goals, the EOP advisor should direct these students towards courses that can help them explore career possibilities, or towards program services that will link them with a peer support network that is focused on developing a strong sense of academic community. Such programs include the EOP Fall Bridge program or the university sponsored Freshman Interest Group experience.
Parental Involvement

First year students who reported that their parents were involved with their academic life during their high school years were significantly more likely to report that their parents were also involved with their college life. Two items were used to specifically measure parental involvement during high school. The first item measured the level in which the students’ parent understood the academic challenges the student faced in high school. The second item measured the extent to which the students’ parents encouraged the student to spend time at home doing their homework. These two measures accounted for 30 and 35 percent of the variance between the items measuring parental involvement during high school and the students’ subsequent level of parental involvement during college.

While these correlations show a relatively high level of continuity in the level of parental involvement between high school and college, parental involvement did not have any significant influence among first year students in regard to their level of social or academic integration, nor in regard to their institutional commitment or intent to persist at Humboldt State University. In the absence of these latter correlations, the high school measures would not seem to provide the EOP advisor with an adequate assessment of risk among entering first year students.
This study also found, however, that while parental involvement did not have a positive influence among first year EOP students, positive correlations were found among the student sample as a whole. When not controlling for the students’ first year of attendance, parental involvement was found to have a modest positive influence on the students’ level of academic integration, their institutional commitment, and their intent to persist at Humboldt State University. Together, these findings suggest that parental involvement and parental encouragement provide more of a long-term source of support, which simply does not emerge as a significant factor during the students’ first year in college. This is consistent with Tinto’s theory, which posits that as the student transitions into the university, they undergo a process similar to a rite of passage, and that as part of this rite of passage, the student leaves behind aspects of his or her prior life.

The findings in this study suggest, that while first year students may not be directly influenced by the level of parental involvement and encouragement they receive, over the long-term, parental involvement and encouragement does re-emerge as an important factor that influences student persistence. Because of the long-term implications of these measures, the EOP advisor might better serve their entering students by including such questions as “Were your parents involved with your academic life during high school” and “Do your parents support your decision to attend Humboldt State University”.

While the students’ answers to these questions may not have a direct impact for the students’ first year experience, students who report low levels of parental involvement and support can be directed towards programs designed to increase parental knowledge and awareness about the students’ experiences at Humboldt State University. Although no such program exists within the current array of EOP services, information dissemination activities can be designed to enhance parental knowledge, awareness, and involvement. These activities can range from the simple creation of a generic EOP parent newsletter or a parent orientation, to a more elaborate activity where students chronicle their first year experiences in the form of a personalized yearbook, which they can then share with their parents.

The Influence of Integrative Adaptation Strategies on High School Predictors

In part four of this study, items were included to determine the extent to which students were able to cross between the separate spheres of their family life at home, their life at school in the classroom, and their life among their peers. It was hypothesized that students, who were able to integrate the separate spheres of family, school, and peers
during their high school years, would be able to better integrate their subsequent college experiences, thus improving the predictive value of their high school experiences.

This study found that students who practiced integrative adaptation strategies during high school did experience a greater level of continuity during their transition from high school to college. This level of heightened continuity, however, was limited to their academic experiences. Specifically, among students who reported using integrative adaptation strategies during high school, the correlation which improved the most was between the item measuring similarity of values with high school teachers (“During my high school years, I believe my values were similar in general to those of my high school teachers”) and the item measuring similarity of values with college professors (“I believe my values are similar in general to those of my IISU professors”). This correlation improved between 22 and 51 percent among students who reported using integrative adaptations strategies. Another significant improvement was found in the correlation between students’ who reported that their high school classes were meaningful and that their college classes were meaningful. This correlation improved between 7 and 32 percent among students who reported using integrative adaptation strategies.

The items measuring the level of family encouragement that the students’ received from their parents, and the level of social/cultural inclusion between their high school and
Humboldt State University were unaffected by the students’ use of integrative adaptation strategies.

Given the findings in part four of this study, it has been determined that adding questions that would measure the students’ use of integrative adaptation strategies during high school would unnecessarily complicate the initial interview between the FOP advisor and their students. The limited scope of improvement to the correlations that measure the level of continuity between the students’ high school and college experiences did not significantly improve the predictive value of the measures identified in part three of this study, and therefore, should not be included within the interview process.

As much as pre-collegiate experiences might correlate with the students’ subsequent college experiences, this study found that these pre-collegiate experiences eventually give way to the influences of the students’ actual experiences at the institution. Consistent with Tinto’s research, this study found that academic integration and social integration have the strongest influence on the students’ level of institutional commitment and persistence at Humboldt State University. Because of this, pre-collegiate high school experiences are best considered as an adequate predictor for the students’ first year in college, rather than as a predictor for their long-term college experiences overall.
The implications of the factors influencing the level of academic integration, social integration, institutional commitment, and intent to persist among EOP students at Humboldt State University in general, are discussed in the next section of this study.

Implications of Non-Cognitive Factors Affecting EOP Student Attrition

Similar to the findings of several other studies conducted on student attrition, this study found that social integration, academic integration, peer group influences, parental encouragement, academic involvement, and cultural inclusion all have positive influences on the institutional commitment and the intent to persist among EOP students at Humboldt State University. More importantly, this study also revealed subtle nuances in how these factors appear to influence EOP students differently depending upon their year in school, their ethnicity, and their gender. By understanding these nuances, EOP program personnel may be able to design specific program interventions that target the specific needs of program participants during the different stages of their college experiences. These nuances and implications to EOP programming are detailed below:
Social Integration

This study found that three measures of social integration had significant correlations with the students' level of institutional commitment and with their intent to persist at Humboldt State University. These measures included the students’ ability to develop close personal relationships, the influence of those relationships on their personal growth, and the influence of those relationships on their intellectual growth. This study also found that social integration had a greater influence on the students’ institutional commitment (which accounted for 30 percent of the variance between the measures) than it did on the students’ intent to persist (which accounted for 14 percent of the variance between the measures).

When controls were added, this study also found that social integration had a broader influence among first year students (influencing both institutional commitment and persistence), and among students whose cultural population had reached a critical mass within the institution (white students and Hispanic/Latino students). These variations in social integration, which are based on class level and ethnicity, have specific implications for EOP programming. Slight differences were found in gender, but not significant enough to warrant special programming.
Currently, EOP program services are designed to enhance student interactions and the development of student relationships, especially among first year students. Such programming serves first year students well, as it has implications to both their level of institutional commitment and persistence. In subsequent years, however, such programming would prove less effective, given that social integration has not been found to positively influence the students' intent to persist among second, third, or fourth year students.

This finding should not be construed to imply that social integration is not important during the students' latter years at Humboldt. This study has found that social integration is strongly correlated with institutional commitment throughout the students’ enrollment at the university. While the level of the students’ social integration continuously reinforces their institutional commitment, this study has also found that social integration only had a positive influence on the students’ actual intent to persist among first year students.

The fact that social integration was found to only influence those students whose cultural population had reached a critical mass, also suggests that additional programming is warranted for those students’ whose culture is largely underrepresented on campus. Different types of programming can be developed, ranging from activities that are
designed to foster the development of interpersonal relationships among underrepresented students who share a similar cultural background (i.e. cultural based programming), to activities that are designed to foster the development of intercultural relationships among students who share similar interests (i.e. interest based programming targeted towards underrepresented students). While all students would benefit from such programming, EOP students of color whose cultural group does not enjoy a critical mass would be best served by such programming.

**Academic Integration**

This study found that two measures of academic integration had significant correlations with the students level of institutional commitment and with their intent to persist at Humboldt State University. These measures included the students’ level of satisfaction with their academic experiences and the extent to which these academic experiences had a positive influence on their intellectual growth. This study also found that academic integration had a similar influence on the students’ institutional commitment (which accounted for 32 percent of the variance between the measures) as it did on the students’ intent to persist (which accounted for 38 percent of the variance between the measures).
This study also found that the influence of academic integration appeared to wane among second and third year EOP students, with strong correlations found among first and fourth year students only. This study also found that academic integration had broader implications among white students, specifically in regard to their intent to persist, with a narrower influence among students of color. Slight variations were found in regard to gender, but not to the extent that it would warrant special programming interventions.

The implications of the differences found in academic integration depending on the students’ class level suggest that programming designed to enhance the academic integration among second and third year students may be warranted. During these intermediary years, no positive correlations were found between academic integration and the students’ institutional commitment or their intent to persist at Humboldt. Program activities designed to increase the level of academic satisfaction and intellectual growth within the students’ discipline may improve persistence rate among second and third year EOP students. Such program activities can range from services designed to clarify educational goals, to activities designed to increase academic involvement such as through faculty/student mentoring, discipline centered service learning, or discipline centered internships and research programming.
The implications of the differences found in academic integration and the students’ cultural background (as well as in the findings in other parts of this study), suggest that processes of cultural reproduction have influenced the academic experiences of EOP students’ of color, especially in regard to their in-class experiences and the level of inclusiveness within the academic curriculum. While academic integration did have a positive influence on the institutional commitment among certain cultural groups (white, Asian/Pacific Islander, and Mexican American/Hispanic), no positive influence was found in regard to the students’ intent to persist among students of color.

Although EOP program services has little to no influence on the in-class experiences or the curricular content of university classes, EOP services can provide opportunities for students’ to discuss and apply in-class learning and knowledge to the particulars of their life. Such activities can include discipline based student discussion groups that address issues specific to students of color, faculty/mentoring activities designed to enhance discipline based research which address the concerns of specific cultural communities, or participation in internships, research, or summer institutes which include components that address issues specific to students of color.
Peer Group Influences

This study found three specific measures of peer group influences that had significant correlations with the students' level of social integration, academic integration, institutional commitment, and intent to persist at Humboldt State University. These measures included the extent to which students' reported that their close friends support their decision to attend Humboldt State University, that their friends were serious about their academic work, and that their friends planned to continue at the institution. Peer group influences accounted for between 25 and 32 percent of the variation in the students' institutional commitment, and between 16 and 20 percent of the variation in the students' intent to persist at Humboldt.

This study also found that peer group influences tended to strengthen in regard to the students' institutional commitment as the student advanced in their class level, but was only significant in regard to the students' intent to persist among first year students. Peer group influences were also found to have a more powerful influence on the social and academic integration among women than among men. While peer group influences had a greater influence on the level of integration among women, thus increasing their level of satisfaction with their academics and with their peer relationships, it had a different influence among men. Among men, peer group influences were found to have a more
powerful influence on their level of institutional commitment, or confidence that Humboldt was the right choice of institutions, and their intent to persist at Humboldt State University. And finally, peer group influences were found to have a stronger influence in regard to the academic and social integration among white students than among students of color, with only slight differences found in regard to the institutional commitment and persistence among the different cultural groups.

The implications of these findings suggest that peer group influences have a powerful influence on the students’ social integration, academic integration, and institutional commitment regardless of their class level, gender, and ethnicity, although the extent of these influences varies slightly. Peer group influences also have a powerful influence on the students’ intent to persist, although there are larger variations in regard to class level and gender.

The greatest implications regarding peer group influences found in this study are reflected in the influences peers have in regard to their academic habits and academic intent. Students who reported that their peers were serious about their academic work and that their peers intended to continue at Humboldt had higher levels in both their institutional commitment and in their intent to persist at the institution. This finding further supports the idea that EOP program services that are designed to foster peer group
relationships among students should also include an element that specifically forward the academic mission of the university. Such activities include the EOP Fall Bridge program, the EOP Summer Bridge Program, the EOP mentoring program, the EOP Annual Honors Ceremony, faculty led mentoring and cultural programming activities, and the EOP Graduate School Workshop. Each of these program services are generalized in regard to their embedded academic component, with none having a specific disciplinary focus. Additional program services, which foster the development of an academic community within specific disciplines, may better serve EOP students in regard to their intent to persist at Humboldt State University, especially among upper division students. Such activities may include student involvement in discipline based student organizations, discipline based learning service programs and internships, and discipline based study groups.

Parental Encouragement

This study found that three measures of parental encouragement and involvement produced positive, although modest correlations with the students’ level of academic integration, with their level of institutional commitment, and with their intent to persist at Humboldt State University. These measures included the extent to which the students’ parents supported their decision to attend Humboldt State University, the extent to which
the students’ parents understood the academic challenges of the university, and the extent
to which the students’ parents offered meaningful advice about how to be successful in
college. These measures accounted for 9 percent of the variance in their level of
academic integration, between 5 and 9 percent of the variance in the students’
institutional commitment, and between 5 and 6 percent of the variance in the students’
intent to persist.

This study also found that while parental involvement had a positive influence on
women, no positive correlations were found among men. Additionally, no positive
correlations were found among students of color. Interestingly, however, students of
color who reported that their parents were involved in their academics during their high
school years were also more likely to report that their parents’ understood the academic
challenges they faced at Humboldt (which accounted for 45 percent of the variance
between the measures) and were also more likely to report that their parents’ offered
them meaningful advice (which accounted for 37 percent of the variance between the
measures).

These findings suggest that either EOP students of color experience a greater level of
continuity in the level of parental involvement during their transition from high school to
college, or that EOP students of color have a more difficult time becoming integrated into
Humboldt State University and therefore, rely more heavily upon parental involvement and encouragement as a continuing source of support from which they draw. Given the other findings in this study regarding the challenges that EOP students of color face as they transition into Humboldt, the latter is presumed.

The implications of these findings further support the idea that EOP program activities should include a component designed to enhance parental knowledge and familiarity with Humboldt State University and with their child’s experiences at the institution, particularly for the parents of students of color. Such activities mirror those suggested earlier in this section of the study, and include activities such as a parent’s newsletter or student created yearbook. These activities should also specifically address issues regarding the intercultural experiences and challenges that students of color face, as well as the interpersonal experiences that may help male students further inform and involve their parents about their transition into Humboldt State University.

**Cultural Inclusion**

This study included two items that specifically measured the level of cultural inclusion students experienced within the university sponsored social activities and within their course curriculum. Students of color were more likely to report that university sponsored
social activities included aspects of their cultural heritage, although this did not result in any positive correlations in regard to their social or academic integration, nor in regard to their institutional commitment or persistence at Humboldt. Additionally, students of color were less likely to report that aspects of their cultural heritage were included in their academic curriculum than were white students. Again, no positive correlations were found among students of color in regard to this measure.

Conversely, strong correlations were found among white students in regard to both items measuring cultural inclusion and their level of social integration, academic integration, institutional commitment, and intent to persist. These correlations suggest that white students are more likely to benefit from cultural inclusion within the institution than are students of color, which is consistent with theories of cultural reproduction and critical theory.

One measure that produced an equally powerful correlation among EOP students of color and white EOP students was the item measuring the extent to which the students’ peer group goals were consistent with the goals of the institution. This may provide insight into the type of supportive peer environment that, if fostered, can help EOP students of color overcome the cultural bias inherent within the institution. When students of color are involved with peers who are serious about their academics and who are committed to
staying at the institution, these peer relationships have a positive influence on the academic goals of the student, as well as on their academic and social integration into Humboldt State University. This finding is consistent with the findings of many other studies, and highlights the importance of helping students of color establish strong peer group relationships that not only help them meet their interpersonal, cultural, and social needs, but which are also supportive of the academic goals of the institution.

The significance of these findings suggest that EOP students of color can particularly benefit from the type of activities that foster strong peer group relationships, especially if those activities include components designed to enhance the academic involvement of the student groups they serve.

Summary of the Implications for EOP Program Services

The implications of this study for EOP program services are numerous and should help to guide future discussions regarding the ongoing changes in the programming, designed specifically to enhance the retention of EOP students who are at greatest risk. Such changes could include the use of additional questions during the EOP advisor’s initial interview and assessment of their student, to information based programming for parents.
to career development and discipline based programming for students. The recommendations included in this section of the study are summarized below.

Four questions were identified as possible predictive indicators for inclusion during the EOP advisors’ initial interview with their students, with recommendations for referral included.

Question 1: Were your high school friends serious about their academic work?
- Possible Referral: EOP Fall Bridge program, courses offering supplemental group instruction, peer group tutoring, and group study hall.

Question 2: Were the things you learned in your high school classes meaningful to your life?
- Possible Referral: Value-based or interest-based career exploration services or courses, EOP Fall Bridge, or the university sponsored Freshman Interest Group program.

Question 3 and 4: Were your parents involved with your academic life during high school? Do your parents support your decision to attend Humboldt State University?
• Possible Referral: Information dissemination activities such as an EOP parent newsletter, parent orientation, or a personalized student yearbook chronicling the students’ first year experiences.

Additionally, a number of other possible referrals were also identified for EOP students who encounter challenges beyond their initial semester at Humboldt State University and include:

• Cultural based activities designed to foster the development of interpersonal relationships among underrepresented students who share a similar cultural background

• Interest based activities designed to foster the development of intercultural relationships and which are particularly targeted towards including underrepresented students.

• Activities designed to increase academic satisfaction and intellectual growth, particularly among second and third year EOP students, such as career and professional goal clarification, faculty/student mentoring, discipline centered service learning, or discipline centered internships and research programming.
• Activities designed to foster peer group relationships, which include components that specifically forward the academic mission of the university, such as the EOP Fall Bridge program, the EOP Summer Bridge Program, the EOP mentoring program, the EOP Annual Honors Ceremony, faculty led mentoring and cultural programming activities, and the EOP Graduate School Workshop.

• Additional program services that foster the development of an academic community within specific disciplines, such as activities that lead to involvement in discipline based student organizations, discipline based learning service programs and internships, and discipline based study groups.

• Parent information programs that include information that specifically addresses issues regarding the intercultural experiences and challenges faced by students of color.

• Activities that include discipline based student discussion groups that address issues specific to students of color.
• Faculty/mentoring activities designed to enhance discipline based research which address the concerns of specific cultural communities.

• Student participation in internships, research opportunities, or summer institutes, which include components that address issues specific to students of color.
REFERENCES


APPENDIX

Survey Instrument

The questionnaire consisted of 59 items, with 48 items using a 6-point, forced response Likert scale to measure the responses. The 6-point Likert scale eliminates the neutral response and forces the respondent to agree or disagree with statements. The range of responses available were strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree, and not applicable. There were an additional 11 categorical items included for the identification of gender, ethnicity, household responsibilities, enrollment status, parental education, and year of college entry. The survey questions and cover letter are below.
Dear Student:

The EOP/Student Support Services program is conducting this survey as part of a continuing effort to improve our understanding of the issues our students encounter as they enter college. Your participation in this survey is very important to us, even if you are not currently enrolled at HSU. Please take a few minutes to complete this survey and return it in the postage-paid envelope provided. Your responses are confidential and your participation in this research is voluntary. If you prefer to respond anonymously, please do not write your name anywhere on this survey.

Thank you for your participation.

Sincerely,

Dan Saveliff

Associate Director, EOP
Circle the number corresponding to your level of agreement with each of the following statements. If you are not currently enrolled at HSU, please respond to the following statements based on the last semester you were enrolled at HSU. (A 6 point Likert scale was included in the original survey, with numbering 0 thru 6, representing strongly disagree, somewhat disagree, disagree, agree, somewhat agree, strongly agree).

1. It is important for me to get a college degree.
2. My parents (or guardian) encourage me to get a college degree.
3. My close friends are supportive of my decision to get a college degree.
4. I am confident I made the right decision by choosing to attend HSU.
5. My parents (or guardian) support my decision to attend HSU.
6. My close friends support my decision to attend HSU.
7. My parents (or guardian) are able to help me pay for college.
8. I am concerned that by attending HSU, I am putting a financial hardship on my family.
9. I am satisfied with the amount of financial aid I receive at HSU.
10. I can afford to attend HSU without receiving financial aid.
11. I send a portion of my financial aid home to help my parents financially.
12. I am concerned that while I am attending HSU, I cannot be as close to my family as I should be.
13. I am concerned that while I am attending HSU, I cannot be as close to my friends as I
should be.

14. It has been easy for me to meet and make friends with other HSU students.

15. Since coming to HSU, I have developed close personal relationships with other
students.

16. My interpersonal relationships with other HSU students have had a positive influence
on my personal growth.

17. My interpersonal relationships with other HSU students have had a positive influence
on my intellectual growth.

18. I believe many of my HSU friends are serious about their academic work.

19. I believe many of my HSU friends plan to continue at HSU (they do not intend to
transfer to another campus).

20. I am satisfied with my academic experience at HSU.

21. I am certain I have made the right choice about my academic major.

22. The HSU faculty I have had contact with are willing to spend time outside of class to
discuss issues of importance to me.

23. I believe my values are similar in general to those of my HSU professors.

24. My academic experience has had a positive influence on my intellectual growth.

25. At HSU, university sponsored social activities include events that recognize my
cultural heritage.
26. At HSU, my professors have included aspects of my cultural heritage as part of their course content.

27. The things I am learning in my college classes are meaningful to my life.

28. My parents (or guardians) understand the academic challenges I face at HSU.

29. My parents (or guardians) offer me meaningful advice about how to be successful at HSU.

30. I will re-enroll at HSU next fall.

The following questions pertain to the experiences and attitudes you held while you were enrolled in high school.

31. During my high school years, the racial composition of my neighborhood was similar to the racial composition of the high school I attended.

32. During my high school years, the racial composition of my high school was similar to the current racial composition of HSU.

33. During my high school years, school sponsored social activities included events that recognized my cultural heritage.

34. During my high school years, my teachers included aspects of my cultural heritage as part of their classroom teaching.

35. During my high school years, the things I learned in class were meaningful to my life.
36. During my high school years, I believe my values were similar in general to those of my high school teachers.

37. During my high school years, many of my friends were serious about their academic work.

38. During my high school years, many of my friends planned to go to college.

39. During my high school years, my parents (or guardians) understood the academic challenges I faced in high school.

40. During my high school years, my parents (or guardians) encouraged me to spend time at home doing my homework.

41. During my high school years, I acted differently at school (as compared to my behavior at home) in order to fit in with my high school peers.

42. During my high school years, most people who knew me would have been surprised by how differently I acted at home.

43. During my high school years, I would speak with my parents (or guardian) about the things I was involved in at school.

44. During my high school years, one or more of my teachers were aware of what my life was like at home.

45. During my high school years, I discussed aspects of my cultural heritage in my classes and coursework.

46. During my high school years, I would speak to my friends about my goal of going to college.
47. During my high school years, I considered school as a way of escaping from my family.

48. During my high school years, I considered school as a way of escaping from my neighborhood.

Please answer the following questions by filling in the circle that corresponds with your answer. If you are not currently enrolled at HSU, please answer based on your situation during the last semester you were enrolled at HSU.

49. Are you currently working off-campus? (Yes/No)

50. Are you currently responsible for the care of others (including children, brothers, sisters, parents, grandparents, other family)? (Yes/No)

51. Do part of your current household responsibilities include cooking, cleaning, or doing laundry for other members of your family? (Yes/No)

52. Are you currently living at home with parents or guardians? (Yes/No)

53. Ethnicity: (Asian, Southeast Asian, Hawaiian, Pacific Islander, Mexican American/Hispanic/Latino/Chicano, Native American, African American, White, Other (specify))

54. Gender: (Male/Female)

55. Age: _______ (years)

56. What year did you first enroll at HSU? (Fall 1998, Fall 1999, Fall 2000, Fall 2001)
57. Are you currently enrolled in HSU? (Yes/No)

58. Is English the primary language spoken in your parents (or guardians) home? (Yes/No)

59. Enter the code for the highest educational level completed by your parents:

   Mother _______   Father _______