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GROUP DIFFERENCE IN PSYCHOSOCIAL DEVELOPMENT OF
UNDERGRADUATE STUDENTS

By

Charles L. Pride

B.A., Western Kentucky University, 1987

M.A., Western Kentucky University, 1989

A Dissertation
Submitted to the Faculty of the
Graduate School of the University of Louisville
In Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy

Department of Leadership, Foundations, and Human Resource Education
University of Louisville
Louisville, Kentucky

In Cooperation with
Department of Educational Administration, Leadership and Research
Western Kentucky University
Bowling Green, Kentucky

May 2007

GROUP DIFFERENCE IN PSYCHOSOCIAL DEVELOPMENT BY GREEK
STATUS, GENDER, AND RACE OF UNDERGRADUATE STUDENTS

By

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B.A., Western Kentucky University, 1987
M.A., Western Kentucky University, 1989

A Dissertation Approved on

January 29, 2007

By the following Dissertation Committee:

Dissertation Director

DEDICATION

This dissertation is dedicated to my family

Julie, Emily and Will Pride

who make each day a new adventure.

ACKNOWLEDGEMENTS

I would like to thank my major professor, Dr. John Keedy, for his insight, knowledge and patience. I would also like to thank my other committee members, Dr. Namok Choi, Dr. Paul Winter, Dr. Mary O’Phelan, and Dr. Aaron Hughey. I would like to express my thanks to my wife, Julie, for her understanding, help, and patience during this journey. Also, I would like to thank my colleagues at work, Scott Taylor, Howard Bailey, Gene Tice, Heather Strode, Stephanie Scott, and Amanda Phillips. They listened, advised, and encouraged me during this journey. Finally, I would like to thank the Order of Omega Honor Society for the fellowship during my work towards this degree.

ABSTRACT

GROUP DIFFERENCES IN PSYCHOSOCIAL DEVELOPMENT OF UNDERGRADUATE STUDENTS

Charles L. Pride

January 29, 2007

The purpose of this dissertation is to examine group differences in psychosocial development by affiliation, gender, and race of undergraduate students. The design was causal-comparative. The independent variables were gender (female/male), race (Black/White), and affiliation (Greek/non-Greek). The dependent variables were the three subscales obtained from the Student Developmental Task Lifestyle Assessment for Purpose (PUR), Autonomy (AUT), and Mature Interpersonal Relationships (MIR). The Student Developmental Task and Lifestyle Assessment (SDTLA) was used in this study. The research sites included Eastern Kentucky University, Murray State University and Western Kentucky University. Seven hypotheses were tested by a MANOVA design. The major finding was the significance of race and affiliation on Autonomy and Purpose. In particular, the disordinal interaction upon affiliated Black students was significant.

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CHAPTER I

INTRODUCTION

As higher education moves into the 21st century, it is moving into a new age of accountability. In this age, higher education will be held more answerable for the funds that it receives and the educational experience that colleges and universities supply to their students. Federal and state governments have started to apply performance indicators to their funding of higher education. At no time in the history of higher education in the United States have there been the expectations that are now being placed upon institutions of higher learning.

In 1997, the state of Kentucky created the Council on Postsecondary Education. This council was charged with developing and implementing systematic evaluations of the quality and effectiveness in Kentucky postsecondary educational institutions. It was also charged with monitoring the performance of the various institutions in relation to instruction, research, and public service. One of the Council's main purposes was to tie accountability to performance goals. Other areas of focus were retention of students and graduation rates of students from the individual institutions.

Higher Education in Kentucky

The Kentucky Council on Postsecondary Education published "2020 Vision: An Agenda for Kentucky's System of Postsecondary Education (1997)." The vision included (a) educated citizens who want advanced knowledge and skills and the know how to

acquire them, (b) globally competitive businesses and industries respected for their knowledgeable employees and advanced production and services, (c) vibrant communities offering a high standard of living, (d) scholars and practitioners who are among the best in the world, dedicated to creating new ideas, and technological knowledge; and (e) an integrated system of elementary and secondary schools and providers of postsecondary education, committed to meeting the needs of students and the Commonwealth, and acclaimed for excellence, innovation, collaboration, and responsiveness (Kentucky Council on Postsecondary Education, 1997).

With this vision, a call to change was initiated. A responsive and flexible system of postsecondary education was needed to help Kentucky flourish in the 21st century. The new Council wanted to cultivate an appetite for knowledge and skills. The Council stated that nearly half of the state's population lacked the skills to participate fully in the economy (Kentucky Council on Postsecondary Education, 1997). The proportion of the population without a high school diploma was greater in Kentucky than all but one of the states that the Council sees as competitors for business opportunities. Kentucky ranked almost last in the nation in the percentage of citizens with a bachelor's degree. Factors that contributed to Kentucky's plight were high school dropout rates, uneven access to postsecondary resources, low motivation, high attrition, and adult illiteracy (Kentucky Council on Postsecondary Education, 1997).

The Council's vision included everyone as a stakeholder in the state's postsecondary education system. This included students, graduates, businesses, industry and labor, the public education community, high school graduates, communities and

regions, the general public, and state government. Students will be able to choose from a richer array of education and training opportunities. Adult students will be able to experience anytime, anyplace education. There will be less bureaucratic red tape and loss of academic credit due to an individual transferring from institution to institution.

Graduates of four-year institutions will be critical thinkers, lifelong learners with skills and knowledge needed in a technologically advanced society. Business, industry, and labor will have a workforce that is well trained. Advanced research will create new technologies that can be transferred to businesses and labor groups. The Public Education Community will experience a new level of responsiveness from higher education. Teacher education programs and professional development opportunities will be designed to help implement school reform and meet the needs of students. High school graduates will be fully prepared for the future because teachers will be fully prepared. Communities and regions will have access to postsecondary resources and services that are designed to meet their distinct needs. “One size fits all” does not apply to Kentucky postsecondary education anymore. The general public will benefit because education, research, and service will improve the quality of their lives. Economic development, improved education, and strengthened financial position will help the state government (Kentucky Council on Postsecondary Education, 1997).

The vision talks of “investment” in postsecondary education. State dollars are a valuable part of the investment. Investment also includes the time and talents of governing boards and institutional leaders that are committed to act in the best interests of the state. Investment in faculty results in students becoming active learners, creating new

technologies and working within and beyond the boundaries of their institutions. An investment in student aid makes postsecondary education financially accessible to all Kentuckians. An investment in staff provides services to students and other customers. Investing in libraries provides access to knowledge and information through both traditional and electronic methods. Investing in technology allows faculty to teach better, expands the availability of information, and helps students prepare for the modern workplace. An investment in physical facilities fosters better teaching and learning and support cooperation among multiple institutions providing instruction (Kentucky Council on Postsecondary Education, 1997).

The vision plan agenda set in motion a fundamental shift in how Kentuckians should think about postsecondary education. The plan asked questions for the future of postsecondary education in Kentucky. The questions include the following: (a) Are high school graduates going into postsecondary education in greater numbers?, (b) Are our students ready for the global marketplace of the 21st century?, (c) Is Kentucky creating its own businesses as well as attracting new businesses, industries, and jobs?, (d) Are governments and corporations investing more research and development dollars in Kentucky's research universities?, and (e) Have our schools, colleges, and universities become nationally respected for their programs and their commitment to help build better lives for all Kentuckians (Kentucky Council on Postsecondary Education, 1997)?

In 1998, the Council on Postsecondary Education made these observations about higher education in Kentucky: (a) Kentucky ranked 48th in the country in the percentage of adults with a bachelor's degree or higher, (b) Less than half of Kentucky's high school

graduates enter college the fall semester following their graduation from high school, which is significantly below the national average of 67 percent, (c) many of the high school students who attend college are not as academically prepared as they should be, and (d) the persistence and graduation rates of Kentucky's undergraduate students are considerably below the national average. Kentucky's six-year graduation rate of 36 percent for bachelor students compares unfavorably to the five-year rate of 44 percent found in a national survey conducted by ACT (Kentucky Council on Postsecondary Education, 1998). Greater numbers of Kentuckians are attending college, but a significant number leave college without earning a four-year degree. Forty-five percent of the United States population had one or more years of college, compared to 33 percent in Kentucky. Twenty percent of the United States population has earned at least a four-year degree, compared to 14 percent in Kentucky. This type of assessment has changed the environment of higher education in Kentucky (Kentucky Council on Postsecondary Education, 1998).

Assessments have become a very important part of the higher education process in Kentucky. Institutions make extensive use of various assessment findings. Program improvements based on program reviews and assessments of institutional effectiveness are being measured in terms of student learning outcomes in the major fields of study and general education courses and levels of students' satisfaction with instruction. Student progress is being monitored through studies of populations such as students and alumni at many levels. Other populations being monitored include students that withdraw, provisionally admitted students, transfers, teacher education graduates, new freshmen,

minority students, and commuter students. Assessment results have been integrated into institutional strategic planning processes and funding allocation decisions based on accountability and assessment results. Institutions are improving student support services such as advising, registration, and student life programming based on results from assessments and surveys of institutional effectiveness (Kentucky Council on Postsecondary Education, 1998).

Psychosocial development can be used as a conduit for retention of students and lead students to graduation because it develops skills that are needed to complete a college education (Chickering, 1981; Pascarella & Terenzini, 1991). If increasing psychosocial development develops skills that are needed to complete a college education, then it should be a goal of institutions of higher education in Kentucky as outlined by the vision of the Kentucky Higher Education Reform Act.

Statement of Problem

Institutions are working on many ways to increase their retention of students and in turn raise their graduation rates. Institutions use many programs including student tutoring, student support programs, increased academic counseling, and peer mentoring. Institutions also seek to involve students in organizations and campus activities. Research (Abrahamowitz, 1988; Astin, 1975; Astin, 1977) has shown that student involvement leads to higher retention of students, a higher level of student satisfaction with their institutions and higher graduation rates. These organizations and activities can help in the development of students.

Organizations are a component of developing communities, which in turn leads to

student development. Boyer (1987) supports the idea of building communities within institutions of higher education. Community can be a residence hall or a student organization. This sense of community can lead to social integration, which can precipitate involvement in college community. This, in turn, enhances the persistence and satisfaction reported by students at their particular institution. One such entity is Greek-letter organizations (fraternities and sororities).

Are fraternities and sororities meeting the psychosocial needs of students?

Increased psychosocial development leads to increased retention and graduation rates of students. Fraternities and sororities should be meeting these needs to be an asset to their institution (Baier & Whipple, 1990).

Fraternities and sororities have been a significant part of campus life at many institutions. Relatively little research has been conducted on Greeks and the developmental issues associated with these groups. Some members in the field of higher education say that Greek-letter organizations are antithetical to the mission of the educational institution (Baier & Whipple, 1990; Hughes & Winston, 1987; Maisel, 1990; Marlowe & Auvenshine, 1982; Wilder, Hoyt, Surbeck, Wilder, & Carney, 1986). Others believe that Greek-letter organizations add to the university community (Astin, 1984; Strange, 1986). Since little research has been done on fraternities and sororities, one area to investigate is the relationship that membership in these organizations might have with the psychosocial development of a student. Assuming that higher levels of psychosocial development are desirable or an appropriate outcome, this study could provide evidence concerning the role of these organizations on the university campuses. Pascarella and

Terenzini (1991) noted that there was little evidence to suggest that Greek-letter organizations promoted the development of students' independence or autonomy or that there was much evidence to support that Greek-letter organizations hindered these developments.

The limited amount of research performed to date on Greeks has been almost exclusively on historically White fraternities and sororities weighing heavily on the fraternity side. Many of the studies have concentrated on major public and small selective liberal arts colleges. This study examined both Black and White Greeks at regional residential campuses in Kentucky. Assuming that higher levels of psychosocial development are a desired outcome for higher education, this study can provide evidence concerning Greek-letter organizations and psychosocial development. This study adds to the body of knowledge concerning gender and ethnic differences in psychosocial development. This study addresses a high-profile student group that has had little research in the area of psychosocial development.

Purpose

The purpose of this study was to examine selected levels of psychosocial development as defined by Establishing and Clarifying Purpose (PUR), Developing Mature Interpersonal Relationships (MIR) and Developing Autonomy (AUT) (Miller & Winston, 1990) at three regional universities in Kentucky using the variables of Greek affiliation (Greek/ non-Greek), race (Black/White) and gender (male/female).

Hypotheses

The following hypotheses were tested in this study:

Hypothesis 1: There will be no significant 3-way interaction effect of race, gender, and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 2: There will be no significant 2-way interaction effect of race and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 3: There will be no significant 2-way interaction effect of race and gender on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 4: There will be no significant 2-way interaction effect of gender and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 5: There will be no significant main effect of affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 6: There will be no significant main effect of gender on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 7: There will be no significant main effect of race on psychosocial development measured by the three components (PUR, AUT, MIR).

Definition of Terms

Age of Accountability—defined as the era that higher education finds itself by the Kentucky Council of Postsecondary Education (1998). Higher education must prove itself worthy of the funds that it receives from its various constituencies.

Autonomy (AUT)—an area of psychosocial development, which reflects the ability to attain one's goals with minimal help from others.

Council on Postsecondary Education (CPE)—created in 1997 by the General Assembly of Kentucky to oversee all aspects of higher education in Kentucky including universities, community colleges, and postsecondary technical schools.

Developing Mature Interpersonal Relationships (MIR)—an area of psychosocial development that reflects one's ability to relate appropriately to friends, parents and people of different ethnic groups and backgrounds.

Developmental Theory—ways of defining developmental issues involving individuals at various stages in their life.

Establishing and Clarifying Purpose (PUR)—an area of psychosocial development that reflects one's ability to initiate career and lifestyle plans.

Greek—a student who is a member of a Greek-letter organizations.

Greek-letter organizations—any student organization that is a member of the National Interfraternity Conference (NIC), National Panhellenic Conference (NPC), or the National Pan-Hellenic Council (NPHC) or any group that is recognized by the university as a social fraternity or social sorority.

Non-Greek—a student who is not a member of a Greek-letter organization.

Psychosocial development—the change in an individual's beliefs, values, and behavior resulting from the interaction between the individual and society.

CHAPTER II

REVIEW OF LITERATURE

In this chapter the researcher reviews: (a) the current political and economic environment of higher education; (b) development theory for college students; (c) psychosocial development theory and research; (d) the importance of student involvement concerning psychosocial development during one's college career; and (e) Greek-letter organizations and the research on these organizations.

Current Political and Economic Environment of Higher Education

Higher education is a major topic in many government circles; it has come to mean much more than classroom learning. Indeed, institutions of higher education have a multitude of tasks to perform. The many tasks that higher education performs are closely tied to the amount of funds they have at their disposal. With increasing frequency, colleges and universities are being held more and more accountable for the public funds they receive. Thelin (1994) says,

By 1990, reports from virtually every governor's office in the country indicated severe shortfalls in the state revenues, in addition to other sustained indications of a depressed economy. At the same time, federal support for university-based research waned, making even the most prestigious universities vulnerable to cutbacks. If there was an apt motto for the situation facing higher education in the last decade of the twentieth century, it was to "do more with less." (p. 19)

In 1997-98, state support for higher education in the United States reached the \$9.8 billion dollar mark. In Kentucky, this total reached \$775 million (Kentucky Chronicle of Higher Education Almanac, 1999). It is important to note that these totals do not include what institutions receive in tuition, grant, and research revenue. Stakeholders (parents, students, governments, communities, etc.) are also investing large amounts of money into institutions. The universities have to justify their funding needs more than ever before.

The constituents want to know where their dollars are going and if they are being well spent. This leads to more accountability for higher education. Colleges and universities are under increasing pressure to ensure that graduates are equipped with the necessary skills for the information age. College students represent the future of our society in the technological era that we have entered. Universities use graduation rates as one measure of what they are accomplishing. A key to increasing the number of graduates is to increase student retention rates.

University administrators spend many hours working on student retention. A student's performance during his/her first semester is a valuable indicator of the student's probability for persistence and retention at an institution. More than 35% of all college entrants leave higher education without earning a degree. Seventy percent of these students drop out after the first year of college. The typical institution can expect only 47% of a typical entering class to graduate in the United States. In Kentucky the graduation rate is only 41% (Kentucky Council on Postsecondary Education, 2005). Obviously, most individuals that drop out do not get the training they will need to be

successful in the future. With each generation, a college degree becomes more and more important. The percentage of our population who has a college degree is growing, but is still relatively small.

Currently in the United States, 27.2% of the population holds a college degree. In Kentucky, only 19.3% have college degrees (Kentucky Council on Postsecondary Education, 2005). Graduation rates are a key accountability statistic, although they do tend to differ by institutional type, (i.e., public, private, commuter, or residential). The graduation rates for public institutions in Kentucky range from 25% at Eastern Kentucky University to 50% at the University of Kentucky. Less than one of every two students who start college in Kentucky graduate. It is these statistics that have caused many legislators to reevaluate higher education.

In 1997, the Kentucky General Assembly reviewed the higher education system in Kentucky. The Kentucky Postsecondary Improvement Act of 1997 (House Bill One) expanded and enhanced the landscape of postsecondary education in Kentucky. This review led to many changes in the structure of higher education, including the creation of the Council of Postsecondary Education. This agency was formed to streamline government oversight of higher education and to make higher education more accountable for the funding it receives. It was the General Assembly's goal to make higher education more responsive to the needs of the people of the Commonwealth of Kentucky.

House Bill One changed how postsecondary education was defined and how its activities and programs were evaluated. The legislation also created the Kentucky

Community and Technical College System (KCTCS), an entity charged with coordinating the efforts of the Commonwealth's community colleges and postsecondary technical schools. This new system involved monitoring the institutions' success at achieving performance goals in four major areas: educational quality and outcomes, student progress, research and service activities, and use of resources. The accountability framework was tied to the development of a statewide strategic agenda, the creation of institutional missions that support that agenda, and the establishment of a funding system driven by the Strategic Investment and Incentive Funding Program (Kentucky Council on Postsecondary Education, 1997).

The passage of House Bill One in 1997 restructured the governance of postsecondary education and also committed Kentucky to establishing a high performance system that enhances the state's future economic well being. The legislation created six incentive funds to foster research, technology, workforce development, and other quality programs. Also, the General Assembly approved 40 million dollars in new funds for postsecondary education with a promise of more to come. Higher education's research activities were recognized as an essential component of the state's economic development and as critical to Kentucky's and the nation's efforts to compete in the global market (Kentucky Council on Postsecondary Education, 1997).

In Kentucky Revised Statutes 164.095 (2), the Kentucky General Assembly outlined its intent for postsecondary education in Kentucky. It is as follows:

It is the intent of the General Assembly that an accountability process be implemented which provides for a systematic ongoing evaluation of quality and

effectiveness in Kentucky postsecondary educational institutions and to provide a method for evaluating each institution's progress toward meeting specific goals, principles, strategies, objectives, and benchmarks as set forth in the strategic agenda established in Section 6 of this Act. It is further the intent of the General Assembly that the accountability process monitors performance at the institutions in each of the major areas of instruction, research, and public service, while recognizing the individual missions of each of the institutions. The accountability process shall provide for the adoption of system wide and individual performance goals with standards identified with the advice of the postsecondary educational institutions and the Council on Postsecondary Education. (p. 456)

Another issue of the higher education reform is the moral side of higher education. Are we developing students who can perform in today's society? Are they developing skills that will help them be good citizens? Are they developing skills that will allow them to survive economically?

For example, college should foster the development of job skills. Statistics show that individuals with a college degree earn more than individuals without one (Pascarella & Terenzini, 1991). In a Census Bureau report (1998) it was reported that a person with a high school degree earned on average, \$22,154 per year. By contrast, an individual with a bachelor's degree earned approximately \$38,112, annually.

A term that has recently appeared in the higher education literature is "value-added." In addition to the monetary reward of a college education, a college experience

should also enhance one's quality of life. For example, through the development of appropriate social, organizational, and communication skills, people are prepared for their journey through life. These extra benefits are referred to in higher education as being "value added." The term, value-added, agrees with Pascarella and Terenzini's (1991) definition of higher education:

In terms of educating undergraduate students, these include (but are certainly not limited to) such lofty goals as transmitting the intellectual heritage of Western civilization; fostering a high level of verbal and mathematical skills; developing an in-depth understanding of social, cultural, and political institutions; facilitating one's ability to think reflectively, analytically, critically, synthetically, and evaluatively; developing one's value structures and moral sensibilities; facilitating personal growth and self-identity; and fostering one's sense of career identity and vocational competence. In addition, there are the less lofty but fully appreciated goals of socializing the individual for effective functioning in the middle class and acting as an important entree to positions of status, influence, and wealth in American society. (pp 1-2)

Pascarella and Terenzini's definition implies that higher education has a moral responsibility. One of the purposes of college is to develop students to be part of our democratic society. Boyer (1987) states that society makes different and contrary demands on higher education. Many of the nation's colleges seem to be more successful in credentialing than in providing a quality educational experience for their students.

The area of higher education concerned with the non-academic development of

students is student affairs. The field of student affairs evolved in response to the growing awareness of the importance of out-of-classroom experiences and retention of students. Because the transition to college is marked by complex challenges in emotional, social, and academic adjustments, student affairs practitioners use developmental theories to explain what college students are experiencing and develop programs that are developmentally based.

The average college students typically spend only about 15% to 20% of their time in the classroom. Most of a student's time is spent outside of the classroom. Therefore, a major assumption in this study is that a greater emphasis on student development can potentially lead to higher graduation rates. Higher education's accountability will look more to the development of a student as a whole than just classroom learning.

Developmental Theory

Developmental theory provides the general and specific criteria for designing physical environments, programs, policies, and services that are appropriate for persons at different maturation levels. Kniefelkamp, Parker, and Widick (1978) noted that a comprehensive theory of student development did not exist. They did find, however, that theories seemed to cluster into specific groups. Currently, there are at least four major categories of developmental theories that student affairs professionals use. They include: (a) cognitive-structural, (b) person-environment interaction, (c) typological, and (d) psychosocial.

Cognitive-Structural Theory

Cognitive-structural theory refers to the sequence of meaning-making structures

through which people perceive, organize, and reason about their experiences.

Developmental changes result from learning how to deal with the confusion and disequilibrium that stem from cognitive conflict. Stages are used to describe cognitive development. Hierarchical in nature, each successive stage incorporates the functional parts of the previous stages. Additionally, stages follow invariant sequences that are not defined by culture (Rodgers, 1989).

Leading cognitive-structural theorists include (a) Piaget, who defined the basic concepts and assumptions of this family of thought, (b) Kohlberg, who refined and extended Piaget's work on moral development, and (c) Perry who defined the structures of cognitive-structural theory in positions and stages.

Piaget (1965) interviewed and questioned a large number of children from the Geneva and Neuchatel schools to gather data concerning concepts and assumptions. The treatment, sample size, and ways of analyzing the data were not mentioned in Piaget's work. Piaget stressed the importance of heredity in cognitive development but also noted the role played by the environment, which presents experiences to which the individual must react. Social interaction with peers, parents, and other adults is especially influential in cognitive development. Social interactions include school, family life, church and almost any event in which a child can interact and/or view others interacting.

Piaget noted that an individual was morally autonomous if independent of any external influences, especially of adult authority. General attitude toward rules and laws can be heteronomous (dependent upon others for direction), semi-autonomous (somewhat dependent on others for direction), or autonomous (self-directed), according to the

manner with which an individual relates to moral standards (Piaget, 1965).

Kohlberg (1981) attempted to describe moral reasoning within cognitive development. Kohlberg derived his moral development and justice reasoning stages from a longitudinal study of seventy-two boys between the ages of ten and sixteen over a twenty-year period with cross-section studies of an international sample of urban and rural persons from different cultures. Kohlberg analyzed the data through statistical and qualitative methods. Kohlberg's theory concerned the structures of meaning that defined what one should do, not the content of what one does. Different contents or different solutions to a dilemma could be obtained with the same structure of reasoning.

Kohlberg defined cognitive development in six stages. Stage 1 was the punishment and obedience orientation stage. In this stage, decisions were made as a direct consequence of actions that were determined to be right and wrong. The individual acted to avoid being punished. In Stage 2, the instrumental-relativist orientation, decisions were made pragmatically, based on equal exchange. In Stage 3, the interpersonal concordance, or "good boy, nice girl" orientation, good behavior was defined as that which pleased others and gained their approval. In Stage 4, the "law and order" orientation, actions were based on upholding the system and obeying the rules of society. In Stage 5, the social contract, or legalistic orientation, right action was determined by standards that had been agreed upon by society, but an awareness existed that rules could be re-evaluated and changed. In Stage 6, the universal ethical principle orientation consisted of self-chosen ethical principles, including justice, equality, and respect for human dignity, as a guide behavior (Kohlberg, 1981).

Perry (1970) conducted a longitudinal study, based on annual interviews with 112 Harvard students from 1954 to 1963. The interviews were conducted in late May and June of each year and were conducted in as open-ended a way as possible to avoid dictating the structure of a student's thought by the design of the questions. This was the first systematic attempt to investigate the intellectual development of college students. From these interviews, Perry developed a scheme composed of nine positions, or stages, to describe the progression of students' cognitive development. Perry analyzed the data through statistical and qualitative methods.

Perry divided his nine positions into three groups, which are called the Modifying of Dualism (position 1, 2, 3), the Realizing of Relativism (position 4, 5, 6), and the Evolving of Commitments (position 7, 8, 9). In Modifying of Dualism, a student starts with the belief that right answers exist to all questions and that authorities have the answers. As the positions progress some uncertainty is recognized. Starting in the Realizing of Relativism, uncertainty is seen as extensive that all opinions are equally valid and students begin to rely less on authorities. A shift occurs that the student comes to view knowledge as contextual and relative and is able to make judgments based on evidence and the merits of an argument. With the Evolving of Commitments, students test and evaluate various commitments leading to the development of a personalized set of values, lifestyle, and identity.

In summary, Piaget, Kohlberg, and Perry advanced the theory of cognitive structure to explain the changes of children and young adults. The stages are viewed as arising sequentially and always in the same order, regardless of cultural conditions.

Piaget defined the basic concepts and assumptions of Cognitive Structure theory.

Kohlberg refined and extended Piaget's work on moral development and began working with college students. Perry defined a progression of the intellectual development by working with college students. Both Kohlberg and Perry have been used extensively in college teaching and student affairs. Other researchers argue that the environment plays a pivotal role in an individual's development. This theory is person-environment interaction.

Person-Environment Interaction

Person-environment interaction refers to various conceptualizations of the college student and the college environment and the degree of congruence that occurs when they interact. Researchers of person-environment interaction models address the idea that people are influenced systematically by their environment. Several different researchers have developed theoretical models of person-environment interaction, including Barker, Stern, and Moos (Rodgers, 1989).

Barker's (1968) methods, theories, and data were reported from 20 years of research at the Midwest Psychological Field Station in Oskaloosa, Kansas. Barker's methods were primarily observations and case studies through the Field Station. Barker found that individuals within the same environment might behave in highly similar ways despite their individual differences.

Barker (1968) approached person-environment relationships based on the premise that environments shape the behavior of the person who inhabited the environments through the operation of "behavior settings" (p.18). Behavior settings were naturally

occurring environmental units consisting of one or more standing patterns of behavior with the surrounding environment similar in form to the behavior. Examples included a football game, a classroom lecture, a worship service, or a piano lesson. Another example was a small high school setting. The relative scarcity of population made students more important. It sometimes happened that everyone in a setting of a small school was a key person, and knew it. Barker (1968) noted that the effect of any behavior setting was related to the proportion of the number of people in the setting to the physical size and essential functions of that setting.

Stern (1970) used the “need-press” model to explain person-environment. Stern and his colleagues administered the Activities Index, a personality measure, and the College Characteristics Index (reliability and validity of instrument test-retest reliability .68 to .86), a measure of environmental characteristics to almost 10,000 students at some 100 different institutions. Out of the 10,000 students, 1076 students responded to both instruments and were nontransfer upper division matriculants. The individual students were chosen by volunteers, direct solicitation, and others were the result of locally initiated studies by a college administrative staff member, faculty, or doctoral candidate. The key concepts found by Stern were (personal) needs and (environmental) press. Needs were defined as the organizational tendencies that seem to give unity and direction to a person’s behavior. Press referred to the individual unique and private view of the world that each person had of the events in which he or she took part.

These concepts were related through three primary assumptions of the model. First, behavior was a function of the individual and the environment. Second, the person

was represented in terms of needs, which were inferred from self-reported behavior. Third, the environment was defined in terms of press, which was inferred from the aggregate of self-reported perceptions or interpretations of the environment. Behavior was studied as a function of the congruence of need and press, or of the congruence between explicit press (stated purposes of an institution) and implicit press (perceived policies and practices as reported by constituents).

Moos (1976) extended the work of Barker and Stern by adding the individual's social climate to person-environment theory. Moos primarily was interested in the consensually perceived climate, which he measured by having respondents describe both the usual patterns of behavior that occur in their environment and their own subjective impressions of the environment. Moos noted that the environment affects the individuals who inhabit it via the social climate. Data and information were collected from the Social Ecology Laboratory and Psychiatry Research Training Program at Stanford University over a ten-year period. Moos did not define his subjects, sample and method. He used the many theories that have been espoused to define his social climate theory.

Moos (1976) identified three clusters or broad categories of social climate dimensions. These clusters were relationship dimensions (i.e., how people affiliate together), personal development or goal orientation dimensions (the available opportunities for personal growth or task performance), and system maintenance and system change dimensions. The extent relates to how the environment was responsive to the individual. The environmental system was defined by its physical attributes, policies and other organizational factors, suprapersonal or human aggregate characteristics, and

social climate.

In summary, Barker (1968) conceptualized the person-environment interaction theory by introducing behavior settings. A person's environment is very important to the way a person develops. Behavior is also linked to the number of people in the environmental setting. Stern (1970) takes person-environment interaction a step further with the need-press model. Needs are the direction a person is given by an organization and press is the individual view that an individual takes of the world. Moos (1976) extends Barker's and Stern's theories by adding the social climate as a factor of development. Social climate is the established norms of an individual's settings and his or her own subjective impressions of the setting. Person-Environment Interaction theory showed that the environment or behavior setting can have an effect on an individual. These environments can include college campuses, student organizations, or fraternities and sororities.

In contrast, other researchers found that besides cognitive structure and environment, personality type played a role in an individual's development. This theory is called typological theory.

Typological Theory

Typological theory refers to interpersonal interactions, such as cognitive style, temperament, personality type, and patterns of socialization that may cause individual variations in the processes and patterns of outcomes in development. Typological models categorize individuals into groups based on these distinct characteristics. Typically, they focus on characteristic differences in the ways individuals perceive their world or respond

to conditions in it (Rodgers, 1989).

Jung (1971) conducted considerable research on personality types although he did not explain his methodology. Jung used a preferred pattern of mental functioning which consisted of preferred ways of taking in information (e.g., lecture or seminar method of classroom style), making judgments (concrete basis or theoretical understanding), reflecting or interacting (extrovert or introvert), and moving toward judgment or staying open to taking in information (snap decisions or throughout). This pattern of mental functioning led to dispositions, resulting in tendencies to select learning environments compatible with one's type and to use certain learning tools and avoid others.

The Myers-Briggs typologies use four dimensions (extroversion-introversion, sensing-intuition, thinking-feeling, and judgment-perception) to explain Jung's research. This personality typology can help facilitate both learning and development by informing professionals about program and workshop design involving stylistic differences, team building and delegation about task preferences, and focusing attention on the fact that stylistic differences need to be taken seriously.

Heath (1964) suggested that different types of students responded to different sources of support and different challenges for growth. Heath followed a sample of entering freshmen at Princeton University ($N = 36$) through their college careers. His methodology used over 700 interviews, case studies, and direct observations. His model integrated a developmental level (low, medium, or high) with temperamental style (personality type) to present a holistic picture of the self. Heath concluded that the rate of maturing varied across the different sectors of the personality. He concluded that students

who represented different types responded differentially to different challenges and sources of environmental support.

Jung (1971) laid the groundwork for typological theory. His basic assumptions outline personality types and how to use the personality type to facilitate personal development. Heath's work grew out of the reflective practice of a college counselor working with traditional-aged college students. They both showed systems of identifying personality types in which one can develop programs to facilitate growth and development of individuals particularly college students. Another type of theory that builds upon cognitive structure, person-environment, and typological is psychosocial theory.

Psychosocial Theory

In Pascarella and Terenzini's (1991) review of the impact of college, they defined psychosocial development in two parts. The first part consisted of the personal, internal, and psychological aspects of an individual. This part included the constructs of self, ego, and identity. The second part referred to the individual's personal orientations to the external world and the relationships between the self and society. Psychosocial development plays an important part in the broad mission of higher education. Pascarella and Terenzini's definition of psychosocial development was taken from previous research defined by their review of the subject.

Psychosocial refers to the developmental issues or tasks and events that occur throughout the life span and to a person's pattern of responses to issues and adaptations to events. Psychosocial development is concerned with personal, psychologically-oriented

aspects of self and the relationships that exist between the self and society. This type of development is significantly influenced by the interactions that occur between individuals and their environments (Miller & Winston, 1990). Psychosocial theories describe where the student is developmentally, and explain how developmental changes occur.

Psychosocial theories characterize the “what” students do in the development process.

They characterize the concerns and decision-making process of students.

Erikson, Havighurst, and Chickering built the foundations of psychosocial developmental research. Their theories attempted to describe the development tasks that occupy adults at different phases in their lives. The stages are started by a convergence of biological and psychological changes within the person and environmental demands that represent a given culture’s social norms and roles for a given age range. These stages tend to occur in sequence. The order of the stages can vary according to cultural and gender-related influences. How people resolve or fail to resolve the tasks of a given stage has a cumulative effect on their ability to resolve the tasks of future stages (Rodgers, 1989).

Erikson (1968), Levinson (1978), Havighurst (1953), Chickering (1969), and Miller and Winston (1990) conducted most of the research of psychosocial theories. This review will deal with the concept of psychosocial development theories especially in dealing with the 17- to 25-year-old age group, the age group of most college students. Starting with Erikson, their theories will be outlined in the following pages.

Erikson’s psychosocial theory

Erikson (1968) used case studies and interviews to develop his theory. He

participated in studies sponsored by the Yale Department of Psychiatry, Yale School of Medicine, and the University of California's Institute of Child Welfare. The studies included a wide range of children and cultures. Erikson used this wide range of field studies to develop his theory. He regarded psychosocial development as epigenetic, meaning that there is an underlying structure to development throughout the life span. In other words, development unfolded in a series of predictable stages.

Erikson concluded that an individual had a ground plan and the plan had different parts. Each part had its time of special ascendancy, until all parts had arisen to form the whole. Development occurred due to this epigenetic unfolding. Both biological and psychological internal changes interacted with environmental roles and other cultural expectations to initiate the changes. Early and late life was dominated by biological changes. Psychological and environmental factors were more influential in the middle life. They included job related changes, family related changes, and location factors.

Each stage in life was characterized by an issue or task that was qualitatively different from the issues or tasks of other stages. Erikson's eight ages of man were trust vs. mistrust (birth to 2 years); autonomy vs. shame, doubt (3 to 6 years); initiative vs. guilt (6 to 10 years); industry vs. inferiority (10 to 14 years); identity vs. role confusion (14 to 20 years); intimacy vs. isolation (20 to 40 years); generality vs. stagnation (40 to 65 years); and integrity vs. despair (65+ years).

According to Erikson's theory, traditional-aged college students were in the stage of identity versus role confusion. Up to the age of twenty, this group faced identity issues that required them to experiment with roles and lifestyles, make choices and experience

the consequences, identify their talents, experience meaningful achievement, and find meaning in their lives. A person who achieved an inner sense of identity was prepared to deal with the issues of intimacy versus isolation. The person who had not resolved the issue of identity was handicapped in the next stage.

Levinson's psychosocial theory

Levinson (1978) focused on male development. He interviewed 40 men divided equally into four different occupations from the Boston and New York areas. The four different groups were hourly workers in industry, business executives, university biologists, and novelists. The industry workers and business executives were volunteers from two companies close to the New Haven area. The sample varied in social class origins, racial-ethnic-religious origins, education, and marital status. A biographical interview was the method used to gather data. The interview was used to construct the story of each man's life.

The main concepts in Levinson's theory were life structure, transition stage, stable stage, dream, and mentor. Life structure was the basic idea in this framework. Life structure was the pattern that man related to his external world. It also included the internal meaning of the pattern for an individual. Levinson and his colleagues studied the development of men across cultural and socio-economic types. The research had been conducted primarily with biographical interviews using the longitudinal approach.

Levinson theorized that life structure evolved through an alternating sequence of transitional and stable stages. The task of transitional stages was reassessment of an existing life structure. The outcomes of reassessment were (a) creation of a new life

structure, (b) reconfirmation of the old structure with minor modifications or (c) the failure to do either of the first two. Transitional stages appeared to last 3 to 5 years (Levinson, 1978).

Stable stages appeared to last 5 to 7 years. These stages appeared to build deeper and test the limits of a life structure. This period involved striving for goals and values within a given life structure. Reassessment and change were important parts of this stage. They were partially a function of attempts to resolve incongruence between perceived sense of self and aspects of self that were not emphasized in that life structure (Levinson, 1978).

The 17- to 25-year-old period was important to Levinson's theory because this period is when transitional and stable periods begin. This age period in one's life set the transitional and stable stages in motion. This period was called leaving the family or early adult transition. For many, this transition took place during college. The first general task was to separate from the pre-adult world, and the second task was to make preliminary steps into the adult world.

Havighurst's psychosocial theory

Robert Havighurst (1953) of the University of Chicago worked to combine biological maturation, social pressures, and personal values and aspirations. He described a series of life span development tasks to be achieved by persons as they experienced their environment. Ninety children who were 10 years old at the same school in a small midwestern city were selected as subjects. They were studied until they were about 13, then a special group of 30 were selected for more intensive study. The investigator

followed the 30 for another 3 years. The chosen represented a variety of social classes and equal number of boys and girls. A variety of methods were used in the study. They included interviews, self-produced tests for developmental tasks (reliability .59 to .97), and observations.

Havighurst developed the concept of the “teachable moment,” relating to the timing of educational or learning efforts. The teachable moment arrives when (a) the physical body has sufficiently matured, (b) social norms are developing, and (c) the self values and is aspiring to a certain goal. In Havighurst’s view, all three conditions were necessary. If one or more of the three conditions cannot be met, then efforts at teaching or achieving insight are largely wasted.

Factors such as race, gender, social class membership, and historical events could exert influence over the course of one’s life. These factors determined how one reacted to situations in life and how one developed as a person. Havighurst reported different developments for boys and girls. Boys differed from girls considerably in the personal characteristics that were connected with achievement of developmental tasks.

Havighurst stated that social class membership had a definite effect upon development. It also could retard or even change the characteristics of developmental tasks. Havighurst noted that it was hard to predict a person’s developmental tasks without knowledge of the social and historical factors of his or her background (Havighurst, 1953).

Havighurst pointed to the 17-to 25-year-old age group as the beginning of teachable moments for young adults. This was the time period that the developmental

tasks become very important to develop an individual to be a happy and successful person. If people succeed in this time period, then they were more likely to have a more productive life.

Chickering's psychosocial theory

Chickering (1969) developed one of the most widely used theories of student development. Chickering gathered information from studies done by the Project on Student Development, a 5 year study of institutional characteristics, student characteristics, attrition, and student development in 13 liberal arts colleges. Questionnaires and surveys were used to measure each of the developmental tasks that he was defining. He did not describe the sample selection process.

Chickering's theory of college student development provided the specifics that Erikson's lacked. He elaborated on Erikson's stage of identity. Chickering provided details on the vectors or tasks that make up the content of three broad issues of identity. The issues include (a) career development; (b) defining one's sexuality and initiating the development of the capacity for intimacy; and (c) building and integrating an adult philosophy of life, morality, and values. Chickering's concepts of developmental vectors and tasks provided a blueprint for program planning and evaluation of college students (Rodgers, 1989).

Chickering described the development directions of young adults in college in some detail. He described "vectors" that most traditional students tend to experience while in college. Chickering postulated that traditional-age college students proceeded through seven vectors of development that represent the general task of identity

formation. These vectors were as follows:

1. Developing competence. Likened to a three-tined pitchfork, intellectual competence, physical and mental skills, and interpersonal competence are the tines, and the sense of competence is the handle. The sense of competence is the confidence that a person has in his or her ability to cope with what happens and to reach successfully what he or she sets out to do. All parts of the pitchfork are interrelated. When one is weak or missing the usefulness of the pitchfork is diminished (Chickering, 1969).

2. Managing emotions. Aggression and sex are the two major impulses to manage. The development of the ability to manage these emotions involves awareness and integration of feelings to allow control and expression. The task is to become aware of the impulses that are pushing from within. The increasing variety of feelings leads to an awareness that feelings can be trusted to provide useful information and can be expressed (Chickering, 1969).

3. Developing autonomy. Autonomy requires both emotional and instrumental independence, and recognition of one's interdependencies. Emotional independence is the freedom from continual need of reassurance, affection, or approval. Instrumental independence is the ability to function and handle problems without asking for help. Interdependence is the recognition by college students that there is a certain level of dependence and independence between individuals and groups in their life and they accept this ideal as part of life (Chickering, 1969).

4. Establishing identity. Development of identity depends upon the prior development of competence, emotions, and autonomy. This vector includes the

clarification of conceptions concerning physical needs, characteristics, personal appearance, and clarification of sexual identification. As this vector is achieved, it fosters change in other major vectors of development (Chickering, 1969).

5. Freeing interpersonal relationships. This vector includes increasing tolerance and acceptance of differences between individuals and increased ability for mature and intimate relationships. The student develops attitudes and skills marked by empathy and gains capacities to perceive others, to listen and understand different views without the need to dominate or pass judgment (Chickering, 1969).

6. Developing purpose. The development of purpose requires formulating plans and priorities. The areas include avocational and recreational interests, vocational plans, and lifestyle considerations. By developing purpose, life will flow with direction and meaning (Chickering, 1969).

7. Developing integrity. The development of integrity involves the development of a personal set of beliefs that will have some internal consistency and provide a tentative guide for behavior. Chickering identified three stages that such development involves. They included (a) the humanizing values, (b) the personalizing of values, and (c) the developing of congruence, the achievement of behavior consistent with the personal values held (Chickering, 1969).

Each of the vectors was made up of a series of concepts, or tasks, and associated processes. The contents of the vectors made up the developmental challenges to be mastered. The processes described how the tasks were resolved and their relationships with one another. These tasks were not easily resolved. Their mastery could take one or

more years to resolve a single vector. Mastery took place after repeated exposure to appropriate developmental environments (Rodgers, 1989).

Chickering outlined developmental changes in terms of a series of differentiations and integrations. They were associated to the vectors and challenges and supports appropriate to the tasks within the vectors. Environmental conditions related to the resolution of vectors. The conditions included clear and consistent goals, organizational size, curriculum design and teaching strategies, classroom evaluation, residence hall design and programs, interactions between students and faculty and staff, and the influence of peer culture (Rodgers, 1989). Three important areas included developing purpose, developing autonomy, and developing mature interpersonal relationships.

Miller and Winston's psychosocial theory

Miller and Winston (1990) proposed that the higher education experience was more than classroom development alone. They had difficulty in defining “nonacademic” development. Psychosocial development was one area that Miller and Winston defined as nonacademic development. Students can change and develop in regards to psychosocial development as they grow older. Higher education can help facilitate this change in regards to psychosocial development (Miller & Winston, 1990).

Miller and Winston summarized the data from the review of the literature on human development and from studies collected by these instruments: the Student Developmental Task Inventory I (STDI-1), the Student Developmental Task Inventory II (STDI-2), and the Student Developmental Task and Lifestyle Inventory (STDLI) to develop concepts about psychosocial theory. Miller and Winston discussed psychosocial

development as those personal, psychologically oriented aspects of self and the relationships that exist between the self and society. This development was influenced by the interaction that took place between individuals and their environment. Without these interactions, psychosocial development may not occur because development was a result from these interactions. The interactions brought about change and growth (Miller & Winston, 1990).

Miller and Winston (1990) noted the dynamic nature of psychosocial development by identifying the following five principles associated with the process:

1. Psychosocial development is continuous in nature. Normal maturation and individual life experiences shape developmental changes.
2. Psychosocial development is cumulative in nature. Developmental tasks build upon each other. Some tasks must be accomplished or mastered before advancing to more complicated tasks.
3. Psychosocial development progresses along a continuum from easy to more complex tasks and behaviors.
4. Psychosocial development tends to be orderly and stage-related. A stage is a time period or interval in an individual's life when biological, psychological, or sociological forces interact to make discomfort, conflict, tension, challenge, differentiation, or crisis that requires response.
5. Psychosocial development is reflected in development tasks. Tasks include important components of human development, give a comprehensive and orderly view of the life cycle, and can be stated in terms of behaviors useful for assessment purposes.

Winston and Miller state the processes of development and tasks that can be mastered in these processes are significant for student development educators. Because development is continuous, educators need to know the behaviors that must be mastered and the order of mastering them for optimum development. Development is considered to be cumulative. To promote further development, behaviors must be based on an understanding of past experiences and previous learning. Development progresses from the simpler to the more complex. It is important to know an individual's present level of development.

Development is orderly and stage related. It is essential to make logical connections between students' behavior and the developmental stages in which the student presently functions. Healthy developmental processes reflect a successful achievement of development tasks. It is imperative that educators understand the importance of the tasks of development and the help that is necessary to fulfill their students' development (Winston & Miller, 1990).

Summary of psychosocial theory

All of these theories of psychosocial development have led to a growing body of research on the developmental age group of 17 to 25 years of age. Havighurst created the building blocks of psychosocial development. Erickson continued the development of this area by working with the stages of life. Chickering did the authoritative work on college age groups. Levinson added to Chickering's work with the advent of the life structure and its effect on the beginning stages of adult development. Winston and Miller defined psychosocial development for the 1990s. Miller and Winston took into account

the social and cultural changes that have occurred. Each one of these individuals and their theories has added to the body of knowledge.

Traditional-aged college students are in the stage of identity versus role confusion (Chickering, 1969). Young adults face identity issues that require them to experiment with roles and life-styles. They also make choices and experience the consequences, identify their talents, experience meaningful achievement, and find meaning in their lives. Psychosocial theories such as Erikson's are valuable to student affairs because they identify the content of the developmental issues or tasks generally relevant for persons at different points in the life span (Rodgers, 1989).

The theory of psychosocial development gives student affairs professionals a background on which to base programs and interactions with students. This theory can help explore the development of individual students or students involved in specific group activities or multiple group activities. Psychosocial development helps explore how the college environment impacts a student. College provides the support, structure, and sometimes the control needed to accomplish tasks at an accelerated rate compared to other environments.

A major development time in a person's life is the 17-to 25-year-old range. Persons attending college have a unique opportunity for psychosocial development. There are many advantages for the student and many potential disadvantages. In a perfect world of the ivory tower, higher education would lend itself to helping student psychosocial development, but this is not the case. In some instances, there are events in college life that even retard development. Therefore, college personnel must always be

aware of what cultures and subcultures produce results in psychosocial development.

Chickering suggested a different approach to higher education. Higher education should not be totally focused on information and professional training but should also be attuned to developmental concerns of students. Chickering's summary of psychosocial research on college students indicated that most freshmen are attempting to resolve three vectors: competence, managing emotions, and developing autonomy. Seniors are trying to resolve four different vectors: establishing identity, freeing interpersonal relationships, developing purpose, and establishing integrity.

The Importance of Student Involvement Concerning Psychosocial Development During One's College Career

Higher education's broad mission has been defined to include self-understanding, expansion of personal, intellectual, cultural, and social interests; learning more than pure facts, development of personal moral and ethical standards; preparation for productive employment; preparation for membership in democratic society, and the enhancement of the quality of the graduates' lives (Pascarella & Terenzini, 1991). Chickering (1969) sums up the purpose of college and the developmental tasks by saying,

The function of a college is not to conform to student wishes, but to create conditions that lead to jointly valued change, so the function of higher education is not to give society what it wants, but what it needs. (p. 345)

This mission within itself is a huge task for higher education. If higher education is to be successful in this day and age it must fulfill this broad mission. This starts the day that students walk onto a college campus. The transition from high school student to

college student is one of the first challenges a college student faces.

University administrators view the transition from high school to college as a form of culture shock involving significant social and psychological relearning. Colleges and universities can promote and facilitate development by student encounters with bodies of knowledge and modes of inquiry. Higher education can also contribute to the development of students by testing new ideas and beliefs, practicing new roles, and developing new mature interpersonal relationships. In essence, the college environment offers a setting for opportunities and change that are unsurpassed by those of any other social institution.

Higher education can meet the growing accountability that individuals, governments, and society in general has for it. Graduation rates are a key accountability indicator for high education. If higher education is developing individuals to be productive citizens, then the money that the public puts into the education system is being well spent. Students whose psychosocial needs are being met will have better academic and social lives in college and will persist to graduation. If a college and university can meet the student's psychosocial needs, a student should be prepared to become a productive citizen in our society. The bottom line is if an institution can meet the psychosocial needs of its students, it will greatly impact the institution, the community, and society.

Researchers have explored psychosocial development in greater detail with regards to different groups and subgroups. These researchers provide college administrators with valuable information that can be important in developing programs to

meet students' psychosocial needs. The next section will explore the research in psychosocial development.

Research in Psychosocial Development

Several areas have been explored in psychosocial development. They include gender comparisons, ethnic backgrounds, and athletics. Gender comparisons use the differences in psychosocial development between men and women. Ethnic backgrounds compare different races including White, Black, and Asian. Researchers compare athletes and nonathletes to monitor progress in this high profile arena. Also, there has been a variety of other areas studied involving psychosocial development. Examples of these include gifted and talented students, mentored students, and comparisons of generations of students' psychosocial development. This review begins with gender research.

Gender research in psychosocial development

Chickering's (1969) theory of psychosocial development has been the benchmark for development studies. Chickering's research, however, focused mainly on men. With the increasing number of women in college, a valuable population to study is women. Higher education needs to be able to meet women's psychosocial needs.

Gilligan (1982) was one of the pioneers in women's development. Gilligan conducted interviews with 29 women, ranging in age from 15 to 33. The women were diverse in ethnic background and social class. The author used an author-designed, semi-structured interview. Gilligan stated that women's moral judgments proceeded on three levels: (a) focus on self (level one); (b) the concept of responsibility for self and others with the good equated with caring for others (level two); and (c) the subsuming of both

conventions (caring for others as equated with good) and individual needs under the moral principle of non-violence (level three). Gilligan found the development of a woman's identity was viewed in a context of relationship and judged by a standard of responsibility.

Gilligan stated that women's moral reasoning was in the "care voice," while men tended to reason in the "justice voice." She did not see these differences as reflecting conflict. Rather, she believed they represented two different ways of viewing the world. She believed all individuals could reason in both voices, although one is preferred and tends to dominate.

Pollard, Benton, and Hinz (1983) assessed the developmental tasks of students in remedial and regular programs. They administered the Student Developmental Task Inventory-2 (reliability ranges .85 to .93 and coefficient alphas ranging from .45 to .85 for the task and subtask scores) to 166 students at a four year, state-supported, liberal arts institution in the southeast. The sample consisted of 119 developmental studies freshman students and 47 freshman English students. Nine separate 2 x 2 analyses of variance were conducted on the 9 subtasks of the SDTI-2. The independent variables included gender and type of program that the student was involved. The dependent variable was achievement of developmental tasks.

Significant gender differences were found in all three Subtasks (Intimate Relationships with Opposite Sex, Mature Relationships with Peers and Tolerance) of the Developing Mature Interpersonal Relationship Task (MIR); females scored significantly higher than males on each Subtask. Students in regular programs had significantly higher

developmental scores than the remedial students. The study showed that the developmental process could be affected by the culture in which an individual is involved (i.e., regular program, remedial program).

Stonewater (1987) investigated gender differences in the factor structure of the SDTI-2. Using 319 students attending fall orientation at a large midwestern university, Stonewater studied the three major tasks, Purpose (PUR), Autonomy (AUT), Mature Interpersonal Relationships (MIR) measured by the SDTI-2. The SDTI-2 was administered at three different large group sessions during the orientation program. The independent variable was gender.

Results of the factor analysis indicated that about 60% of the items were loaded significant for men and for women nearly 50% of the items loaded significantly on one of the three factors (purpose, autonomy, mature interpersonal relationships). Factor 1 consisted mainly of Purpose items. It had the strongest overlap between men and women. Factor 2, Mature Interpersonal Relations had fewer items associated with the task and only moderate overlap between men and women. Factor 3 only had a few overlap items in Autonomy. If behaviors indicated development were the same for men and women, items would have clustered similarly for both sexes. This was not the case. Stonewater indicated that men and women perceive or respond to the items differently or in the manner in which development of these tasks take place. Stonewater indicated that differences occur because of different patterns for decisions, relationships, priorities, and sense of self. The author suggested that men and women may respond differently because of freedom from the need for reassurance and approval from others, ability to function on

one's own without help from others, and a mature dependence and sense of reciprocal relationships.

Jordan-Cox (1987) examined the psychosocial development of students at historically Black institutions of higher learning using the Student Developmental Task Inventory-2. A total of 447 students from three different institutions participated in the study. The author asked the student affairs staff at each institution to randomly select 125 freshmen and 100 seniors to participate in the study. The independent variables were gender and class level. The dependent variable was achievement of developmental tasks.

Data analysis was done using the Statistical Analysis System General Linear Models Procedure. F tests were used to test the null hypothesis with .05 confidence level as the criterion for rejecting the null hypothesis. Significant differences were found between men and women on the Developing Autonomy Task and the Developing Purpose Task. Jordan-Cox noted that the women in the study had mastered significantly more behaviors than men on Autonomy and Developing Mature Interpersonal Relations. The author concluded that college women in particular had mastered significantly more developmental behaviors involving autonomy and interpersonal relations than men had. This was particularly true on interpersonal relationships regardless of the racial composition of the student population.

Straub (1987) investigated the ways women develop autonomy and compared it to Chickering's theory. Twenty-four women participated in the study at a large, midwestern university. The students were selected from a random sample of 241 female students who took the STDI. A total of 39 women who scored significantly higher than the mean on

the Autonomy Scale of the SDTI were invited to participate in this study, and 24 participated. These students were interviewed using a modified version of the Critical Events Interview. The major focus of the interview was for the students to describe critical life incidents that had significant impact on their development of autonomy.

The major finding was the diversity of types of critical events. There was no single way to develop autonomy. In comparing the categories of the events of the participants with Chickering's theory, it was found that 27% of the events differed from Chickering's description of developing autonomy. The results contributed to the links between developmental tasks, particularly the way freeing interpersonal relationships has some impact on developing autonomy for some women. One conclusion was that the freeing interpersonal relationships task preceded the autonomy task for the majority of women. For some women in this study, the mastery of the relationship task had significant impact on their development of autonomy. The results supported the hypothesis that women develop differently than men.

Greeley and Tinsley (1988) studied the between-sex and within-sex differences in the development of autonomy and intimacy in college students. Participants were 441 college students at a large, midwestern university. They attempted to identify predictors of autonomy and intimacy development by using the SDTI-2. The independent variables were sex and class level. A 2 (sex) by 4 (class level) analysis of variance was performed with scores on autonomy as the dependent variable.

The main effect for sex and class level by sex interaction was not found to be significant. Women scored slightly, but not significantly, higher on autonomy than did

the men. Women had significantly higher intimacy scores than men, but they had entered college with higher levels of intimacy and maintained it through college. This study showed that Chickering's theory of autonomy holds for both men and women while there were differences in intimacy for men and women.

Ellis, Puryear, Gardner, and Key (1990) examined the relationship among psychosocial development, gender, and pre-alcoholism. Subjects included 100 college students at a large, land-grant university in the southwest. Instruments used in the research included the Inventory of Psychosocial Development (IPD) (test-retest correlation of .70) and the MacAndrew Alcoholism Scale (MAC). The IPD is a questionnaire instrument designed to assess the successful or unsuccessful resolution of Erikson's psychosocial stages. The MAC was designed to differentiate outpatient psychiatric alcoholics from nonalcoholic psychiatric outpatients. The independent variables were psychosocial development and gender. The dependent variable was the predictability of pre-alcoholism.

The researchers used multiple regression analysis to analyze the data. The findings indicated that gender was a better predictor of pre-alcoholism than psychosocial development. There was no statistically significant relationship between psychosocial development and pre-alcoholism. Gender differences were statistically significant predictors of elevated scores indicating pre-alcoholism. Being male increased the likelihood of a high score on the MAC.

Harris (1995) studied the relationship between body image attitudes and psychosocial development. The participants were 144 undergraduate Euro-American

college women enrolled at two large, public universities located in the southeastern United States. They were recruited from psychology, gender role behavior, and African-American studies classes. Harris used the Student Development Task and Lifestyle Inventory (SDTLI) and Body Cathexis Scale. The independent variable was gender. The dependent variable was the attitude of women about their body image.

Canonical analysis and multiple regression procedures were used to analyze the data. The researcher found that college women who favorably evaluated their bodies on appearance, fitness, and health were more likely to report well-defined educational goals and show advancement in educational, career, and life management, as well as overall purpose. The author revealed that women's attitudes toward body parts and processes; body dissatisfaction; and evaluations of health, fitness, and appearance were associated with salubrious lifestyle and establishing and clarifying purpose tasks of psychosocial development. The author suggested that college women's feelings and thoughts about physical aspects of the self are closely linked to other aspects of their development. This study showed that there are factors that can influence psychosocial development among college students. Group influences can alleviate some of the individual aspects that this study recognized.

Jones and Watt (2001) studied the effects of gender and class standing on college students' moral orientation and psychosocial development. One hundred and eighty-two undergraduates attending a large, midwestern university were given the Student Developmental Task and Lifestyle Assessment (STDLA) and the Measure of Moral Orientation (MMO). The independent variables were gender and Greek membership.

The dependent variables were scores of the moral orientation instrument and the psychosocial development instrument.

A Multiple Analysis of Covariance (MANCOVA) method was used to analyze the data. Women scored significantly higher than men on the following measures: Tolerance, lifestyle planning, educational involvement, instrumental autonomy, interdependence, and salubrious lifestyle. It was noted that men prefer a justice perspective while most women prefer a care perspective.

In summary, several researchers found differences in the way men and women develop involving psychosocial development. Gilligan (1982) found differences in developing purpose and moral reasoning. Pollard et al. (1983) found significant gender differences in developing mature interpersonal relationship task. The study also showed that the developmental process could be affected by the culture of an individual. Stonewater (1987) found differences in developing mature interpersonal relationships and developing autonomy. Stonewater indicated that men and women may perceive or respond differently. Jordan-Cox (1987) found significant differences that women mastered both developing autonomy and mature interpersonal relationships better than men. Straub (1987) found differences in men and women: freeing interpersonal relationships had impact on autonomy for women not necessarily for men. Greeley and Tinsley (1988) found women scored slightly higher on autonomy and significantly higher on intimacy scales. Ellis et al. (1990) found gender was a better indicator of pre-alcoholism than psychosocial development. The authors indicated how psychosocial development can be related to intervention programs. Harris (1995) showed the

complexity of the factors that affect women and their development. Harris suggested physical properties could improve or impede psychosocial development as well as mental properties. Jones and Watt (2001) showed that women scored higher than men on several scores including tolerance, lifestyle planning, educational involvement, instrumental autonomy, interdependence, and salubrious lifestyle.

Research (Gilligan, 1982; Stonewater, 1987; Straub, 1987) suggests that there may be a difference in the psychosocial development of men and women. A large amount of psychosocial research has focused on the nature of male development, because most of the samples studied were men. There seems to be a consensus that the development of men and women is indeed different. Using different techniques and variables can mean the difference in the measuring of psychosocial development for men and women. There is room for more research in the area of gender psychosocial development.

Research in Psychosocial Development and Ethnicity

Studies addressing race differences have entered the research in the last twenty years. As minority populations in higher education increase, ethnic research will become more important. Research in this area will enable administrators to develop programs that will meet the needs of this group of students. Many colleges and universities have developed programs with titles such as Minority Student Support Services.

Itzkowitz and Petrie (1986) compared northern Black students and southern Black students. They administered the SDTI-2 to 234 Black students from five different northern institutions and compared the data to published data from the SDTI-2 manual

(Prince, Winston, & Miller, 1979). Data were collected by staff and faculty members' solicitation of volunteers through placement centers, assessment centers, freshman classes, counseling services, tutorial assistance clubs, and student centers. The dependent variable was the measure of psychosocial development. The independent variables were ethnicity, gender, class level, and geographical location.

The authors found that northern Black women attending institutions of higher learning scored lower than southern Black women attending institutions of higher learning on the following SDTI-2 tasks: Developing Autonomy, Developing Purpose, and Developing Mature Interpersonal Relationships. They also found the scores of Black men from the North were significantly lower than those of Black men from the South on the subtasks Interdependence and Educational Plans. Regional, cultural, or class differences may account for the differences found. Except for Developing Purpose, there were significant differences between northern Black students and southern Black students.

Cheatham, Slaney, and Coleman (1990) examined the hypothesis that the social and intellectual development of African-American college students is nurtured better by traditionally Black collegiate institutions than by predominantly White collegiate institutions. Participants were 250 African-American undergraduate students (152 women and 98 men) at a traditionally Black collegiate institution and a predominantly White collegiate institution in the same northeastern state. At the predominantly White institution, students were recruited in classes and through advertising. At the traditionally Black institution, students were recruited by faculty members in the Education and Social Sciences divisions. Participation in the study was voluntary. The Racial Identity Attitude

Scale (reliability coefficients that ranged from .66 to .72 for the four scales) and the Student Developmental Task and Lifestyle Inventory (reported reliability estimates ranged from .29 to .90) were administered to the participants. For the major analyses of the results, the authors performed a 2 (institution) by 2 (gender) by 4 (year in college) Multiple Analysis of Variance (MANOVA).

Students at the predominantly White institutions scored higher on the Emotional Autonomy, Cultural Participation, and Academic Autonomy scales. The students at traditionally Black institutions scored higher on the Salubrious Lifestyle scale. Men scored higher on the Salubrious Lifestyle scale. Women scored higher on the scales measuring Tolerance and Peer Relationships. Cheatham, Slaney, and Coleman provided little to support that traditionally Black institutions were superior to the predominantly White institutions for the personal and academic development of Black students. The researchers provided information that the type of institution a student attended may not have an effect on their development.

Taub and McEwen (1991) studied differences in psychosocial development between African-American and White undergraduate women at a large, public, mid-Atlantic university. The sample included 218 participants. The Student Developmental Task and Lifestyle Inventory and Student Developmental Task Inventory-2 were both used. The independent variables were class level and race.

Significant results were found by class for Developing Autonomy, Academic Autonomy, and Mature Interpersonal Relationships for both African-American and White students (seniors scored higher). Univariate analyses of differences within class levels

found no differences by race in the development of autonomy and interpersonal relationship in undergraduate women. Significant differences by race (Whites scored higher than African-Americans) were found for only one measure, the development of interpersonal relationships. African-American students scored higher. The authors suggest that more research is needed for both gender and race factors in dealing with student development.

Taub and McEwen (1992) completed a follow-up study on their 1991 study by investigating the relationship of racial identity attitudes to the psychosocial development of undergraduate women. In addition to using the same instruments in the 1991 study, they collected information on racial identity attitudes by administering the Black Racial Identity Attitude Scale (RIAS-B) and White Racial Identity Attitude Scale (WRIAS). Participation was solicited in two ways. First, a random sample of 320 African-American and White undergraduate women living on campus was obtained. Second, volunteer participants were solicited from four gender studies and one Afro-American studies class. A total of 217 participated in the study from the random sample and volunteers.

Of the 16 correlations between the racial identity scales and psychosocial developmental scales analyzed, Pearson's correlation coefficients indicated nine significant negative correlations (academic autonomy, autonomy, mature interpersonal relationships, and intimacy) between the RIAS-B scales and the psychosocial development scales for African-American women. This suggested that the psychosocial development of African-American women occurs in opposition to racial identity. This could lead to African-American women's psychosocial development being hindered due

to their preoccupation with developing their group or collective identity as African-American persons in this society (their racial identity). Twenty Pearson correlations between the WRIAS scales and the psychosocial development scales were computed for White women. Only five significant correlations were found, two of which were negative correlations. The two negative correlations were Mature Interpersonal Relationships with Disintegration and with Reintegration. The other three dealt with autonomy and the individual. This can suggest that the SDTLI and SDTI-2 are tapping different dimensions for Whites and African-Americans. Dimensions included racial identity development and psychosocial development.

Ojano Sheehan and Pearson (1995) compared Asian international and American freshman students to examine the psychosocial development patterns of the two groups. They used the Student Developmental Task and Lifestyle Inventory (SDTLI) to test 117 freshmen at a midwest university. The American students were chosen by random sampling. All Asian International students at the university were approached for the study (37 of 57 Asian International students participated). The independent variables were gender and race (American or Asian international). The dependent variable was achievement of psychosocial development tasks. Means and two-way analyses of variance were produced for each task and scale by ethnicity and gender.

The means for Asian international students were lower than the means for American students on all measures. Significant differences existed in the main effects for ethnicity on the task of Establishing and Clarifying Purpose and the task of Developing Mature Interpersonal Relationships. Significant ethnic differences were also found on the

scale of Intimacy. In all cases, Asian international students' scores were significantly lower than American students on developmental tasks and scales. No interactions or gender differences were found.

In summary, the researchers demonstrated mixed results regarding ethnic backgrounds. Itzkowitz and Petrie (1986) found African-American women scoring lower on Autonomy, Purpose, and Mature Interpersonal Relationships than White women. They found modest differences in Black and White men. Cheatham et al. (1990) found few differences in African-American students who attended predominantly White institutions and African-American students who attended historically Black institutions. This suggested that the environment for African-American students may not be as important as the support and programs of the institutions for psychosocial development. Taub and McEwen (1991) had different results. Significant differences by race were found only in the development of interpersonal relationships. Taub and McEwen (1992) found differences involving Mature Interpersonal Relationships. Ojano Sheehan and Pearson (1995) found several differences occurring on the Establishing and Clarifying Purpose Task and the Developing Mature Interpersonal Relationships Task. Asian international students were lower on all measures than American students.

There seems to be a difference in the way ethnic groups, particularly African-Americans, develop as opposed to Whites (Itzkowitz & Petrie, 1986; Taub & McEwen, 1991). Black development is geared more toward racial identity than their White counterparts. There is not a large amount of research in this area, so there is not conclusive evidence of the differences (Cheatham et al. 1990; Taub & McEwen, 1992).

This area has been underdeveloped for many years. As college populations grow more ethnically diverse, more research needs to be focused on this area.

Research Involving Athletes and Psychosocial Development

Another area of research deals with collegiate athletes. Collegiate athletes are a subgroup/subculture that receives much attention. Although athletes constitute less than one percent of the student population, they are one of the most highly visible constituencies (Pascarella & Terenzini, 1991). Research on this subculture allows one to view what effect structured routines and lifestyles can have on psychosocial development.

Sowa and Gressard (1986) explored the relationship between participation in varsity athletics at the collegiate level and the achievement of developmental tasks. The sample consisted of 48 athletes and 43 nonathletes at a major Southern university. The authors used the Student Developmental Task Inventory (SDTI) (internal reliability for the total inventory of .90 and a test-retest reliability for the total inventory of .92) to measure the achievement of developmental tasks. The two independent variables in the study were the student's participation in athletics and the student's gender. The dependent variable was the achievement of developmental tasks.

The authors ran a 2 (athletic status) by 2 (gender) Analysis of Variance (ANOVA) on the nine subscales of the SDTI. No significant differences were found between the male and female subjects, nor were interactions between athletic participation and sex found on any developmental subscale. Significant differences between athletes and nonathletes were found on three subscales: education plans, career plans, and mature relationships with peers. Athletes' scores were significantly lower than nonathletes on the

achievement of developmental tasks. The compared means for each subtask ranged from .25 to 1.48 lower for nonathletes than athletes. The authors suggested that the nature of the athletes' time and personal commitment may have an affect on their scores. This study found that subgroups can have an effect on certain aspects of psychosocial development in college students, such as mature relationships with peers.

Saidle, Dare, Modica-Turner, Smith, and Staton-McGraw (1994) investigated the relationships between aspects of student athletes' psychosocial development and perceptions of the university residence environment. Participants ($N = 155$) for the study were all first-year athletes at a large public university in the southeastern region who participated in a required freshman orientation course for athletes. The students were given class time at the end of the semester to complete the two instruments. The Student Developmental Task and Lifestyle Inventory and The University Residence Environment Scale (Test-retest correlations ranged from .69 to .75) were used in the study. The independent variable was athletic status (athlete/nonathlete).

Independent sample t-tests compared the means of the student athletes with those of the general residents and found few significant differences. Athletes scored similarly to general residents on the developmental tasks. The one area where non-athletes scored higher than athletes was in the Intellectuality and Cultural Participation. Athletes' rigorous practice schedules, and their very intense focus on their sports, may be keeping them from the pursuit of artistic and cultural scholarly activities.

Petrie and Russell (1995) investigated the effects of academic and psychosocial variables on the academic performance of minority and nonminority college student

athletes. The participants ($N = 167$) were two football teams from major public universities (one west coast and one midwest team). The instruments used were the Life Events Survey (test-retest reliabilities ranged from .76 to .84) and the Sport Competition Anxiety Test-Adult (internal consistency reliabilities range from .95 to .97). The authors used a multiple hierarchical regression and a MANOVA technique to analyze the data. The independent variable was race (minority/nonminority). Academic performance and psychosocial development were the dependent variables.

The results for minority athletes, showed psychosocial variables of life stress and competitive trait anxiety unrelated to academic performance. Psychosocial variables (higher scores) did not play a major part in academic success. For nonminority athletes, psychosocial variables (lower scores) predicted semester GPA for the athletes who were not academically successful. The less developed (higher psychosocial scores) nonminority athlete was less likely to be academically successful. Petrie and Russell suggested that the difference in results implied that different intervention and counseling techniques should be used in dealing with these subgroups. The academic variable of the ACT (American College Test) test was not a good indicator for the minority subgroup while the psychosocial variables were much more valuable in predicting success in the minority subgroup.

Cornelius (1995) examined the direct relationships between athletic identity and college student development. Participants were 228 undergraduate college students from a large southeastern university. The participants were recruited as volunteers from physical education classes. Cornelius used measures for athletic identity including the

Athletic Identity Measurement Scale (AIMS), social involvement including items developed by Pascarella and Terenzini (1991); Williams and Winston (1985); and the Student Developmental Task and Lifestyle Inventory (SDTLI) for the research. The independent variables were gender and year in school. The dependent variable was the relationship between athletic identity and college student development.

Athletic identity was found to be significantly related to the Lifestyle Management subtask of the SDTLI (positively) ($p < .0462$). This subtask involved several skills and qualities associated with the successful management of time, relationships, and obligations. Athletes are one subgroup that gets attention because of their high profile on college campuses. The researcher suggested the stronger identification with the athletic role can help students accomplish more in their college life. Recreational athletics and sports play a crucial role for these students.

Baker (1997) investigated the effects of participation in intercollegiate athletics with associated student development outcomes. Baker's study involved 233 students at Merrimack College (Massachusetts). Data from the athletes were generated at team meetings. A non-athlete sample was obtained by identifying cooperating faculty members who taught classes comprising students that were representative of the various academic majors and class years. The Student Developmental Task and Lifestyle Inventory provided measures of 11 student development outcomes. Multiple regression procedures were used to analyze the data. The independent variable was athletic participation. The dependent variable was achievement of development tasks.

Results indicated very minimal effects associated with participation in

intercollegiate athletics. Being an athlete was associated favorably with Life Management skills and unfavorably with Tolerance. Being a male athlete was negatively associated with Tolerance. Increasing years of participation in intercollegiate athletics was favorably associated with Career Planning.

In summary, various researchers have found mixed results involving athletes and psychosocial development. Sowa and Gressard (1986) found no differences between male and female but found significant differences between athletes and nonathletes on the three subscales of education plans, career plans, and mature relationships with peers. Saidle et al. (1994) found only one difference in athletes and nonathletes. The authors found that nonathletes scored higher than athletes in the Intellectuality and Cultural Participation aspects of development. Petrie and Russell (1995) showed a difference in using psychosocial development as a predictor of academic success between minority and nonminority athletes. Psychosocial variables were a good predictor of GPA for nonminority athletes, not minority athletes. Cornelius (1995) found that athletic identity was significantly related to the Lifestyle Management subtask. He also suggested that stronger identification with the athletic role can help a student accomplish more academically. Baker (1997) found minimal effects associated with being an athlete. Baker found that being a male athlete is negatively associated with Tolerance. Because of inconsistent results, research on subgroups such as athletes will help further the body of knowledge of psychosocial development among college students in which this study can provide.

Other Research in Psychosocial Development

Other areas of psychosocial development have been studied. Polkosnik and Winston (1989) studied the relationship between students' intellectual and psychosocial development. A stratified random sample based on academic class standing, from the 17-to-23 year old residents in a co-educational residence hall at a large, public university in the southeast was used to obtain participants. Twenty students were selected as participants. Intellectual development was measured by the Reflective Judgment Interview (RJI) and psychosocial development by Student Developmental Task Inventory-2 (SDTI-2). Information was collected in the fall and winter terms. Pearson Product-Moment correlations among the RJI and SDTI-2 tasks scores were computed to assess the relationships among the variables. The dependent variable was achievement in psychosocial development. The independent variables were students in the residence hall selected and year in school.

A consistent pattern associated with Developing Autonomy was evident. The Developing Autonomy Task had the most volatile changes between fall and winter data collection points. The development of autonomy seemed to precede the development of the other domains. It suggested that a certain minimal level of autonomy might be necessary for the acquisition of more complex intellectual and mature psychosocial functioning. The study suggested that cognitive and psychosocial developmental processes were not directly linked, that they occurred at varying rates, and that they were influenced by a wide array of life experiences.

Tinsley, Hinson, Holt, and Tinsley (1990) examined the relationship between

students' expectations about counseling and three measures of students' psychosocial development. Participants included 172 students at a large midwestern university. Participants were a sample of introductory psychology students who were given the Expectations About Counseling-Brief form and the Student Developmental Task Inventory (SDTI-2). Independent variables included class level and gender, whereas dependent variables included expectations about counseling and achievement of developmental tasks.

Significant relations were found between students' expectations about counseling and their scores on the SDTI-2. Generally, persons with more appropriate educational plans, more mature career plans, and more mature lifestyle plans had more positive expectations about counseling. By using psychosocial development in college students, student affairs practitioners can identify why people join groups and become involved in different cultures and subcultures. The results supported the view that students' expectations about counseling are related to their level of psychosocial development.

Rice and Brown (1990) explored the psychosocial development of undergraduate students in relationship to their perceived competency, readiness, focus, and choices regarding participation in mentoring relationships. Participants in the study were undergraduate students ($N = 144$) at a large midwestern state university. Instruments were distributed in two elective courses enrolling freshmen through senior students. Five instruments were used in the study: three measures were from the Iowa Student Development Inventory and two measures were designed specifically for the study. The three from the Iowa test were indicators of autonomy, interpersonal relationships, and

developing purpose. The two other scales were developed to assess students' self-perceptions of competence to be mentors and self-perceptions of readiness to be mentored. Multiple regression analyses and ANOVAs were used to analyze the data. The dependent variables were the perceived developmental levels. The independent variables were mentor relationship and class year.

Results showed significant relationships between developmental status as measured by the instruments used in the study and students' self-perceptions of their competence as mentors and their readiness to be pupils. Students who were low in Autonomy apparently perceived themselves needing or benefiting from a supportive, growth-facilitating relationship. Students with a higher sense of purpose seemed more likely to perceive themselves as competent mentors or as ready to be pupils than did students with a less developed sense of purpose. This study showed the uses of measuring psychosocial development to indicate elements about any individual or a group such as fraternities.

Zuschlag and Whitbourne (1994) examined psychosocial development over three generations of college students. The three cohorts were from 1966 ($N = 345$), 1977 ($N = 290$), 1989 ($N = 291$). All three cohorts were undergraduates at the University of Rochester, a private institution in a moderate-size northeastern city. The Inventory of Psychosocial Development (IPD) was used with all three cohorts. The independent variables included the cohorts, college year, and sex.

The analysis involved a comparison of all three cohorts. A 3 (cohort) by 3 (college year) by 2 (sex) MANOVA was performed. A virtually uniform pattern of higher

psychosocial maturity in seniors compared to sophomores and juniors was noted. Seniors had significantly higher psychosocial development scores than either juniors or sophomores, who did not differ significantly from each other. Females generally had significantly higher psychosocial development scores than did males. Zuschlag and Whitbourne stated that psychosocial development during college has been relatively uninfluenced by shifting social pressures over decades.

Johnson (1995) undertook a comparative analysis of the college behaviors and the psychosocial development of academically talented and average ability students over the course of their freshman year in college. Seventy-seven full-time freshman students at a large private university in the northeast were used in the study. Students in the academically talented group were randomly selected from among those entering freshmen with a combined score of 1150 or better on the Scholastic Achievement Test (SAT) and who graduated within the top 10% of their high school class. Students in the average ability group were randomly selected from among those freshmen entering the university with a combined SAT score falling within the university's mean combined SAT score range of 950 and 1020 and who graduated within the top 15%-25% of their high school class. The Student Developmental Task and Lifestyle Inventory and an interview protocol were used as instruments in this study.

The independent variables included psychosocial development during the student's first year of college and the classified ability level of the study (academically talented and average ability) and the dependent variable was achievement of psychosocial development. A repeated-measure MANOVA indicated significant differences occurred

in psychosocial development (Purpose, Autonomy, and Interpersonal Relationships) over the freshman year for both groups but no significant between-group differences were found. Johnson suggested that, without intervention, academically talented students participated in and were impacted by the college experience in many of the same ways as average ability students. The study implied that all students are psychosocially impacted by their first year in college.

Hess and Winston (1995) studied student intentions to participate in developmental activities such as residence hall programs and career planning programs. One hundred residence hall students at a medium-sized public university in the southeast participated in the study. Prospective participants were contacted by telephone and asked to participate in the study. Residents who agreed to participate were sent a package of instruments and requested to return them. Hess and Winston used the Student Developmental Task and Lifestyle Inventory (SDTLI), the Student Activity Preference Survey (SAPS), and the Planned Residence Hall Program Survey (PRHPS). Correlations were used to assess relationships between measures of developmental activities and intentions to participate in developmental activities.

The independent variables were the intentions to participate in developmental activities and measures of developmental achievement on the SDTLI. Pearson product-moment correlations between SDTLI Subtasks and Scales and SAPS were statistically significant for seven of the eleven Subtasks: Educational Involvement, Career Planning, Lifestyle Planning, Salubrious Lifestyle, Life Management, Cultural Participation, and Tolerance. The relation between SDTLI scores and Academic Autonomy programs listed

in the PRHPS was the only negative correlation that was statistically significant. Based on results, students were most likely to participate in programs and to use services related to developmental domains in which they were already relatively well developed.

Students were not motivated to seek activities that would enhance their relative psychosocial developmental weaknesses, suggesting that students have a tendency to stay in their comfort zone and not challenge themselves.

Mather and Winston (1998) studied the autonomy development of traditional-aged students by interviewing 10 students from a large, southeastern university. The 10 interviewees were chosen from 53 students who took the Iowa Developing Autonomy Inventory and represented the highest and lowest scorers on the autonomy instrument for both men and women.

The complexity of autonomy development suggested that a web of interconnected factors and experiences influenced the pace and direction of the developmental process. Parenting style was a significant factor that influenced the course and direction of students' development autonomy. The study suggested that developing autonomy is related to self-confidence or self-efficacy.

In summary, Polksnik and Winston (1989) found that autonomy preceded the development of the other domains, development was often uneven, and development could be influenced by a wide range of life experiences. Tinsley et al. (1990) added that expectations about counseling could be measured by psychosocial development. Significant relations were found between students' expectations about counseling and their developmental tasks scores: the higher the developmental task score, the higher the

positive expectation for the student. Rice and Brown (1990) showed how psychosocial development affected mentoring. The Autonomy factor was the key to who was ready to be a mentor and who was ready to be mentored. A higher score on the Autonomy factor led to a belief of readiness to be a mentor. Zuschlag and Whitbourne (1994) showed that females exhibit higher development scores across three generations of students. The authors stated that psychosocial development was relatively unaffected over the generations. Johnson (1995) compared academically talented students to average ability students. Both groups of students were impacted by the college experience in the same ways. Development occurs, regardless of academic standing. Hess and Winston (1995) used psychosocial development to predict participation in developmental activities. Students were not motivated to seek help in the developmental areas where they are lacking. Mather and Winston (1998) explored the autonomy development of traditional-aged students. Autonomy was influenced by parenting style and the student's environment.

Polkosnik and Winston (1989) and Mather and Winston (1998) explored the autonomy component of psychosocial development and concluded that it was related to several factors. Organizations and individuals can influence the development of autonomy. They found that psychosocial development can be used to discover what type of programs are needed for individuals, subgroups, and groups (Hess & Winston, 1995; Rice & Brown, 1990; Tinsley et al. 1990).

This section of research developed a variety (mentor relationships, generational comparisons, influences on autonomy) of uses for psychosocial development. Using

psychosocial development, we learn what our students' needs are and how to address them so that all students can better develop during their tenure in college. This subsection showed that subgroups and groups can make a difference in the development of a student. With this subsection and the other subsections, a picture develops of psychosocial development research.

Summary of Psychosocial Development Research

Psychosocial development theory has significant implications for student development (Johnson, 1995; Polkosnik & Winston, 1989; Zuschlag & Whitbourne, 1994). There are differences in the way men and women develop (Greeley & Tinsley, 1988; Jordan-Cox, 1987; Pollard et al. 1983; Straub, 1987). Race plays a factor in the way a student develops (Itzkowitz & Petrie, 1986; Ojano Sheehan & Pearson, 1995; Taub & McEwen, 1991). Belonging to a subgroup such as athletes can have an effect on the way a student develops (Cornelius, 1995; Ryan, 1990). Being able to identify how different factors, groups, and subgroups affect students' development is an advantage for college administrators.

There is a wide variety of groups and subgroups that can be used to examine psychosocial development. In higher education, there is a belief that student involvement can be a key to the psychosocial development of students. Student involvement is a key component to retention of students (Astin, 1975; Astin, 1977, Boyer, 1987). Increased retention will lead to more students graduating thereby improving an institution's statistics and help with the accountability that institutions of higher learning are facing. Student involvement is a method that institutions use to help retain students. Student

involvement can also help in areas such as personal psychosocial development. Several researchers, including Astin, Boyer, and Pace, have explored the issue of student involvement. Reviewing the concept of student involvement can show how it integrates with psychosocial development of students.

Student Involvement

Chickering (1969), Astin (1984), and Boyer (1987) explored the transition of a student to college life by using psychosocial development programs. Within the last two decades, many student affairs professionals have applied Chickering's theory to practice. They have geared a large component of student activities and organizations' programming toward the key points of Chickering's theory. Chickering's theory of student psychosocial development fueled both sides of the argument for students joining Greek-letter organizations (Pascarella & Terenzini, 1991).

The report of the National Institute for Education (NIE) Study Group on the Conditions of Excellence in American Higher Education (1984) cited involvement as the most important condition for improving undergraduate education. The NIE Study Group listed two axioms of student involvement: (a) The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program, and (b) The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement in learning, not just classroom learning (Study Group on the Conditions of Excellence in American Higher Education, 1984).

Astin (1984) outlined a developmental theory for higher education that is based on

the NIE Study (1984). Astin defined student involvement as the amount of physical and psychological energy that students devoted to their academic experience. A highly involved student would be one who devotes considerable energy to studying, spends time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students. Astin's theory encouraged educators to focus less on what they do and more on what the student does. It explored how to motivate the student and use the energy that the student devotes to the process.

Astin (1975) reported the results of a nationwide survey of 41,000 undergraduates at 358 institutions who had dropped out of college. Research subjects were selected by random sample from 1968 entering freshmen, who were initially surveyed in the fall 1968 and followed up four years later in summer and fall 1972. Questionnaires were distributed to a random sample of students at each institution and contained items about the students' educational progress, financial information, living arrangements, and types of jobs held.

Astin (1975) found that a student's chances of graduating could be influenced by a wide range of institutional practices: recruitment and admissions policies, residence requirements, allocation of financial aid, selection of students for residence halls, availability of jobs on campus, grading practices, granting of leaves of absence, transfer policies, and establishment of work-study programs. While administrators and faculty have traditionally seen recruitment as the principal means to keeping enrollments up, an equally promising approach is to reduce dropout rates.

One conclusion of Astin's was the following:

Participation in extracurricular activities, especially membership in social

fraternities or sororities, is also significantly related to staying in college. These findings support the theory that student persistence to some extent depends on the degree of personal involvement in campus life and environment. (p. 108)

Participation in varsity athletics, for example, reduced chances of dropping out by 1% for White men and 5% for White women and Blacks in White colleges. Astin found that membership in fraternities or sororities was associated with even further reductions of attrition, from 6% to 9% for all four groups (White men, White women, Black men, Black women) (Astin, 1975).

Astin (1977) studied the impact of college on students. Data were gathered from the Cooperative Institutional Research Program (CIRP) longitudinal study that covered some 200,000 students and a national sample of more than 300 postsecondary institutions of all types. Each fall, the entering freshmen at institutions participating in CIRP completed an extensive questionnaire composed of two types of items: (a) pretests on possible outcome measures and (b) personal characteristics that might affect the propensity to change or to attain certain outcomes. Follow-up tests of each entering freshman class were conducted by sampling approximately 300 students from each participating institution. Students from institutions enrolling more than 300 freshmen were selected at random and follow-up questionnaires were mailed to students' homes. The return rate varied but averaged about 50% across institutions. Independent variables included gender, race, and institutional type.

Astin reported that participating in almost any type of extracurricular activity, involvement in honors program, and undergraduate research projects were factors

significantly affecting the students' persistence in college. In short, Astin's research provided evidence that student organizations and related student activities could make significant contributions to a student's development. Astin's research supported the idea that student involvement had a positive relationship with student retention, student satisfaction, and student perceptions of the college experience.

Williams and Winston (1985) studied how work and participation in student organizations (including Greek organizations) each contribute to students' personal development in different ways. The study included 168 students (55 who worked, 113 who did not) at a large, southeastern university. The participants were volunteer students enrolled in educational psychology and foundations of education classes. The Student Developmental Task Inventory-2 (SDTI-2) was used to assess developmental task achievement. The independent variables were students who worked and students who participated in student organizations, while the dependent variable was achievement of developmental tasks.

Students who participated in organized student activities and organizations showed statistically significantly greater developmental task achievement in the areas of interdependence, educational plans, career plans, and lifestyle plans than those who did not participate. Williams and Winston suggested that students who did not elect to become involved outside the classroom in either organized student activities or work were developmentally less mature than participants. Participation seemed to be an effective means of stimulating personal development.

Pace (1984) reviewed the literature of student outcomes testing for the last fifty

years to see trends or changes among college students. Pace explored a variety of research measuring the quality of the college student experiences. Pace developed the College Student Experience Questionnaire. He used the instrument on 14,615 students at 62 colleges collecting data over a four-year period at doctoral granting universities, comprehensive colleges and universities, public and private universities, and liberal arts colleges.

Pace (1984) used the term “value added” which is a concept of enriching student learning and development in college. The researcher points out that most students made substantial progress in understanding themselves and others and in clarifying their values and ethical standards. Pace also showed that most students made substantial progress toward gaining a broad general education about different fields of knowledge, and becoming aware of different philosophies, cultures, and ways of life.

Pascarella and Terenzini (1991) reviewed and analyzed hundreds of studies on the influence of college on students. These studies ranged from single-institution samples to multi-institution, nationally representative samples. The review largely focused on non-minority students of traditional college age attending four-year institutions full-time and living on campus. Pascarella and Terenzini synthesized twenty years of empirical research and over 2,600 studies to distill what is known about how students change and the benefits of college attendance.

Pascarella and Terenzini (1991) noted in their exhaustive review that peer relationships and extracurricular involvement might expose students to a social network of other achievement-oriented peers, thereby generating and reinforcing high aspirations

and goals. It may also facilitate the realization of such aspirations and goals by allowing students to acquire the personal resources (i.e., interpersonal skills, self-confidence, and specialized knowledge) that permit aspirations and goals to be realized.

Pascarella and Terenzini (1991) stated that participation or involvement in a number of areas, such as living in residence halls and extracurricular activities, has been found to affect students and their educational experiences. Out of class activities, especially participation in student organizations, have been assumed to contribute significantly to the development of the whole student and are considered an integral part of the education process.

Abrahamowicz (1988) studied the relationship of student organization membership to student perception, satisfaction with the college experience and overall involvement with college. The participants included 343 students (151 members of organizations, 192 non-members) at a large commuter university. Members of organizations were selected to include those organizations funded by the university and those fraternities and sororities chartered by their national organizations. The comparison sample of nonmembers was derived from seven classes with enrollment representative of the undergraduate day population of the university. The College Student Experience questionnaire was administered. Means were tested for significance by t-tests using the .01 level of significance. The independent variable was group membership. The dependent variables were satisfaction with the college experience and overall involvement in college.

The results indicated differences between students who participated in student

organizations (including Greek organizations) and students who did not. Members of student organizations scored significantly higher than non-members in all fourteen quality of effort categories. Examples of quality of effort included library experiences, use of athletic and recreation facilities, experiences with faculty, and use of student union. Members' perceptions were significantly more positive pertaining to relationships with faculty, administrators, and students.

Abrahamowicz (1988) explained that extracurricular participation encouraged students to connect with their institution. The degree of involvement maximized the educational impact and the positive conditions associated with academic performance. The students who seemed to have connected with their universities through involvement were more successful. The connections may be evident in the degree and breadth of involvement. The most influential variable for college achievement is the effort invested in opportunities for learning and development in the college setting such as student and/or Greek organizations.

Boyer (1987) explored the undergraduate experience. Sixteen experienced observer-reporters conducted site visits at 29 colleges and universities. The colleges represented a wide range of institutional types--liberal arts colleges, comprehensive colleges, doctorate-granting institutions, and research universities. Observers spent two weeks at each institution and questioned 5,000 faculty members and 45,000 undergraduate students across the country. The reports constituted a rich, vivid record of life in American colleges and universities. All of the reports were read and analyzed to discover common problems and successes as well as unifying themes.

Boyer (1987) concluded that a college or university was a place where the curricular and co-curricular have a unique relationship. At a time when social bonds are tenuous, students try to discover the reality of their dependency on each other. They must understand what it means to share and sustain traditions. Boyer also entertains the idea of building communities. Community can be a residence hall, a student organization, or a Greek-letter organization, etc. Organizations are a component of developing communities, which in turn leads to student development. This sense of community can lead to social integration, which can precipitate involvement in the college community. This, in turn, enhances the persistence and satisfaction reported by students at their particular institution.

In summary, Astin (1975) concluded that staying in college was significantly related to participation in extracurricular activities. Fraternities and sororities were especially significant in retaining students. Astin (1977) concluded that student involvement had a positive relationship with student retention and student satisfaction. Astin supported the idea that student organizations and student activities made significant contributions to a students' development, student retention and student satisfaction. Williams and Winston (1985) found that students who participated in organized student activities and organizations showed statistically significantly higher developmental task achievement. Student involvement was part of the value added. Student involvement had a positive relationship with student retention and development. Pascarella and Terenzini (1991) found that participation in student organizations contribute significantly to the development of the whole student. Extracurricular activities fostered aspirations

and development. Abrahamowicz (1988) found that extracurricular participation encouraged students to connect with their institutions. The most influential variable for college achievement was the effort a student invests in learning and developmental opportunities. Boyer (1987) found that the key to success in college is being involving in the college community and smaller communities within the college such as student organizations.

Student organizations help with the retention of students by allowing students to become involved with campus life and helping them belong to smaller communities within the university community. Student organizations also help students develop the skills that they need to perform in the post-college society. Student organizations and activities provide many reasons for students to be involved and find success in their collegiate efforts (Wessell, Engle, & Smidchens, 1978). Student involvement has its basis in psychosocial developmental theories that outline an individual's growth through life. Student involvement leads to the development of the student as a whole. The whole includes developmentally, socially, and scholarly. This is a very important item in the new age of accountability.

Pace (1984) also supported the idea that student involvement had a positive relationship with student retention, student satisfaction, and student perceptions of the college experience. Moreover, he suggested that the most important item for development and education is not where a student goes to college, but what the student does once he or she gets there.

One area of student involvement is Greek-letter organizations. Greek-letter

organizations are a high-profile subgroup on many campuses. There is a variety of research on these organizations. The next section will explore Greek-letter organizations.

Greek Life

Greek-letter organizations include fraternities and sororities. Greek-letter organizations started on American campuses in 1776 with the forming of Phi Beta Kappa at the College of William and Mary. Since that time, Greek-letter organizations have grown and flourished with higher education in America. Until the last thirty years, empirical research had not been done concerning Greek-letter organizations. Now researchers are focusing on Greek-letter organizations.

History of Greek Life

In 1776, Phi Beta Kappa became the first American society bearing a Greek-letter name. It was founded December 5, 1776, at the College of William and Mary in Williamsburg, Virginia. Phi Beta Kappa had all the characteristics of the present-day fraternity: the charm and mystery of secrecy, a ritual, oaths of fidelity, a grip, a motto, a badge for external display, a background of high idealism, a strong tie of friendship and comradeship, and an urge for sharing its values through nationwide expansion. The young men found the atmosphere of the Apollo Room of the Raleigh Tavern conducive to a buoyant camaraderie. Phi Beta Kappa and the societies that copied them eventually became scholarly honor societies (Owen, 1991).

In 1825, the Kappa Alpha Society was formed at Union College in New York. Two other groups formed shortly thereafter, creating the "Union Triad." The new societies bore a close resemblance to Phi Beta Kappa. The new society was met with

opposition of the faculty but was secretly popular with students. This became the pattern for the American fraternity system. College students originated secret societies to rebel against the autocratic and religiously oriented faculties (Longino & Kart, 1973). The fraternity movement survived the Civil War. After the Civil War, many fraternities appeared, especially ones created in the South at institutions made prominent by their military character (Owen, 1991).

Alpha Delta Pi was counted as the first sisterhood, having been founded as the Adelphean Society in 1851. Pi Beta Phi came into being in 1867 as the first organization of college women established as a national college fraternity. Kappa Alpha Theta was organized in January 1870 as the first Greek-letter society for women. All of the women's groups were called fraternities in the beginning because no other word existed.

In 1882, Gamma Phi Beta was named a “sorority,” a coined word suggested by their advisor who was a professor of Latin, and who thought the word “fraternity” was ill-advised for a group of young ladies. In 1909, the National Panhellenic Conference (the governing body of sororities) revised its Constitution to use the word “fraternity” throughout. This usage still prevails, but sorority is the mainstream term for women's Greek-letter organizations. Thus in literature regarding Greek-letter organizations, fraternity can apply both to men's fraternities and sororities (Owen, 1991).

Alpha Phi Alpha, the first historically Black social fraternity, was founded in 1906 at Cornell University in Ithaca, New York. In 1911, both Kappa Alpha Psi and Omega Psi Phi were founded as Black social fraternities. Alpha Kappa Alpha was the first historically Black sorority founded in 1908 at Howard University in Washington, D.C.

These groups were formed as predominantly Black, social Greek-letter organizations. McKee (1987) noted that on many predominately White college campuses, Black Greek-letter organizations provide the major social structure for Black students.

The Greek system reached its low point in 1973, when statistics reflected a substantial drop in growth and membership. After 1973, membership in Greek organizations started to rise and has continued to swell since that time. There are more than 7,000 chapters and 500 colonies at more than 800 colleges and universities. There are more men and women in the American college Greek system in 1991 than at any other time in their existence. The total number of fraternity and sorority members has increased by 178% since 1973, more than 6.5 million members of fraternities and sororities and 600,000 collegians on campuses throughout Canada and the United States make up the rolls of Greek membership (Anson & Marchesani, 1991).

Research in Greek Life

There have been several studies over the years dealing with fraternities, characteristics of members, effects on moral development, and values and effects on academic success. These studies provided a conflicting picture of the benefits or faults of Greek life. Miller (1973) noted that prior to 1973, numerous articles had been written condemning Greek-letter organizations. Many of these articles were not empirical, however, and were based primarily on personal opinion. Since then, several systematic attempts have been made to research differences between Greeks and non-Greeks. Research can be divided into several categories including characteristics, values, and development; academic life and cheating, alcohol, attitudes about fraternities, and alumni.

Research in characteristics, values, and development

The first study of note was Dollar (1966). One hundred and fifty freshman males at Oklahoma State University were studied in a variety of residential settings. A representative random sample of 50 subjects was selected from each category (dormitory men, fraternity men, men in off-campus housing). Dollar used the Survey of Interpersonal Values, the Guilford-Zimmerman Temperament Survey, and Survey of Study Habits and Attitudes. The independent variable was the housing group to which the freshman male belonged. The dependent variable was attitudinal characteristics of the students in the sample.

Significant *F* values were found on three of the six value scales (Recognition, Independence, and Benevolence). Dollar (1966) indicated that members of fraternities valued recognition more than students who lived at home or in residence halls and they described themselves as being more sociable and ascending in their behavior patterns. Fraternity members tended to be less submissive, more outspoken, showed more leadership habits, and were more aggressive in seeking the limelight. Dollar concluded that the fraternity members had the greatest potential for academic success and persistence in higher education.

Miller (1973) administered the College Student Questionnaire (CSQ) Part 1 to 818 freshman male students at orientation at the University of Pennsylvania. The sample was all male students who attended orientation before classes started in the fall semester. Seven months later, after the fraternity initiation period, the College Student Questionnaire (CSQ) Part 2 was administered to 300 students who had taken Part 1 of the

College Student Questionnaire, 150 students who had pledged a fraternity and 150 who had not pledged a fraternity. The students were randomly selected for the categories, fraternity members and independents. The independent variable was fraternity membership and the dependent variable was the attitudinal characteristics of the students in the sample.

When tested before the opening of classes, fraternity members were found to be significantly lower than the independent students on the Peer Independence, Liberalism, Cultural Sophistication, and Family Social Status scales. When retested, the fraternity members were found to be significantly different from the independent students on the Liberalism, Social Conscience, Cultural Sophistication, Satisfaction with Students, and Extracurricular Involvement scales. Fraternity members were significantly more conservative, less concerned, less involved, less interested in social injustices, less interested in cultural activities, and more involved in extracurricular activities. Miller suggested that there is a “fraternity type” since differences existed before the freshmen pledged a fraternity. Miller suggested certain types of individuals were joiners and other individuals were not joiners.

Longino and Kart (1973) followed up the Miller (1973) research with research that highlighted the beliefs of current research about fraternity life during the early 1970s. They summarized the characteristics of fraternity members and their impact on members. There was a decline in the fraternity lifestyle because of the increasing changes in student populations, less control of student governments, reduced visibility, and a weakening of the special advantages of fraternity membership. Other changes that affected fraternities

included changing ethnic, social class, and sex composition of the student body and the climate of faculty, student, and administrative opinion concerning fraternities. The fraternity movement has been a bastion of the White, upper and upper middle class students.

Longino and Kart (1973) noted that fraternity affiliates are typically thought to come from higher socioeconomic backgrounds. Self-selection and selective recruitment play a large part in fraternity life. Images play an important role in the process. The authors stated that the college fraternity is a training ground for the upwardly mobile and its rewards to this end should not be ignored. Fraternity life offered individuals the opportunity to network and prepare for their future in ways that are different than personal development.

Wilder, Hoyt, Doren, Hauck, and Zettle (1978) documented the four-year impact of Greek membership on attitudes and values. College Student Questionnaire part 1 and part 2 were administered to 1,816 Bucknell University students in 1965, 1966, 1968, 1969, 1970. The total freshman population was used for the sample pool. A 71 to 73 percent voluntary sample of seniors in each of the five classes completed the CSQ, Part 2, early in the second semester of their senior year. Students completed Part 1 as entering freshmen and Part 2 as second semester seniors. A 2 (Greek affiliation) by 2 (Sex) by 2 (Year) by 5 (Class) repeated measures statistical analysis for unequal numbers was performed on the data. The independent variables included Greek membership, sex, and class. The dependent variables were the values and attitudes of students in fraternity life.

The researchers revealed that non-Greeks increased significantly ($p < .05$) more

than the Greeks only on the scale of Family Independence (a generalized autonomy in relation to parents and family). Both groups changed significantly ($p < .05$) for Peer Independence (a generalized autonomy in relation to parents and family), Liberalism (a political, economic, and social value dimension, the nucleus of which is sympathy for either an ideology of change or an ideology of preservation), Social Conscience (moral concern about perceived social injustice and institutional wrongdoing), and Cultural Sophistication (authentic sensibility to ideas and art forms). Greeks were found to have lower scores than non-Greeks in Family Independence, Peer Independence, Liberalism, Social Conscience, and Cultural Sophistication.

The authors implied that members of fraternities and sororities differed substantially from independents. Fraternity or sorority members were more dependent on family and peers, more conservative, less sensitive to moral and social injustice, and less sophisticated in the humanities and arts. These differences persisted for the duration of the undergraduate years, implying that there is a fraternity “type” and that individuals join because they can become connected with a group.

Marlowe and Auvenshine (1982) tackled the impact on moral development of Greek membership on freshmen. A nonrandomized control-group, pretest-posttest design was used with freshmen at a small liberal arts college. The measurement tool was the Defining Issues Test (DIT). One hundred ninety were pretested and 98 posttested (48 Greek and 50 non-Greek). The original group consisted of volunteers who were pretested at their fall orientation. The independent variable was Greek affiliation and the dependent variable was achievement of moral reasoning.

The test for the main effect of Greek affiliation was not significant. No significant differences were found in the development of principled moral reasoning between affiliated and nonaffiliated students during the span of the freshman year. Marlowe and Auvenshine stated that contrary to the expressed philosophies of Greek organizations, Greek membership did not enhance a student's preference for principled moral considerations in making a moral decision.

Wilder, Hoyt, Surbeck, Wilder, and Carney (1986) expanded and updated the sample and restructured the classification of Greek membership of the work of Wilder et al. (1978). In the earlier study, Greeks were defined as all students who joined fraternities and sororities. In the 1986 study, Greeks were reclassified as students who remained active through their senior year, and ex-Greeks were those students who became inactive or resigned membership. The CSQ Part 1 was administered to students entering Bucknell University in 1965, 1966, 1968, 1969, 1970, 1980, and 1981. A total of 2,178 students completed both the freshman and senior questionnaires. The total freshman population was used. A voluntary sample, consisting of 71% to 80% of seniors in each of the seven classes, completed the CSQ, Part 2 early in the second semester of their senior year. A 2 (Sex) by 2 (Greek Affiliation) by 3 (Era) by 3 (Era x Sex) ANOVA for repeated measures for unequal numbers were performed on the data.

Greeks scored lower than both the ex-Greeks and the non-Greeks on all the scales (Family Independence, Peer Independence, Cultural Sophistication, Social Conscience, and Liberalism). Ex-Greeks had significantly greater changes (Peer Independence, Liberalism, Cultural Sophistication, Social Conscience) than did both non-Greeks and

Greeks on all scales except Family Independence. The Non-Greek T-scores were much higher than Greeks and non-Greeks. The authors concluded that the largest differences between Greeks and independents existed before students became Greeks or independents. The impact of Greek values on Greek members was not a result of their Greek membership but of their individual backgrounds.

Hughes and Winston (1987) found that there were no differences between pledges and non-Greeks at the beginning of their college careers. Hughes and Winston administered the Survey of Interpersonal Values (SIV) to fraternity pledges and members and to non-Greeks in a particular residence hall at a large, state-supported southeastern university during the first two weeks of the fall term and once again at the end of the spring term of the same academic year. A nonequivalent control group design was used in this study. A stratified random sample of the 26 fraternities on the campus was selected. A total of 8 fraternities were selected: 2 had fewer than 40 members; 3 had membership between 50 and 80; 3 had more than 80 members. A comparison group of independents was selected from a 1,000-bed, all-male, university residence hall. Ninety-seven fraternity members and 94 independents participated and participation was voluntary. The independent variable was Greek affiliation, while the dependent variable was achievement of interpersonal values.

No statistically significant differences were found for the six SIV scales between independents and pledges at the beginning of the academic year. At the end of the spring term, ANCOVAs revealed significant differences between pledges and non-Greeks for Independence and Leadership; pledges' Independence scores declined significantly and

Leadership scores increased significantly during the year when compared to non-Greeks. Pledges became more like each other in their personal values as compared to non-Greeks. For non-Greeks, there were no significant differences in variances between fall and spring. For pledges, significant differences were found for Independence and Benevolence; both had decreased from fall to spring. On the Independence scale, non-Greeks were significantly different from pledges in the spring. The researchers implied that pledging a fraternity had an effect on students personal values, some positive (leadership) and some negative (independence).

Eddy (1990) examined the differences between Greek and non-Greek men in levels of autonomy. Using the Iowa Developing Autonomy Inventory, Eddy tested 100 participants. The participants were a randomly selected sample of men of junior standing at a mid-size, midwestern, public university. The independent variable was Greek membership and the dependent variable was achievement of autonomy.

Emotional independence-peers was the only one of six subscales to reach statistical significance. Greek men seemed to be more dependent on their peers than non-Greek men. No significant differences were found between Greeks and non-Greeks on the subscale of interdependence, emotional independence-parents, time management, money management, and mobility. Eddy suggested that Greek affiliation had little relationship to autonomy development in general.

Baier and Whipple (1990) used a combination College Student Questionnaire 1 and 2 to compare Greek and non-Greek in the key intellectual value and attitude measures. The study used 1,540 students at a large public university in the southeast. A

stratified random sample stratified by class, gender, race, and Greek/Independent status was used. The independent variables were gender, race, Greek membership, and class level and the dependent variables were intellectual values and attitudes.

Non-Greek students were more likely to be married, to attend college part-time, to be in-state residents, to work more hours per week, and to receive more need-based aid. Greeks were found to be significantly ($p < .05$) more dependent on peers and family members than Independents. They were also found to be less aware and concerned about social issues, but more actively involved in campus extracurricular activities. Baier and Whipple stated that the Greek system appears to provide a “safe harbor” for those who seek conformity, family dependence, social apathy, and extensive involvement in extracurricular activities.

Kilgannon and Erwin (1992) examined moral reasoning and identity development of Greek and non-Greek men and women. The Defining Issues Test (DIT) and Erwin Identity Scale (EIS) were administered to 377 students at a midsized, comprehensive institution in the mid-Atlantic region. A stratified random sample was used including gender and Greek affiliation. The study used the EIS subscales of Confidence, Sexual Identity, and Conceptions About Body and Appearance as dependent variables and The DIT subscales of Principled Moral Reasoning and Anti-establishment as dependent variables, while the independent variables were Greek affiliation and gender.

Non-Greek women, Greek women, and non-Greek men scored similarly in the confidence category ($p < .05$). Greek men scored lower in the Confidence category. Non-Greek women had a higher Principled Moral Reasoning mean (43.4) than did Greek

women (40.6), non-Greek men (40.2) and Greek men (38.7). This showed a major difference in Greek and non-Greek in the area of Principled Moral Reasoning. There were no differences in Principled Moral Reasoning among Greek women and non-Greek men. The authors implied that Greek affiliation may be restricting the development of moral reasoning abilities in both men and women.

Hunt and Rentz (1994) focused on psychosocial development and Greek-letter organizations. At a medium-sized, public, midwestern university, 321 students completed the Student Development Task and Lifestyle Inventory (SDTLI) and the Extracurricular Involvement Inventory (return rate of 76%). The participants were part of a random stratified sample ($N = 420$) developed from the membership lists of registered Greek-letter social organizations. The independent variables were gender and class standing. The dependent variable was the achievement of psychosocial development.

Hunt and Rentz were able to support a relationship between Greek-letter social group members' involvement and certain aspects of psychosocial development as measured by the SDTLI. Involvement was significantly related to the following: establishing and clarifying purpose; developing mature interpersonal relationships; and establishing an intimate relationship with another based on trust, reciprocal caring, and honesty. Students who participated less in activities and organizations outside the fraternity or sorority or who had lower levels of involvement within their Greek-letter social group reported less psychosocial development than those who were more involved. The more involved a Greek student was, the more psychosocial development occurred.

Donlin (1994) studied the relationship between membership in Greek-letter

organizations and psychosocial development. The study included 261 Black Greek ($N = 62$) and White Greek ($N = 66$) and Black non-Greek ($N = 64$) and White non-Greek ($N = 69$) students at Mississippi State University. A random sample was used to identify students to participate in the study. A causal-comparative study was done by using the Student Developmental Task and Lifestyle Inventory. Independent variables included gender, race, and Greek affiliation, while the dependent variables were students' scores pertaining to autonomy, purpose, and mature interpersonal relationships. T-tests were used to analyze the data.

Only two significant results were reported. The two significant scores were Black Greek males and Black Greek females had significantly higher scores on the task of defining purpose for the student's life than Black non-Greek males and Black non-Greek females. The author suggested that membership in Greek-letter organizations at Mississippi State University did not promote or hinder personal development, as measured by the SDTLI.

Pascarella, Edison, Whitt, Nora, Hagedorn, and Terenzini (1996) explored a longitudinal and multi-institutional investigation of the cognitive effects of Greek affiliation during the first year of college. The sample was drawn from eighteen institutions and involved 3,331 students. Institutions were selected from the National Center on Educational Statistics Postsecondary Education Data System database to represent differences in colleges and universities nationwide on a variety of characteristics, including institutional type and control, size location, and commuter or residential character. Participants completed the Form 88A of the Collegiate Assessment

of Academic Proficiency (CAAP) at the beginning of their college career and Form 88B at the end of their freshman year. Form 88A was used to assess general cognitive skills typically acquired by students in the first two years of college. Form 88B was used to assess reading comprehension, mathematics, and critical thinking.

The study design was a pretest-posttest, quasi-experimental design in which statistical controls were made for precollege and other variables. The comparison groups were students who joined Greek-letter organizations and students who had not joined. The independent variables were race, gender, and Greek affiliation. The analysis showed that joining a fraternity during the first year of college had a significant negative impact on all four outcomes (reading comprehension, mathematics, critical, and composite achievement) for men. Women joining a sorority during the first year of college had a negative influence on reading comprehension and composite achievement. For men, ethnicity influenced the magnitude and nature of the cognitive effects of Greek membership. For White men, all four outcomes were negative, for men of color a modest positive influence was reported. The findings suggested that the normative peer culture and socially-oriented time commitments of Greek life often are inconsistent with the educational and intellectual mission of the institution.

Pascarella, Edison, Nora, Hagedorn and Terenzini (1996) studied influences on students' openness to diversity. The sample was drawn from incoming first year students at eighteen four-year institutions located across the country. Institutions were selected from the National Center on Education Statistics IPEDS database. The initial data collection was conducted in the fall of 1992. A precollege survey obtained information

on student demographics characteristics and background, expectations of college, and a series of items assessing students' orientations toward learning, one of which was their openness to diversity and challenge. Independent variables included race, sex, and student social/nonacademic experiences (fraternity/sorority membership, athletics, on-campus residence). The dependent variable was openness to diversity/challenge.

A quantitative analysis (correlations and regressions) was used with the significance set at .01. Joining a fraternity or sorority had a modest but significant negative effect on openness to diversity/challenge. For non-White students, Greek membership had a small positive influence (0.368) on openness to diversity/challenge, whereas for White students the influence was strongly negative (-1.126). Belonging to a fraternity or sorority may benefit students of color in regards to openness to diversity/challenge. The negative results for White students with Greek membership can lead one to believe that these groups provide essentially homogeneous and insulated environments that minimize opportunities for openness to diversity/challenge. The authors suggested that there is the potential need for programmatic intervention in this area.

Brand and Dodd (1998) studied self esteem among college men concerning Greek affiliation and year in college. Participants included 75 men who were members of fraternities and 57 men who were not in fraternities. Participants were drawn from various campus events and locations on a private, urban university in the midwest. Participants completed a brief questionnaire, which included Posenberg's (1965) 10-item Self-Esteem scale and 8 demographics items. The independent variables were Greek

status and college year. The dependent variable was scores on the self-esteem questionnaire.

A 2 by 4 analysis of variance (Greek status by college year) was conducted on the self-esteem variable. There was a significant main effect for Greek status, with Greek men scoring higher than non-Greek men. First-year students along with seniors tended to score relatively high on self-esteem with sophomores reporting the lowest. The results showed that there were differences in self-esteem between Greek and non-Greek men by the end of the first year of college. The authors suggested a sophomore slump in self-esteem.

Pike (2000) studied Greek-letter membership influence on college experiences and cognitive development. The researcher used 827 first-time college students living on campus or in Greek housing at a public, midwestern university. The researcher used the University of Missouri Freshman Survey as his instrument. The independent variables were gender and Greek membership. The dependent variables were cognitive development and college experiences.

The data analyses were conducted in three phases. The first analysis focused on the relationships (covariances) among observed variables. The second analysis examined the model invariant across the two groups. The third phase of analysis was a test of means and intercepts for Greek and non-Greek students using a confirmatory factor analysis of latent variables.

The research suggested three findings. First, Greek and non-Greek students differed significantly in terms of their means levels of social involvement and gains in

general abilities. The differences included Greek students did not report lower levels of academic involvement and integration of college experiences. Second, the unique effects of Greek affiliation were more pronounced for college experiences than for cognitive development. Membership in a Greek organization was directly related to students' social involvement and integration of college experiences. Third, relationships between college experiences and cognitive development varied depending on the dimension of cognitive development being examined.

Pascarella, Flowers, and Whitt (2001) studied the cognitive effects of Greek affiliation. The institutional sample in this study was 18 four-year institutions. The individuals in the overall student sample were students who participated in the first, second, and third follow-ups of the National Student of Student Learning (NSSL). The initial data collection included 3,331 students, the second year included 2,416 students and the third year included 1,613 students. The independent variable was students who had joined a Greek-letter organization as a first-year student. Dependent variables were scores on the Collegiate Assessment of Academic Proficiency (CAAP) and the College Student Experiences Questionnaire (CSEQ).

The data analyses were carried out in three stages. The first stage analyzed Greek affiliation and other variables considered casually prior or concurrent with first-year students. The second stage regressed each dependent variable on the total effects of membership and each of the college experience variables. The third stage tested for the presence of conditional effects. For fraternity membership the only statistically significant factor was that fraternity members reported significantly smaller gains in

understanding the arts and humanities after 3 years of college than non-Greek men. For women, sorority membership exerted small positive effects on all self-reported gains measures. The authors suggested that any negative effects diminish substantially after the freshman year and that membership could be better served by waiting till after the freshman year to join Greek-letter organizations.

In summary, Dollar (1966) found that fraternity members tended to be less submissive, more outspoken, and showed more leadership. He concluded that fraternity members had a great potential for academic success. Miller (1973) found fraternity members to be significantly more conservative, less interested in social injustices, less interested in cultural activities, and more involved in extracurricular activities. Longino and Kart (1973) noted that typically fraternity members came from higher socioeconomic backgrounds. Image was very important to fraternity members. Wilder et al. (1978) found fraternity and sorority members to be more dependent on family and peers, more conservative, less sensitive to moral and social injustice, and less sophisticated in the humanities and arts.

Marlowe and Auvenshine (1982) found no differences in the development of principled moral reasoning between affiliated and nonaffiliated students during their freshman year. Wilder et al. (1986) found that Greeks scored lower than non-Greeks on the scales of family independence, peer independence, cultural sophistication, and liberalism. Hughes and Winston (1987) found that pledging a fraternity decreased independence and benevolence in first-year members as opposed to students who did not pledge. The limited research in the 1980s was negative.

Baier and Whipple found significant differences in peer independence, family independence, and social conscience. Greeks were found to be more dependent on peers and family members and they were less concerned about social issues. Eddy (1990) suggested that Greek affiliation had little relationship to autonomy development. Kilgannon and Erwin (1992) found differences in the development of moral reasoning abilities between Greek and non-Greek. They implied that Greek affiliation might restrict the development of moral reasoning abilities. Hunt and Rentz (1994) found that certain aspects of psychosocial development and membership in Greek-letter organizations were related. The aspects included purpose and interpersonal relationships. Donlin (1994) suggested that Greek-letter membership does not promote or hinder personal development. Pascarella et al. (1996) showed a significant negative impact on reading comprehension, mathematics, critical thinking, and composite achievement for Greek men. For Greek women, there was a negative impact on reading comprehension and composite achievement. Pascarella et al. found that the impact of fraternity/sorority membership had a significant negative effect on openness to diversity/challenge for White students. Brand and Dodd (1998) found differences in self-esteem between Greek and non-Greek men. Greek men scored higher on the self-esteem scales in this study. Pike (2000) found that fraternity/sorority membership did not hinder cognitive development. Pascarella et al. (2001) showed that Greek membership had a negative effect on the first-year student but not a student in their second or third year. Table 1 displays the research pertaining to Greeks' values, characteristics, and attitudes.

Table 1Researching pertaining to Greeks' Values, Characteristics, and Attitudes

<i>Researcher</i>	<i>Date</i>	<i>Focus of Study</i>	<i>Conclusion</i>
Dollar	1966	values	positive
Miller	1973	values	mixed
Longino & Kart	1973	characteristics	mixed
Wilder, Hoyt, Doren, Hauck & Zettle	1978	attitudes/values	negative
Marlowe & Auvenshine	1982	moral development	neutral
Wilder, Hoyt, Surbeck, Wilder & Carney	1986	attitudes/values	negative
Hughes & Winston	1987	interpersonal values	negative
Baier & Whipple	1990	intellectual values	negative
Eddy	1990	autonomy	neutral
Kilgannon & Erwin	1992	moral reasoning	negative
Hunt & Rentz	1994	psychosocial development	negative
Donlin	1994	psychosocial development	neutral
Pascarella, Edison, White, Nora, Hagedorn & Terenzini	1996	cognitive effects	negative
Pascarella, Edison, Nora, Hagedorn & Terenzini	1996	diversity	negative
Brand & Dodd	1998	self-esteem	positive
Pike	2000	cognitive development	neutral
Pascarella, Flowers & Whitt	2001	cognitive effects	mixed

With the disappointing results of the research on the characteristics, values, and development of Greek organizations, it is necessary to evaluate Greek-letter organizations, especially involving psychosocial development. Greek organizations claim

to provide a great learning opportunity for students. Student affairs professionals must determine if this is the case.

A variety of research has focused on different characteristics and development. There is not a wealth of information concerning psychosocial development and Greek life. This is an area where research could be valuable for the study of the culture of fraternity life and its value.

Research in academic endeavors

Academic endeavor studies have also been performed on Greek life. Academic endeavor studies include GPA comparison, environment influences on academics, and cheating. Winston, Hutson, and McCaffrey (1980) studied the environmental influences on fraternity academic achievement. The study was conducted at a large, southern, public university. The sample included six fraternities with a total of 379 members (22% of the fraternity population). Form R of the University Residence Environment Scale (reliability estimates ranged from .65 to .91) measured the social climate within each of the fraternities. The fraternities' selection was based on the quarterly academic rankings published by the Interfraternity Council with the selection of the three highest and three lowest ranking fraternities. One-way analysis of variance procedure was used. Fraternities that had high academic achievement were compared with fraternities that had low academic achievement. The dependent variable was environmental factors' effects on academic achievement.

There were no significant differences in academic abilities, as measured by SAT,

among sampled fraternities. Differences were found in social environments. Statistically significant differences were found on the Academic Achievement, Independence, and Intellectuality Scales. It was concluded that high achieving fraternities promoted intellectual development beyond assigned classroom activities. These findings suggested that members are reinforced and/or rewarded for their performances. Grades and academic performances were topics of conversation and were kept in the awareness of the chapter. The low achieving fraternities did not promote academic endeavors.

Pike and Askew (1990) examined the effects of belonging to a Greek organization on students' academic experiences. The study was conducted at a major, public research university in the southeast with an enrollment of 20,000 students. The study used the information obtained from the College Outcome Measures Project (COMP) Objective Test. At this university, all seniors are required to take the COMP. The sample included 6,646 seniors, 15% fraternity and sorority members. Three classes of variables were used in the study: background characteristics, measures of academic involvement, and educational outcomes.

Greek men had lower cumulative grade point averages than independent males. Greek women had slightly higher cumulative grade point averages than independent females. Fraternity and sorority members reported higher levels of academic effort, higher student interaction with other students, and a higher level of involvement in student professional organizations. Independents were higher in involvement in extracurricular cultural activities and interaction with faculty. Results were mixed. While

the impact of Greek membership on educational involvement may be less dramatic than some would hope, the authors concluded that there was ample reason to believe that membership in fraternities and sororities can lead to positive outcomes. The authors stated the opportunity for Greek membership be maintained as one extracurricular option.

McCabe and Bowers (1996) examined and compared self-reported cheating behaviors of fraternity and non-fraternity members. A total 1,793 students (response rate: 38.7%) from seven institutions returned a six-page survey. A stratified random sample of 200 seniors, 150 juniors, and 150 sophomores at participating institutions was given the survey. The independent variables were Greek membership and gender. The dependent variable was student cheating.

The authors found that the frequency of cheating on tests among men was significantly higher than that among women. Significantly more cheating was found among those who belong to either a fraternity or sorority than those who are non-members (20% more for fraternity members, 15% more for sorority members). Another conclusion was that cheating on tests had increased significantly over the last 30 years at the seven institutions in the study. McCabe and Bowers stated that it is clear that cheating would not disappear or even change dramatically, if fraternities or sororities did not exist on campus.

In summary, research in academic endeavors began with Winston et al. (1980) who found differences in the social environments of fraternity housing. The fraternities that provided an atmosphere that promoted intellectual development were the ones who

were academically successful. Pike and Askew (1990) presented mixed results. The authors stated that there was ample reason to believe that membership in Greek letter organizations could lead to positive outcomes. McCabe and Bowers (1996) found significantly more cheating among those who belong to either a fraternity or sorority.

Research in alcohol and Greeks

A variety of factors can affect academic performance. Alcohol consumption is one of them. Alcohol consumption among college students started to become an issue after the mid 1980s. Goodwin (1989) explored the reasons for drinking among members of fraternities and sororities at a large, western public university. The analysis was based on responses to an extensive questionnaire completed anonymously by 2,276 fraternity and sorority members, including freshmen. The dependent variable was defined as the extent of drinking. The independent variables included personal beliefs/feelings, social beliefs, college-related beliefs, control of drinking, and house-related beliefs/characteristics.

Numerous factors influenced the level of drinking. They included personal beliefs or expectations about how appropriate it is to be inebriated in different contexts, cumulative effect of the fraternity or sorority house environment, and the impact of social beliefs. The author said that the extent of high school drinking is a major predictor of current drinking. Males tended to think that drinking is a male specialty. The study reflected negatively on fraternity and sorority life because of the level of drinking that this environment entailed. Alcohol was considered a problem.

O'Conner, Cooper, and Thiel (1996) examined the relationship between prior alcohol use and potential fraternity membership. One hundred sixty-three freshman males out of 300 (return rate: 54.3%) at a small, private midwestern university completed the Student Drinking Information Scale (SDIS). Participation was voluntary. The independent variable was Greek membership. The dependent variable was alcohol use.

The authors showed that fraternity members were 3 to 1 more likely to be heavy drinkers. The analysis revealed that those who drank more were more likely to pledge a fraternity than those who drank in lesser amounts. Based on the chi-square analysis, overall consumption level seemed to be a very good predictor whether or not people pledged. The authors revealed a significant relationship between pre-college levels of alcohol consumption and the likelihood that a freshman would pledge a fraternity. The investigation showed that the relationship between fraternity membership and drinking was not solely a result of belonging to the fraternity.

Wechsler, Kuh, and Davenport (1996) compared the drinking behavior of fraternity and sorority members with non-members to determine alcohol usage. A national sample of 179 four-year colleges and universities was used. A 20-page questionnaire was developed drawing on standardized measures used in other studies of alcohol use. A total of 17,592 students returned the questionnaires for a response rate of 69%. The independent variables were gender and Greek affiliation. The dependent variables were drinking behavior and alcohol usage.

A majority of the total sample considered heavy alcohol use to be a problem on

their campus. Virtually all fraternity and sorority members drank. The majority (86%) of fraternity house residents engaged in binge drinking, compared with about 71% of the non-resident members, and 45% of the non-fraternity men. Findings were similar for the women. The authors stated that fraternity and sorority house environments appeared to tolerate hazardous use of alcohol and other irresponsible behaviors. These problems can also affect attitudes about fraternities and sororities.

Alva (1998) compared alcohol use patterns and personal beliefs and expectancies about alcohol use of Greek and non-Greek affiliated college students. Subjects included 1,901 (38.6% male and 61.4% female) undergraduate college students from four campuses of a large, comprehensive public university system in California. The sample of college students was randomly selected. The Core Alcohol and Drug Survey was used in this study. The instrument was developed as a measurement of alcohol, marijuana, tobacco, and other drug usage on college campuses and as an assessment of student's attitudes, perceptions, and opinions of various aspects of college life related to substance abuse. The independent variables were gender and Greek affiliation. The dependent variables were alcohol use and expectancies.

T-tests were used to analyze the data. A comparison of Greek fraternity and sorority members and non-Greek students revealed that fraternity and sorority members reported significantly higher levels ($p < .05$) of weekly alcohol consumption. On average, Greek members reported consuming 3.91 drinks per week, compared to 1.75 consumed weekly by non-Greeks. This study supported past research findings showing a higher

incidence of self-reported alcohol consumption among fraternity and sorority members than in the general population. Greek members were more likely to believe that alcohol enhances social activity and facilitates bonding.

Pace and McGrath (2002) compared students who were members of Greek-letter organizations and a student volunteer organization. Three hundred and twenty-one undergraduate students from a Midwestern, public university participated in the study. The Core Alcohol and Drug Survey was used in this study. The instrument was developed as a measurement of alcohol, marijuana, tobacco, and other drug usage on a college campus and assessment of college students' attitudes, perceptions, and opinions of various areas of college life related to substance abuse. The independent variable was Greek membership. The dependent variable was drinking behaviors.

An ANOVA method was applied examining alcohol use over the last year, the last 30 days, the occurrence of binge drinking, and differences between groups in the occurrence of certain alcohol-related behaviors. Findings indicated no significant differences between Greeks and the volunteer organization's members in a number of problematic behaviors associated with binge drinking. The authors stated that several of the same behavioral problems suggested that there may not be as many differences between Greeks and other students as has been previously assumed. Students involved in student organizations may be more alike in drinking habits than students who are not in organizations. Both Greek and the volunteer organization alcohol-related behaviors were significant as compared to students not in student organizations.

In summary, research on alcohol and Greeks revealed negative results. Goodwin (1989) said that the extent of high school drinking was a major predictor of college drinking and many drinking high school students were attracted to fraternity life. O'Connor et al. (1996) found that fraternity members were 3 to 1 more likely to be heavy drinkers. The author revealed a significant relationship between pre-college levels of alcohol consumption and the likelihood of joining a fraternity. Wechsler et al. (1996) found that a majority of fraternity and sorority house residents engaged in binge drinking. Fraternity and sorority members engaged in binge drinking at a much higher rate than non-members. Alva (1998) supported previous research that Greek membership reported higher levels of weekly alcohol consumption. Pace and McGrath (2002) found that students who joined organizations, not just Greek-letter organizations, had many of the same drinking behaviors.

Other research of Greeks

Malaney (1990) examined student attitudes toward fraternities and sororities. The study was conducted at the University of Massachusetts, a research-oriented institution with about 18,000 undergraduates. The study used a phone interview technique to interview 310 randomly selected undergraduates. The independent variable was Greek affiliation. The dependent variable was perception of students at the university of what Greek affiliation meant to them.

The author showed that non-Greeks as well as Greeks see certain advantages in belonging to fraternities and sororities. Non-Greek students recognized the following

advantages to Greek life over residence hall living: leadership opportunities and community service opportunities. A majority of Greeks see additional advantages: greater chance to associate with others who share the same interests and more opportunity to meet people who can assist in a future career. A majority of all students also recognized that Greeks perform community service and are involved in campus activities outside of the Greek system. With students seeing advantages, there could be a lasting effect for alumni of Greek-letter organizations.

The Center for Advanced Social Research (1997) conducted a study to look at University Alumni and giving, community participation, and retrospective college satisfaction. Ten colleges and universities agreed to provide alumni lists for the following graduation years: 1965, 1975, 1985, and 1994. Random selection of alumni was set up by computer. The total sample included 2,348 individuals. Hierarchical regression analyses were used to analyze the data. The independent variables were post-college involvement and satisfaction of one's college experience. The dependent variable was membership in Greek-letter organizations.

The researchers indicated that Greeks belonged to more civic organizations. Greeks gave significantly more than non-Greeks to their alma mater and religious organizations. There was no difference in the overall college satisfaction levels in the two groups. Greeks were more satisfied with the social aspect of the college experience. Greeks were less satisfied with their academic life in college and their relationship with teachers, counselors, and administrators.

Hayek, Carini, O'Day, and Kuh (2002) compared levels of student engagement on members of Greek-letter organizations and non-members. The sample was composed of 42,182 undergraduate students at 192 institutions that had recognized Greek systems and who completed The College Student Report. The independent variable was membership in a Greek-letter organization. The dependent variable was the levels of engagement of the students.

The study used Hierarchical Linear Modeling for analysis. Greek membership had statistically significant and positive effects, indicating that Greeks were more highly engaged than nonmembers, on average; two conclusions that the authors make are that students who belong to Greek-letter organizations do not fare worse and in many cases fare better than other students in terms of student engagement. Second, the overall favorable Greek engagement effect generally applied to all segments of Greek membership.

Chang and DeAngelo (2002) tested whether different levels of racial compositions affect White student participation in Greek-letter organizations. The main source of data was obtained from the Cooperative Institutional Research Program (CIRP) database of college students. CIRP data was drawn for annual surveys received from over 200,000 students. The two instruments used were the Student Information form and the College Student Survey. The independent variable was Greek membership. The dependent variable was participating in Greek-letter organizations consisting of several stages of logistic regression analysis. Cross-tabulation analysis showed differential patterns of

participation in Greek organizations by White students relative to their pre-college expectations. Undergraduate racial composition made a significant difference in whether or not White students eventually joined a fraternity. White students on a high percentage of White campus were more likely to join than ones on a racially diverse campus.

Other research studies included Malaney (1990), who found that a majority of all students recognize that Greeks performed community service and were involved in campus activities. Both Greeks and non-Greeks saw advantages to being Greek. The Center for Advanced Social Research (1997) indicated that alumni of Greek organizations belong to more civic organizations and contribute more to their alma mater and religious organization. Hayek et al. (2002) provided a positive view of Greek life concerning student engagement. Chang and DeAngelo (2002) debated the joining of fraternities as related to racial composition on campuses.

Summary of Greek Life Research

In summary, a variety of research material has been presented in this review. The articles fall into four categories positive, mixed, negative, and neutral. The positive research included Dollar (1966), the Center for Advanced Social Research (1997), Brand and Dodd (1998), and Hayek et al. (2002). The mixed research included Miller (1973), Pike and Askew (1990), Malaney (1990), Hunt and Rentz (1994), Donlin (1994), and Pascarella et al. (2001). The negative research included Wilder et al. (1978), Wilder et al. (1986), Hughes and Winston (1987), Goodwin (1989), Eddy (1990), Kilgannon and Erwin (1992), Pascarella et al. (1996), Pascarella et al. (1996), McCabe and Bowers

(1996), O'Connor et al. (1996), Wechsler et al. (1996), and Alva (1998). The neutral research included Longino and Kart (1973), Marlowe and Auvenshine (1982), Winston et al. (1980), Pike (2000), Chang and De Angelo (2002), and Pace and McGrath (2002). A majority of the research was either negative or mixed. Table 2 indicates the research on Greek contribution to psychosocial development.

Table 2

Research involving Greek Organizations

<i>Researcher</i>	<i>Date</i>	<i>Focus of Study</i>	<i>Conclusion</i>
Dollar	1966	values	positive
Brand & Dodd	1998	self-esteem	positive
Hayek, Carini			
O'Day & Kuh	2002	student engagement	positive
Miller	1973	values	mixed
Longino & Kart	1973	characteristics	mixed
Pike & Askew	1990	membership effects on academic experience	mixed
Malaney	1990	attitudes toward Greeks	mixed
Pascarella, Flowers & Whitt	2001	cognitive effects	mixed
Winston, Hutson & McCaffrey	1980	environmental influences on academic achievement	neutral
Marlowe & Auvenshine	1982	moral development	neutral
Eddy	1990	autonomy	neutral
Donlin	1994	psychosocial development	neutral
Pike	2000	cognitive development	neutral
Pace & McGrath	2002	drinking behaviors	neutral

review of Greek research literature revealed a pattern of negative attributes for Greek-letter organizations that might hinder psychosocial development of the members of these organizations as opposed to Tripp's.

Research literature reveals holes in the research pertaining to psychosocial development and Greek-letter organizations. Greek-letter organizations are high profile, intentionally structured groups on college campuses. Many college administrators argue the value of the Greek-letter organization experience. There is interest in how Greek-letter organizations help or hinder psychosocial development of college students. If psychosocial development is considered a positive attribute for students to receive during their college career, then it is important to monitor student's progress. There are many ways that students can develop. Organizations particularly Greek-letter organizations should provide for psychosocial development. The research of Greek-letter organizations showed that they provide an atmosphere that does not support psychosocial development. The current study on these organizations can benefit the body of knowledge.

Summary

In this political and economic climate of higher education, the age of accountability has become a driving force. Under the watchful eyes of federal and state governments, institutions now have to be mindful of the ways funds are being utilized and what products (students) that they are producing. The development of the Council on Postsecondary Education has furthered the concept of accountability of funding for higher education in the Commonwealth of Kentucky. Its design is one of funding tied to

performance indicators. Institutions are looking for ways to increase retention of students and graduation rates.

One can argue that the theories of student development are an important part of the higher education process. Theories such as cognitive-structural, person-environment interaction, typological, and psychosocial can help institutions develop programs to help retain students and develop them into members of society that are needed in this age of technology.

In this age of accountability for higher education, institutions need to meet the students' psychosocial needs. Meeting psychosocial needs are very important for each individual student. By meeting students' psychosocial needs, institutions can increase retention and increase satisfaction with the individual's college experience. Increased retention and satisfaction will help during this era of higher education by helping revenues streams for the institutions, meeting performance indicators, and by producing good citizens for society. Meeting the psychosocial needs of the college students is a desired outcome for higher education, which relates to Pascarella and Terenzini (1991)'s definition of higher education. Many of the outcomes of developing psychosocial needs are what the General Assembly of Kentucky wanted in the outcomes of their reform of higher education in 1997. Outcomes include better trained workers and individuals who can operate in the ever-growing technological age.

College life can be the foundation and the building blocks for meeting and developing psychosocial needs. One way to meet these needs is student involvement.

Student involvement allows an individual the opportunity to meet their psychosocial needs. Students who are involved develop skills that aid in meeting their psychosocial needs. There are numerous avenues of student involvement.

Greek life is one such avenue. Membership in Greek organizations can help meet the psychosocial needs of students. The effect of Greek life on psychosocial development is important. It is important to know Greek life's value to college campuses. By studying this subgroup, a researcher can determine if Greek-letter organizations meet students' psychosocial needs. This research offers an opportunity to further develop the body of knowledge concerning both psychosocial development and Greek-letter organizations.

Fraternities and sororities can potentially help in the psychosocial development of college students. With these organizations' new members, pledges, and member development programs, they have the opportunity to enhance the development of their members. Greek Life can help in the areas of psychosocial development such as Chickering's developing competence, managing, emotions, and establishing identity. Fraternities and sororities also provide an outlet for students to harness their energies and develop a foundation to build their psychosocial abilities. The research shows that fraternities and sorority may not provide an atmosphere for psychosocial development and may in turn retard development. At some institutions, fraternity and sorority life have increased psychosocial development. If fraternities and sororities are meeting the psychosocial needs of their members, then institutions of higher education need to evaluate the existence of the organizations. At the least, the institution should foster

programs that will help these organizations with psychosocial development of their members.

CHAPTER III

METHOD

The purpose of this research was to examine psychosocial development as defined by Purpose, Autonomy, and Mature Interpersonal Relationships at regional residential campuses in Kentucky. The focus was the differences between Greek and non-Greek students on selected levels of psychosocial development measured by The Student Developmental Task and Lifestyle Assessment (STDLA) (1999). The STDLA measures three components Establishing and Clarifying Purpose (PUR), Developing Autonomy (AUT), and Developing Mature Interpersonal Relationships (MIR).

Advancement in Literature

Relatively little research has been conducted on Greeks and developmental issues associated with Greek students at public regional residential campuses. The limited amount of research performed to date on Greeks has been almost exclusively on historically White fraternities and sororities weighing heavily on the fraternity side (Baier & Whipple, 1990; Dollar, 1966; Eddy, 1990; Hunt & Rentz, 1994). Many of the studies concentrated on major public and small selective liberal arts colleges (Hughes & Winston, 1987; Marlow & Auvenshine, 1982). This study included research that involved Greeks and minority students at regional universities which has had very little attention in previous studies.

Fraternities and sororities play a significant part of campus life at many

institutions. Various people in higher education say that Greek-letter organizations are antithetical to the mission of the educational institution (Baier & Whipple, 1990; Maisel, 1990). Others believe that Greek-letter organizations add to the university community (Astin, 1983; Strange, 1986). One area to investigate is the relationship that membership in these organizations might have with the psychosocial development of a student. Can membership in Greek-letter organizations help enhance the psychosocial growth of students? Assuming that higher levels of psychosocial development are desirable or an appropriate outcome, this study could provide evidence concerning the role of these organizations on the university campuses.

The effect of Greek life enhancing psychosocial development can be important. By studying Greek-letter organizations, a researcher can help determine if Greek-letter organizations meet students' psychosocial needs. This research offered an opportunity to further develop the body of knowledge concerning both psychosocial development and Greek-letter organizations.

Participants

In this section, the researcher presents the population, target population, and sampling frame.

Population

The target population was students at regional public institutions. The survey population was students at three regional public institutions in Kentucky. The sampling frame was as follows: Greek and non-Greek students were selected randomly from the students who were enrolled at the three regional residential campuses in Kentucky

(Eastern Kentucky University, Murray State University, and Western Kentucky University) for the fall 2005 semester. Eastern Kentucky University is located in Richmond. Murray State University is located in Murray. Western Kentucky University is located in Bowling Green.

These three sites were chosen because of similar characteristics among the universities and fraternity and sorority systems. The three universities are regional residential campuses with similar admissions requirements including average ACT/SAT and high school grade point averages for incoming freshmen at each university. Each Greek system was established between 30 and 40 years ago. The universities have been supportive of their Greek systems. Each university has provided assistance by allowing use of university facilities and providing university resources such as the offices of Greek Life.

The following reflects the comparison of the three institutions. Each university requires between a minimum of 2.3 and 2.65 high school grade point average, a minimum of 18 to 22 on the ACT standardized test, and Pre College-Curriculum. The Pre College-Curriculum includes 4 years of English, 3 years of math including Algebra I, Algebra II, Geometry; 2 years of Social Studies including World History; and 2 years of Sciences including Biology during high school.

For the fall of 2005, each freshman class for the three respective universities had grade point averages ranges from 3.10 to 3.29. The average ACT test score ranges from 19.8 to 24.7. The average cost to attend each university as an in-state student ranges from \$9,800 to \$10,750 per year. The cost includes in-state tuition and fees, room and board,

books, personal expenses, and transportation.

The three institutions have undergraduate student populations ranging from 7,834 to 15,978. The male-female ratio is about 40% male and 60% female at all three institutions. The African-American student population ranges from 5% to 9% of the undergraduate population. The fraternity/sorority populations make up between 8% and 12% of the undergraduate populations at the institutions. Table 3 highlights the comparison of the three universities.

Table 3

Comparison of Student and Greek Population of Eastern Kentucky University, Murray State University, and Western Kentucky University (Fall 2005)

<i>Student Population</i>				
	<i>Undergraduate</i>	<i>Male</i>	<i>Female</i>	<i>Black</i>
Eastern Kentucky	13,942	5431	8511	637
Murray State	7,834	3003	4831	604
Western Kentucky	15,978	6709	9269	1448

<i>Greek Population</i>					
	<i>Greek</i>	<i>Male</i>	<i>Female</i>	<i>Black Male</i>	<i>Black Female</i>
Eastern Kentucky	1122	423	699	22	24
Murray State	911	463	448	26	18
Western Kentucky	1290	580	710	28	29

Note. Greek Population = members of fraternities and sororities. Male = members of fraternities. Female = members of sororities. Black Male = Black males members of fraternities. Black Female = Black female members of sororities.

Sample

Upon receiving clearance from the Human Subjects Committee from the University of Louisville and Western Kentucky University to conduct the research, lists were obtained from each institution's Office of Student Activities of Non-Greek/Greek, Black/White Male/Female students. The random sample was drawn from the individual lists provided by each student activities office from each institution's database for each

cell (Black female, Black male, Greek Black female, Greek Black male, White female, White Greek female, White male, White Greek male). Students under the age of 18 and over the age of 24 were eliminated from the sample. Students under 18 were eliminated in order to avoid having to obtain parents' permission. Students over the age of 24 were eliminated because the instrument was developed for students between the ages of 17 and 24. Greek students were separated from the general undergraduate population. Black Greeks were removed from the general Black population. Three hundred and twenty students were selected. Forty were selected for each cell. An equal-sized stratified random sampling was used to select equal number of participants for each cell from each institution. The cells included Greek and non-Greek Black males, Greek and non-Greek Black females, Greek and non-Greek White males, and Greek and non-Greek White females. A return rate of 60% or above is deemed satisfactory (Salant & Dillman, 1994). The following were used to determine the number of surveys that was needed for the study: effect size (d) = .50 (medium), power (β) = .80, alpha significance = .01, then N is 188. Sixty percent return rate requires mailing 313 surveys (Salant & Dillman, 1994).

Procedures

During the fall semester, the individuals to be surveyed were identified. A pre-notice letter was sent to individuals announcing that the instrument packet would be arriving in a few days. The instrument packet was sent a couple of days after the pre-notice letter to the students identified by the random sample. It contained a cover letter, a SDTLA and an answer sheet, instructions for completing the instrument, and instructions on how to return the instrument. The participants returned the instruments to the Office

of Student Activities at their respective university. Two weeks after the surveys were delivered, a follow up letter was sent to all participants thanking them or reminding them to return the completed instrument. A couple of days after the thank you/follow up letter was sent, a replacement questionnaire was sent. One week later, a final follow up/thank you letter was sent. Instruments were accepted until November 23. This process was taken from Dillman's (2000) process regarding mail and internet surveys. Return rate was determined by the following formula: $\text{number returned} \div \text{number in sample} \times 100$ (Salant & Dillman, 1994). Return rate for general public mail survey should be at least 60% (Salant & Dillman, 1994). Babbie (1983) stated that a response rate of at least 50% is adequate for analysis and reporting, 60% is good, and 70% is very good. Between September 6 and November 23, 2005, 231 usable surveys were returned. Of the 231, 25 were Black male, Greek; 30 White male, Greek; 28 White male, non-Greek; 32 Black male, non-Greek; 25 Black female, Greek; 33 White female, Greek, 25 Black female, non-Greek; 33 White female, non-Greek.

Instrumentation

The Student Developmental Task and Lifestyle Assessment was designed for use with traditional-aged students (17-24 years of age) and builds upon Chickering's (1969) theory of psychosocial development and the seven developmental vectors that he introduced. The SDTLA is an instrument that represents a sample of behaviors and reports of feelings and attitudes that students can be expected to demonstrate when they have satisfactorily achieved certain developmental tasks common to young adult college students (Winston, Miller, & Cooper, 1999). In particular, it is concerned with the

changes produced in individuals as a result of accomplishing a developmental task or addressing important life events or issues within the context of higher education. The SDTLA provides an assessment tool and procedure that practitioners can use with young adult college students to facilitate development of life purpose, mature interpersonal relationships, and academic autonomy as well as the establishment of healthy lifestyles (Winston et al. 1999).

The SDTLA (1999) has gone through several revisions since the original Student Developmental Task Inventory (SDTI). Winston, Miller, and Prince (1979) introduced the Student Developmental Task Inventory (SDTI). It combined the context of Chickering's vectors with conceptualization of developmental tasks to form a practical assessment instrument for use with individual students. Experience with its use and further research led to the creation of a revised, second edition, of the Student Developmental Task Inventory (SDTI-2) (Winston, Miller, Hackney, Hodges, Polkosnik, Robinson, & Russo, 1981).

Studies conducted on the reliability and validity of the SDTI-2 indicated certain psychometric problems (Stonewater, Daniels, & Heischmidt, 1986; Winston & Polkosnik, 1986). Data suggested that social changes, which occurred since 1969, might have affected the definition of psychosocial developmental tasks. The SDTI-2 was revised, and the result was known as the SDTLI (Winston, 1990). The SDTLI was in a true/false format.

The latest version is known as the Student Developmental Task and Lifestyle Assessment (SDTLA). The SDTLA is a 153-question survey using multiple choice

answer format. The instrument uses a Likert scale 1-5 with 5 being the most favorable. The SDTLA is made up of three developmental components or constructs (Establishing and Clarifying Purpose, Developing Autonomy, and Developing Mature Interpersonal Relationships) and 10 subtasks. The subtasks are further delineations of the tasks. For this study, one score for each of the tasks (Purpose, Autonomy, and Mature Interpersonal Relationships) was obtained by using the SDTLA.

The first component measured by the SDTLA is Establishing and Clarifying Purpose (PUR). PUR has four subtasks, including Educational Involvement (EI), Career Planning (CP), Lifestyle Planning (LP), and Cultural Participation (CUP). Students who score high on this component have well-defined goals and know what they need to do to achieve those goals. Additionally, they participate in cultural events and are efficient in managing personal finances and daily responsibilities and have established a personal direction in their life and have allowed personal, ethical, and religious values to be a part of this direction (Miller et al., 1999).

The second component is Developing Mature Interpersonal Relationships (MIR). MIR has subtasks, including Peer Relationships (PR) and Tolerance (TOL). Students scoring high on this component have independent, frank, and trustful relationships. By appreciating individual differences, these students respect and accept other cultures and races. Additionally, they do not need continuous reassurance and approval from others, and they are minimally dependent on their parents in decision making (Miller et al., 1999).

The third component is Developing Autonomy (AUT). Autonomy (AUT) has

subtasks, including Emotional Autonomy (EA), Interdependence (IND), Academic Autonomy (AA), and the Instrumental Autonomy (IA). Students who score high on this component can handle ambiguity and behave in ways that allow them to succeed and fulfill responsibilities (Miller et al., 1999). Miller and Winston define students that have high achievements on this task as ones who can meet their needs without constant reassurance from others, do not need extensive direction from others, can meet academic goals without the need of direction from others, and act as a responsible, contributing member of their community.

The SDTLA was selected because of its basis in Chickering's theory of psychosocial development. The SDTLA also has a Likert format instead of a true/false format that other instruments use. Using the Likert format gives a broad range of answers instead of a simple true/false format and provides more variability in scores. The Likert format permits the ranking of individuals in terms of the favorability of their attitude toward a certain object or attitude (Ary, Jacobs, & Razavich, 1990).

The Normative Sample data for the SDTLA were collected from over 1800 students from 31 colleges and universities in the United States and Canada between the months of October and May 1995-1997. The sample included students from 20 private liberal arts colleges, 19 public four-year colleges and universities, and 3 public two-year colleges. The sample included 40% male, 60 % female; 35% freshmen, 25% sophomores, 22% juniors, 18 % seniors; 15% African-American, 2% Hispanic, 5% Asian-American, 75% Caucasian, 4% other; and 26% age 18, 25% age 19, 21% age 20, 16% age 21, 10% other. Only data obtained from students age 17 to 25 were included in

the normative sample (Miller et al., 1999).

Reliability of the SDTLA

Reliability estimates the degree that the results of a psychological instrument are attributable to systematic sources of variance (i.e., error) (Miller et al., 1999). Two methods of reliability estimation were used with The Student Development Task and Lifestyle Assessment: test-retest and internal consistency. The first method was a test-retest estimate that gives an estimation of the stability of a measure over time. The test was administered at two different institutions to three classes of students. Students completed the STDLA again four weeks later. Reliability coefficients clustered around .80 (range .70 to .89). All correlations were statistically significant at the alpha level of .01; therefore, the SDTLA has relatively high temporal stability and is adequate for group data. Temporal stability implies that results would not be expected to vary greatly over short periods of time for individuals completing the instrument.

The second method was estimating internal consistency. The alpha coefficients ranged from .76 to .88 (Miller et al, 1999). For the PUR Task, the reliability coefficients ranged from .81 to .84. For the AUT Task, the reliability coefficients ranged from .81 to .88 and for the MIR Task, they ranged from .76 to .79. The reliability coefficients were scored moderately high which warrants using the SDTLA as an instrument with groups of students.

Validity of SDTLA

A commonly used definition of validity is that it is the degree to which a test measures what it purports to measure (Ary, Jacobs, & Razavieh, 1990). Several

approaches were taken to test validity of the scores obtained from the SDTLA. Items were based on the constructs of psychosocial development by Chickering (1969) and the authors' observations of college students. The intercorrelations of tasks revealed that most of the measures are moderately correlated with each other, as the developmental theory (Chickering & Reisser, 1993) suggests should be the case.

A variety of scales were selected to estimate the validity of constructs measured by the tasks of the SDTLA. For PUR, data were collected through regularly scheduled classes at the University of Georgia (Miller, Winston & Cooper, 1999). A total of six scales were correlated with PUR task, which are based on Chickering's vectors. Scores obtained from the PUR were correlated with the scores from the Career Exploration Scale from Career Development Inventory; Classroom Learning Scale from the College Student Experience; Experiences with Faculty Scale from College Student Experiences; Life Skills Development Inventory; Art, Music, and Theater Scale from College Student Experiences; and Problem Solving and Decision Making Scale from Life Skills Development Inventory. The correlations ranged from .33 to .53 between the scores of the PUR Task and the other measures. PUR Task was moderately correlated with the other scales. The correlations did reveal a positive relationship between the PUR Task and the scores of the other instruments measured providing for convergent validity. If measures of the same trait with different instruments are correlated, then convergent validity is present.

For AUT, data were collected at three different moderate sized, public four-year colleges. The scores obtained from the AUT task were correlated with scores from the

Georgia Autonomy Scales (GAS) and two scales from the College Student Questionnaire (CSQ). The scales were selected because they were developed using the same theories as the SDTLA. The correlations between the scores of the instruments compared ranged from .37 to .56 between the (AUT) task and the scales of the GAS and CSQ. The scales from the CSQ were chosen because in the past revisions of the SDTI/SDTLI, they were shown to be moderately correlated with similar scales in the SDTI/SDTLI (Winston, Miller, & Cooper, 1999). The correlations show convergent validity between the SDTLA and selected scales.

For (MIR), data were collected in regularly scheduled classes in the College of Business at the University of Georgia. Concurrent validity of the (MIR) task was estimated by correlating them with the total score for the Multi-group Ethnic Identity Measure (MGEIM). The MGEIM is closely associated with the theories of Chickering and Reisser, which are the same that the STDLA are based upon (Winston, Miller, & Cooper, 1999). The correlation between the two was .58. The correlation shows a moderately strong relationship of convergent validity between the two measures.

The SDTLA was compared with scales from other instruments and comparable measures of other instruments (Multi-group Ethnic Identity Measure, Georgia Autonomy Scale, etc.) that are based on the same theories of psychosocial development that the SDTLA is based. Correlations do not necessarily imply causal relationships but that a relationship of some direction and magnitude exists. With these results, there are positive correlations between the SDTLA and with scales from other instruments (GAS, MGEIM, etc.). The correlations between the scores of the SDTLA components and scores of the

other scales provide convergent validity that allows one to consider the STDLA as a valid instrument.

Research Design

This study utilized a causal-comparative research design (Wiersma, 2000) because the independent variables (race, gender, affiliation) are characteristics of people that cannot be changed. Causal-comparative research seeks to determine the relationships among two or more variables, but in this type of research manipulation of the independent variable is not possible because the independent variable is a characteristic of the individuals surveyed in the study.

Hypotheses

The following hypotheses were tested in this study:

Hypothesis 1: There will be no statistically significant 3-way interaction effect of race, gender, affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 2: There will be no statistically significant 2-way interaction effect of race and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 3: There will be no statistically significant 2-way interaction effect of race and gender on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 4: There will be no statistically significant 2-way interaction effect of gender and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 5: There will be no significant main effect of affiliation on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 6: There will be no significant main effect of gender on psychosocial development measured by the three components (PUR, AUT, MIR).

Hypothesis 7: There will be no significant main effect of race on psychosocial development measured by the three components (PUR, AUT, MIR).

Independent Variables

There were three independent variables for this study. They were gender (male/female), race (White/Black), and affiliation (Greek/non-Greek).

Dependent Variables

The dependent variables in this study were the three subscale scores obtained from the Student Development Task and Lifestyle Assessment (STDLA): Establishing and Clarifying Purpose (PUR), Developing Autonomy (AUT), Establishing Mature Interpersonal Relationships (MIR) as measured by the Student Developmental Task and Lifestyle Assessment (SDTLA).

Statistical Analysis

The Statistical Package for the Social Sciences (SPSS) was utilized to perform all statistical procedures. First, reliability analysis was conducted. Internal consistency reliability coefficients were obtained for each of the three subscales and one for the

overall scores. Second, descriptive statistics for the total group and each comparison group were computed including group means and standard deviations for scores on AUT, MIR and PUR tasks. Third, a three-way MANOVA was conducted for the seven research questions. A test of statistical significance was run to test each hypothesis. This study used a three-way MANOVA analysis. Four reasons are as follows: (a) The use of fragmented univariate tests can lead to a greatly inflated overall Type I error rate; (b) The univariate tests ignore important information, namely, the correlations among the variables; (c) Groups may not be significantly different on any of the variables individually, but jointly the set of variables may reliably differentiate the groups; and (d) It is sometimes argued that the groups should be compared on total test score first to see if there is a difference. Using the MANOVA technique accounts for important information such as intercorrelations among variables and has a greater sensitivity for detecting differences in certain situations (Stevens, 2002).

The level of significance for acceptance or rejection of each null hypothesis was set at the .01 level. All of the hypotheses in this study addressed differences between psychosocial development for different levels of the independent variables.

Study Limitations

The study was subject to certain limitations including sites of research. The participants of the study attended universities in a single state. The participants' characteristics may not generalize to students in other states. Individuals attending universities in other states may answer the questionnaire differently because of regional and state differences. The research sample consisted of college-aged students selected at

random at the regional residential campuses. Accordingly, the results of the study should only be generalized to this population or other populations with similar characteristics in the same geographical region.

CHAPTER IV

RESULTS

The purpose of this study was to examine psychosocial development as defined by Establishing and Clarifying Purpose (PUR), Developing Autonomy (AUT), and Developing Mature Interpersonal Relationships (MIR) as operationalized by Miller and Winston (1990) at regional universities in Kentucky. The independent variables were gender (female/male), race (Black/White), and affiliation (Greek/non-Greek). The dependent variables were the three subscale scores obtained from the Student Development Task and Lifestyle Assessment (SDTLA): Purpose (PUR), Autonomy (AUT), and Mature Interpersonal Relationships (MIR) as measured by the Student Developmental Task and Lifestyle Assessment (SDTLA). This chapter is divided into two sections. The first section contains the preliminary analyses: reliability analysis, descriptive statistics, and intercorrelations of variables. The second section contains the results of the seven hypotheses tests.

Preliminary Statistical Analysis

The participants consisted of 231 undergraduate students from three regional institutions. There were 103 Black students and 128 White students in the study. One hundred and twelve participants were male and 119 were female. There were 118 students affiliated with fraternities and sororities (Greek) and 113 not affiliated with fraternities and sororities (non-Greek). Table 4 further breaks down the frequencies of

independent variables by group samples: race (Black/White), gender (female/male), and affiliation (Greek/non-Greek). As seen in Table 4, the cell sizes are comparable.

Table 4

Frequencies of Independent Variables

	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	Affil.	Non-Affil.	Affil.	Non-Affil.	Affil.	Non-Affil.
Black	25	28	25	25	50	53
White	30	32	33	33	63	65
Total	55	60	58	58	113	118

Reliability Coefficient of Scales Used in Study

The coefficient alpha estimates for this sample were comparable to the coefficient alpha estimates reported by the developers of the scales used in this study (Winston, Miller, & Cooper, 1999). Table 5 indicates the Cronbach's alpha obtained for this sample and those reported by the developers of each scale. The difference between Purpose was .01 from the current study to developers' scale (.83 versus .84). For Autonomy, the difference was .04 (.77 versus .81). For Mature Interpersonal Relationships, the difference was .04 (.75 versus .79).

Table 5Comparison of Reliability Coefficients

Dependent Variable	Items	Current Study Developers' Scale	
Purpose	51	.83	.84
Autonomy	51	.77	.81
Mature Interpersonal Relationships	24	.75	.79

Descriptive Statistics

Table 6 lists the means and standard deviations for each dependent variable (Purpose (PUR), Autonomy (AUT), and Mature Interpersonal Relationships (MIR)) by gender, affiliation and race. The higher the mean score was, the better the group performed on that scale.

Table 6Descriptive Statistics for Variables

Variable	<i>N</i>	<u>PUR</u>		<u>AUT</u>		<u>MIR</u>	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male/Affil/Black	25	53.16	7.72	55.33	6.47	48.51	7.11
Male/Affil/White	30	45.57	9.68	46.63	11.53	44.88	9.17
Male/Not Aff/Black	28	46.69	8.03	46.70	10.07	51.58	7.88
Male/Not Aff/White	32	48.59	10.63	47.77	11.77	49.30	8.88
FM/Affil/Black	25	53.04	6.78	56.28	5.91	51.15	6.68
FM/Affil/White	33	52.80	8.88	52.50	9.31	48.54	9.78
FM/Not Aff/Black	25	45.18	9.05	48.86	9.04	52.27	7.82
FM/Not Aff/White	33	51.11	10.90	51.85	9.26	50.52	9.39

The mean scores for Purpose, in order of magnitude, were as follows: affiliated Black males (53.16), affiliated Black females (53.04), affiliated White females (52.80), not affiliated White females (51.11), not affiliated White males (48.59), not affiliated Black males (46.69), affiliated White males (45.57), and not affiliated Black females (45.18). The mean scores for Purpose indicated Black students who were affiliated scored higher than the other groups. Students who were affiliated with fraternities and sororities scored higher (Black females, Black males, White females) except for White males who were affiliated scored lower than non-affiliated White males for Purpose.

The mean scores for Autonomy, in order of magnitude, were as follows: affiliated

Black females (56.28), affiliated Black males (55.33), affiliated White females (52.50), not affiliated White females (51.85), not affiliated Black females (48.86), not affiliated White males (47.77), not affiliated Black males (46.70), and affiliated White males (46.63). The mean scores for Autonomy indicated Black students who were affiliated scored higher than the other groups. Students who were affiliated with fraternities and sororities scored higher (Black female, Black male, White female) except for White males who were affiliated scored lower than non-affiliated White males for Autonomy.

The mean scores for Mature Interpersonal Relationships, in order of magnitude, were as follows: not affiliated Black females (52.27), not affiliated Black males (51.58), affiliated Black females (51.15), not affiliated White females (50.52), not affiliated White males (49.30), affiliated White females (48.54), affiliated Black males (48.51), and affiliated White males (44.88). The mean scores for Mature Interpersonal Relationships indicated not affiliated Black students scored higher than other groups and not affiliated students scored higher than their counterparts for each cell. Students who were not affiliated with fraternities and sororities scored higher for Mature Interpersonal Relationships for all four race and gender comparisons (Black female, Black male, White female, White male).

Intercorrelation of Variables

Intercorrelations among the three dependent variables by gender, race, and affiliation were obtained next. The intercorrelations among Purpose, Autonomy, and Mature Interpersonal Relationships by gender are shown in Table 7. All the correlation coefficients were statistically significant at the .01 alpha level. The size and strength of

the correlation coefficients obtained in the current study were comparable to the ones reported by the authors of the scales. As shown in the matrix, the correlation patterns were remarkably similar across genders. Overall, those students who scored high on one subscale scored high on the other two subscales. For example, those who scored high on Autonomy scored high on Purpose and on Mature Interpersonal Relationships. The correlations between Autonomy and Purpose were particularly high, indicating that those students who scored high on Autonomy tended to be high on Purpose.

Table 7

Intercorrelation among the PUR, AUT, MIR by gender

Variable	PUR	AUT	MIR
PUR	--	.702*	.355*
AUT	.743*	--	.411*
MIR	.378*	.447*	--

Note. Correlations in the upper half are for males, and the lower half are for females.

* $p < .01$

The measures had moderate correlations among the three dependent variables related to gender. The correlations were higher for each correlation for female students than male students: Purpose/Autonomy (.743 to .702), Purpose/Mature Interpersonal Relationships (.378 to .355) and Autonomy/Mature Interpersonal Relationships (.447 to .411) The participants who exhibited higher levels of Autonomy also exhibited higher levels of Purpose and higher levels of Mature Interpersonal Relationships.

Intercorrelations for Purpose, Autonomy, and Mature Interpersonal Relationships

by Race are listed in Table 8. All correlations were significant at the .01 alpha level.

Table 8

Intercorrelation among the PUR, AUT, MIR by race

Variable	PUR	AUT	MIR
PUR	--	.755*	.407*
AUT	.712*	--	.391*
MIR	.356*	.448*	--

Note. Correlations in the upper half are for Black, and the lower half are for White.

* $p < .01$

The measures had correlations among the three dependent variables related to the dependent variable, race. The correlation between Purpose and Autonomy were higher for Black students than White students (.755 to .712). The correlation between Purpose and Mature Interpersonal Relationships were higher for Black students than White students (.407 to .356) while the correlation for Autonomy and Mature Interpersonal Relationships was higher for White students (.448 to .391). White students who exhibited a higher level of Mature Interpersonal Relationships also exhibited higher levels of Autonomy than Black students. Black students who exhibited a higher level of Mature Interpersonal Relationships exhibited higher levels of Purpose than White students.

Intercorrelations for PUR, AUT, and MIR for the variable of Affiliation are listed in Table 9. All correlations were significant at the .01 alpha level.

Table 9Intercorrelation among the PUR, AUT, MIR by affiliation

Variable	PUR	AUT	MIR
PUR	--	.689*	.387*
AUT	.748*	--	.413*
MIR	.417*	.545*	--

Note. Correlations in the upper half are for Greek, and the lower half are for Non-Greek.

* $p < .01$

The measures had moderate to high correlations among the three dependent variables when broken down by levels of affiliation. The correlations for Greek affiliated students for the three independent variables were higher than for non-Greek affiliated students. The correlation between Purpose and Autonomy was higher for Greek students than for non-Greek students (.748 to .689). The correlation between Purpose and Mature Interpersonal Relationships was higher for Greek students than for non-Greek students (.417 to .387). Greek students showed the higher correlation between Autonomy and Mature Interpersonal Relationships as compared to non-Greek students (.545 to .413). Greek and non-Greek students who exhibited high levels of Autonomy also exhibited high levels of Purpose and Mature Interpersonal Relationships. Overall, the correlations were noticeably stronger for Greek than they were for non-Greek.

Analyses for the Hypotheses

A 2 x 2 x 2 between-subjects Multivariate Analysis of Variance (MANOVA) was performed on three dependent variables: Purpose (PUR), Autonomy (AUT), and Mature

Interpersonal Relationships (MIR). Independent variables were sex (male and female), race (Black and White), and affiliation (Greek and non-Greek).

Before using the MANOVA technique the major assumptions related to these procedures were examined. The first assumption is the independence assumption. This assumption requires individual scores are not influenced by other participants, as might happen if participants are tested in small groups rather than individually. Surveys in this study were distributed to individuals not to groups. Therefore, the observations were independent of each other.

The second assumption is the Normality Assumption. For the Normality Assumption to hold, each of the individual variables must be normally distributed for the variables to follow a multivariate normal distribution. Two other properties of a multivariate normal distribution are (a) any linear combination of the variables is normally distributed and (b) all subsets of the set of variables have multivariate normal distributions (Stevens, 2002). The histograms and stem-and-leaf displays generated by SPSS indicated fairly normal distributions of scores for all of the subgroups.

The third assumption is the homogeneity of covariance. The population covariance matrices for the p dependent variables are equal. No significant Levene's Tests for Equality of Variance were produced for the cells used in the study. The Box test was not significant ($p = .588$). No significance implies that the homogeneity of covariance assumption is met.

Hypothesis 1—There will be no significant 3-way interaction effect of race, gender, and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR)

A Multivariate Analysis of Variance was performed. Due to unequal cell sizes (range from 25 to 33), there was a concern about a possible inflated error rate, so subsequent analysis used a more stringent significant level of $\alpha = .01$ to avoid Type I error (false positive). The MANOVA summary table is displayed in Table 10. The results showed that the 3-way interaction of sex, race, and affiliation on Purpose, Autonomy, and Mature Interpersonal Relationships was not significant at $\alpha = .01$ related to the three dependent variables, $p = .87$. This means gender by race by affiliation did not have a significant joint effect on psychosocial development as measured by Purpose, Autonomy, and Mature Interpersonal Relationships. Therefore the hypothesis could not be rejected.

Table 10Multivariate Analysis of Variance for PUR, AUT, MIR

Source of	Wilk's Lambda	Hypothesis df	Error df	Multi- variate F	<i>p</i>
Gender	.969	3	219	2.304	.078
Race	.958	3	219	3.167	.025
Affiliation	.884	3	219	9.548	.000*
Gender x race	.975	3	219	1.870	.136
Gender x affil	.985	3	219	1.075	.360
Race x affil	.940	3	219	4.646	.004*
Gender x race x affil	.997	3	219	.228	.877

* $p < .01$

Hypothesis 2—There will be no significant 2-way interaction effect of race and affiliation psychosocial development measured by the three components (PUR, AUT, MIR)

The 2-way interaction between race and affiliation on the Purpose, Autonomy, and Mature Interpersonal Relationships was examined for this hypothesis, which was statistically significant at the .01 alpha level. The effect of race and affiliation on Purpose ($p = .002$) and Autonomy ($p = .002$) were significant and Mature Interpersonal Relationships ($p = .660$) was not significant. This significant 2-way interaction indicated that the effect of race and affiliation on Purpose and Autonomy was not the same across races. To further examine this significant multivariate effect, the 2-way interaction between race and affiliation on each of the three dependent variables was examined

separately at univariate level. As shown in Table 11, the effect of race and affiliation on Purpose and on Autonomy was statistically significant. The joint effect of race and affiliation on Mature Interpersonal Relationships, however, was not significant.

Table 11Univariate Analysis of Variance by Race and Affiliation for the dependent variables

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Purpose (PUR)					
Race	2.696	1	2.696	.031	.861
Affiliation	672.184	1	672.184	7.668	.006
Affil. x Race	843.472	1	843.472	9.621	.002*
Error	19724.761	225	87.666		
Total	581915.629	229			
Autonomy (AUT)					
Race	224.456	1	224.456	2.394	.123
Affiliation	879.770	1	879.770	9.382	.002
Affil. x Race	954.803	1	954.803	10.182	.002*
Error	21098.401	225	93.771		
Total	608059.548	229			
Mature Interpersonal Relationships (MIR)					
Race	350.013	1	350.013	4.765	.030
Affiliation	392.048	1	392.048	5.338	.022
Affil. x Race	14.289	1	14.289	.195	.660
Error	16526.485	225	73.451		
Total	578087.271	229			

* $p < .01$

Following these significant interactions at univariate level, the nature of the

interactions was examined by inspecting interaction graphs. As shown in Figure 1, there was a disordinal interaction between race and affiliation on Purpose. This means that the effect of affiliation on Purpose was not consistent across two races. While affiliation seemed not to have a visible effect on White students, affiliation seemed to have a noticeable effect on Black students.

Figure 1. Disordinal interaction between race and affiliation on purpose.

To further examine the disordinal interaction between race and affiliation on

Purpose, a simple effect analysis was conducted. The results indicated that there was no significant difference in Purpose between the White/Affiliated student group and the White/Not Affiliated student group. The difference in Purpose between Black/Affiliated and Black/Not Affiliated, however, was statistically significant. This finding indicated that affiliation seems to have a significant effect on Black students in terms of Purpose $F(1, 100) = 21.420, p = .000$, but no significant effect on White students $F(1, 127) = .021, p = .749$.

As shown in Figure 2, there was a disordinal interaction between race and affiliation on Autonomy. This means that the effect of affiliation on Autonomy was not consistent across two races. While affiliation seemed not to have a visible effect on White students, affiliation seemed to have a noticeable effect on Black students.

Figure 2. Disordinal interaction between race and affiliation on autonomy

To further examine the disordinal interaction between race and affiliation on Autonomy, a simple effect analysis was conducted. The results indicated that there was no significant difference in Autonomy between White/Affiliated students and White/Not affiliated students. The difference in Autonomy between Black/Affiliated and Black/Not affiliated, however, was statistically significant. This finding indicated that affiliation seems to have a significant effect on Black students in terms of Autonomy $F(1, 100) = 24.257, p = .000$, but no significant effect on White students $F(1, 127) = .103, p = .749$.

Hypothesis 3—There will be no significant 2-way interaction effect of race and gender on psychosocial development measured by the three components (PUR, AUT, MIR)

The results are displayed in Table 12. An analysis of variance was performed to determine if there was any interaction involving race and gender on psychosocial development. There was no significant interaction at the $\alpha = .01$ level upon the three dependent variables. For race by gender, the results did not show to have significant effect on psychosocial development as measured by Purpose, Autonomy and Mature Interpersonal Relationships. Therefore, the hypothesis could not be rejected.

Table 12Univariate Analysis of Variance by Gender and Race for the dependent variables

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Purpose (PUR)					
Gender	263.079	1	263.079	2.916	.089
Race	6.557	1	6.557	.73	.788
Gender x Race	430.103	1	430.103	4.768	.030
Error	20296.388	225	90.206		
Total	581915.629	229			
Autonomy (AUT)					
Gender	608.022	1	608.022	6.248	.013
Race	206.051	1	206.051	2.117	.147
Gender x Race	150.921	1	150.921	1.551	.214
Error	21895.396	225	1.551		
Total	608059.548	229			
Mature Interpersonal Relationships (MIR)					
Gender	219.559	1	219.559	2.955	.087
Race	379.896	1	379.896	5.113	.025
Gender x Race	7.655	1	7.655	.103	.749
Error	16716.403	225	74.295		
Total	578087.271	229			

* $p < .01$

Hypothesis 4—There will be no significant 2-way interaction effect of gender and affiliation on psychosocial development measured by the three components (PUR, AUT, MIR)

An analysis of variance was performed to determine any interaction involving gender and affiliation on psychosocial development. The results are displayed in Table 13.

Table 13Univariate Analysis of Variance by Gender and Affiliation for the dependent variables

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Purpose (PUR)					
Affiliation	505.158	1	505.158	5.654	.018
Gender	359.505	1	359.505	4.024	.046
Gender x Affil.	126.577	1	126.577	1.417	.235
Error	20101.719	225	89.341		
Total	581915.629	229			
Autonomy (AUT)					
Gender	645.626	1	645.626	6.725	.010
Affiliation	655.836	1	655.836	6.831	.010
Gender x Affil.	.272	1	.272	.003	.958
Error	21601.325	225	96.006		
Total	608059.548	229			
Mature Interpersonal Relationships (MIR)					
Affiliation	435.606	1	435.606	5.903	.016
Gender	224.773	1	224.773	3.046	.082
Gender x Affil.	65.931	1	65.931	.893	.346
Error	16602.777	225	73.790		
Total	578087.271	229			

* $p < .01$

There was no significant 2-way interaction effect of gender and affiliation at $p < .01$ level upon the three dependent variables. Therefore the hypothesis could not be rejected. In this study, gender by affiliation interaction had no significant effect on

psychosocial development as measured by Purpose, Autonomy, and Mature Interpersonal Relationships. The closest was for the independent variable, Purpose, $p = .235$.

Hypothesis 5—There will be no significant main effect of affiliation on psychosocial development measured by the three components (PUR, AUT, MIR)

An analysis of variance was performed to determine any main effect of affiliation on psychosocial development. The results are displayed in Table 14. There was significant main effect of affiliation on Autonomy ($p = .009$). For Autonomy, the differences ranged from Black male students (affiliated = 55.33 to non-affiliated = 46.70), Black female students (affiliated = 56.28 to non-affiliated = 48.86), and White female students (affiliated = 52.50 to non-affiliated = 51.85). Only White male students (affiliated = 46.63 to non-affiliated = 47.77) scores were lower than their non-affiliated counterparts. Therefore the hypothesis was rejected.

Autonomy is defined as structuring one's life in ways to allow one to satisfy daily needs, structuring one's time and devising effective strategies to meet academic expectations, and acting in a responsible and contributing member on one's community. Many belonging to Greek-letter organizations find the structure and challenges within these organizations which may lead to higher levels of Autonomy. However, due to the significant 2-way interaction between affiliation and race on autonomy, this significant main effect was considered meaningless since it depends on race. In particular, Black Greek-letter organizations place a priority in having a strong relationship with their community.

Table 14Univariate Analysis of Variance for Affiliation for the dependent variables

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Purpose (PUR)					
Affiliation	514.346	1	514.346	5.675	.018
Error	20575.243	227	90.640		
Total	581915.629	229			
Autonomy (AUT)					
Affiliation	672.850	1	672.850	6.866	.009*
Error	22247.015	227	98.004		
Total	608059.548	229			
Mature Interpersonal Relationships (MIR)					
Affiliation	428.933	1	428.933	5.766	.017
Error	16886.326	227	74.389		
Total	578087.271	229			

* $p < .01$

Hypothesis 6—There will be no significant main effect of gender on psychosocial development measured by the three components (PUR, AUT, MIR)

An analysis of variance was performed to determine any main effect of gender on psychosocial development. The results are displayed in Table 15. There was significant

effect of gender on Autonomy at ($p = .010$). Therefore, the hypothesis was rejected. The significant result for gender on Autonomy can relate to the higher scores of females than males (Table 6) for each cell comparison (Black/White, Affiliated/Non-Affiliated). For Autonomy, the differences ranged from affiliated White students (Female = 52.50 to Male = 46.63) to not affiliated Black students (Female = 48.86 to Male = 46.70).

Table 15Univariate Analysis of Variance for Gender for the dependent variables

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Purpose (PUR)					
Gender	357.935	1	357.935	3.919	.049
Error	20731.655	227	91.329		
Total	581915.629	229			
Autonomy (AUT)					
Gender	662.520	1	662.520	6.757	.010*
Error	22257.346	227	98.050		
Total	608059.548	229			
Mature Interpersonal Relationships (MIR)					
Gender	209.728	1	209.728	2.783	.097
Error	17105.531	227	75.355		
Total	578087.271	229			

* $p < .01$

Hypothesis 7—There will be no significant main effect of race on psychosocial development measured by the three components (PUR, AUT, MIR)

An analysis of variance was performed to determine the main effect of race on psychosocial development. The results are displayed in Table 16. There was no

significant effect of race at $p < .01$ level upon the three dependent variables. Therefore, the hypothesis could not be rejected. In this study, race had no significant effect on psychosocial development as measured by Purpose, Autonomy, and Mature Interpersonal Relationships.

Table 16

Univariate Analysis of Variance for Race for the dependent variables

Source	SS	-	df	MS	F	p
Purpose (PUR)						
Race	9.175		1	9.175	.099	.754
Error	21080.414		227	92.865		
Total	581915.629		229			
Autonomy (AUT)						
Race	181.794		1	181.794	1.815	.179
Error	22738.071		227	100.168		
Total	608059.548		229			
Mature Interpersonal Relationships (MIR)						
Race	358.532		1	358.532	4.800	.029
Error	16956.727		227	74.699		
Total	578087.271		229			

* $p < .01$

In analyzing the seven hypotheses, no significant 3-way interaction was found. Statistical significant 2-way interaction was found at $p < .01$ level for race by affiliation for AUT and PUR. Significant effect was found for affiliation at $p < .01$ level for AUT and PUR. Significant effect was found for gender at $p < .01$ level for AUT and MIR.

CHAPTER V

DISCUSSION, IMPLICATIONS, CONCLUSIONS

The purpose of the this study was to examine psychosocial development as defined by Purpose, Autonomy, and Mature Interpersonal Relationships (Miller & Winston, 1990) at regional universities in Kentucky using the variables of gender (female/male), race (Black/White), and Greek affiliation (fraternity and sorority members/non-members). This chapter includes a summary of the study findings; discussion of the study findings; implications for improving educational practice, policy, and research; and conclusions.

Summary of the Study Findings

This research study used three independent variables (gender, race, and fraternity/sorority affiliation) and three dependent variables (Purpose, Autonomy, and Mature Interpersonal Relationships). A Multivariate Analysis of Variance was performed to determine the interaction between the dependent variables and independent variables. Seven hypotheses were investigated.

Hypothesis 1

The results showed no significant 3-way effect of gender, race, and affiliation on Purpose, Autonomy and Mature Interpersonal Relationships ($p = .877$). Gender, race and fraternity/sorority affiliation had no interaction on psychosocial development of undergraduate students as measured by Purpose, Autonomy, and Mature Interpersonal

Relationships.

Hypothesis 2

The results showed a significant 2-way interaction of race between affiliation on Purpose ($p = .002$) and Autonomy ($p = .002$). There was no significant 2-way interaction of race and fraternity/sorority affiliation on Mature Interpersonal Relationships ($p = .660$). Race and fraternity/sorority affiliation had a significant interaction on psychosocial development on undergraduate students as measured by Purpose and Autonomy. The 2-way interaction showed that there was a disordinal interaction for Black affiliated students. Black affiliated students reported significantly higher levels of development of Purpose and Autonomy than did Black non-affiliated students. Race and fraternity/sorority affiliation, however, had no effect on psychosocial development of undergraduate students as measured by Mature Interpersonal Relationships.

Hypothesis 3

The results showed no significant 2-way interaction of race and gender on Purpose ($p = .030$), Autonomy ($p = .214$), and Mature Interpersonal Relationships ($p = .749$). So, race and gender had no interaction on psychosocial development of undergraduate students as measured by Purpose, Autonomy, and Mature Interpersonal Relationships.

Hypothesis 4

The results showed no significant 2-way interaction of gender and affiliation on Purpose ($p = .235$), Autonomy ($p = .958$), and Mature Interpersonal Relationships ($p = .346$). So, gender and fraternity/sorority affiliation had no interaction on psychosocial development of undergraduate students as measured by Purpose, Autonomy, and Mature

Interpersonal Relationships.

Hypothesis 5

The results showed a significant main effect of affiliation on Autonomy ($p = .009$). There was no significant effect of affiliation on Purpose ($p = .018$) and Mature Interpersonal Relationships ($p = .017$). Fraternity/sorority affiliation had no effect on psychosocial development of undergraduate students as measured by Purpose and Mature Interpersonal Relationships. Fraternity/sorority affiliation, however, had a significant effect on psychosocial development of undergraduate students in regards to Autonomy.

Hypothesis 6

The results showed a significant main effect of gender on Autonomy ($p = .010$). There was no significant effect of gender on Purpose ($p = .049$) and Mature Interpersonal Relationships ($p = .097$). Gender had no effect on psychosocial development for undergraduate students as measured by Purpose and Mature Interpersonal Relationships. Gender, however, had a significant effect on psychosocial development of undergraduate students in regards to Autonomy.

Hypothesis 7

The results showed no significant main effect of race on Purpose ($p = .754$), Autonomy ($p = .179$), and Mature Interpersonal Relationships ($p = .029$). So, race had no effect on psychosocial development of undergraduate students as measured by Purpose, Autonomy, and Mature Interpersonal Relationships.

Discussion of Study Findings

The researcher now discusses each of the findings and how each related to the

literature. This study found no significant interaction involving gender, race and fraternity/sorority affiliation on psychosocial development as measured by Purpose, Autonomy, and Mature Interpersonal Relationships (Hypothesis 1). Contrary to this study, Donlin (1994) reported Black Greek males and Black Greek females had significantly higher scores on the task of defining Purpose when compared to those of Black non-Greek males and Black non-Greek females. Pascarella et al. (1996) reported in their study on cognitive development for affiliated White men, all outcomes were negative for affiliated White men. For affiliated Black men, however, a modest positive influence was reported. Abrahamowicz (1998) studied the relationship of student organization membership to student perception, satisfaction with the college experience, and overall involvement with college. The results indicated differences between students who participated in student organizations (Greek or otherwise) and students who did not. Members of student organizations scored significantly higher than non-members in all quality of effort categories, regardless of gender or race. In the studies that have race, gender, and affiliation factors, these studies (Abrahamowicz, 1988; Donlin, 1994; Pascarella, et al., 1996) have reported significant results.

This study found significant effect for race and fraternity/sorority affiliation on psychosocial development as measured by Purpose and Autonomy but no significance for Mature Interpersonal Relationships (Hypothesis 2). The significance of race and affiliation on Purpose and Autonomy relates to the significance that has been found by other studies in dealing with race and fraternity/sorority affiliation. Therefore, this study concurs with the findings of other studies.

In particular, the disordinal effect for Black Greek students compares with the findings of Donlin (1994). Donlin (1994) reported Black fraternity/sorority members had significantly higher scores on Purpose as compared to those of Black non-fraternity/sorority members. Pascarella, Edison, Nora, Hagedorn, and Terenzini (1996) reported joining a fraternity or sorority had a slightly significant negative effect on openness to diversity/challenge. For non-White students, fraternity/sorority membership had a small positive influence on openness to diversity/challenge, whereas for White students the influence was strongly negative. The authors concluded that belonging to a fraternity or sorority might benefit students of color in regards to openness to diversity/challenge. The negative results for fraternity/sorority White students could lead one to believe that these groups provide essentially homogeneous and insulated environments that minimize opportunities for openness to diversity/challenge. McClure (2006) found that the history and structure of the Black Greek system has served a very different purpose than that of the predominantly White Greek system.

This study reported no significant effect on psychosocial development of undergraduate students for race and gender as measured by Purpose, Autonomy, and Mature Interpersonal Relationships (Hypothesis 3). Contrary to this study, previous studies have found that Black females scored lower than White females and they found modest differences in Black and White men (Itzkowitz & Petrie, 1986). Taub and McEwen (1992) suggested that the psychosocial development of Black women occurred in opposition to racial identity; Black women's psychosocial development was hindered due to their preoccupation with developing their group or collective identity as Blacks in

society. Ojano Sheehan and Pearson (1995) reported lower scores for Asian international students on all measures than American students. This study does not agree with the body of literature stated above.

This study found no effect on psychosocial development of undergraduate students for gender and fraternity/sorority affiliation as measured by Purpose, Autonomy, and Mature Interpersonal Relationships (Hypothesis 4). Contrary to this study, other researchers have found significance in regards to gender and fraternity/sorority affiliation. Pike and Askew (1990) reported lower grade point averages for fraternity men than non-fraternity men. Sorority women had slightly higher averages than non-sorority women. Fraternity/sorority members reported higher levels of academic effort, higher student interaction with other students, and a higher level of involvement in student professional organizations. Kilgannon and Erwin (1992) showed a major difference in affiliated and non-affiliated students in the area of principled moral reasoning. The authors implied that fraternity/sorority affiliation may restrict the development of moral reasoning abilities in both men and women.

Pascarella, Edison, Whitt, Nora, Hagedorn & Terenzini (1996) reported women who joined sororities during the first year of college had a negative influence on reading comprehension and achievement. The findings suggested that the normative peer culture and socially-oriented time commitments of Greek life often were inconsistent with the educational and intellectual mission of the institution. McCabe and Bowers (1996) found that significantly more cheating was found among those who were fraternity/sorority members than non-members (both for men and women). Wechsler, Kuh and Davenport

(1996) compared the drinking behavior of fraternity/sorority members and non-fraternity/sorority members. Fraternity and sorority members appeared to tolerate hazardous use of alcohol and other irresponsible behaviors better than non-members.

Alva (1998) supported past research findings showing higher incidents of self-reported alcohol consumption among fraternity and sorority members than in the general population. Fraternity/sorority members were more likely to believe that alcohol enhances social activity and facilitates bonding. Pike (2003) reported that fraternity and sorority members were at least as engaged in developmental activities as their non-affiliated counterparts. Senior fraternity/sorority members tended to be significantly more involved than seniors who were not members. There were no significant differences for men and women in developmental activities. The results of Pike's research suggested that the positive effects of belonging to a Greek-letter organization are greater for seniors than for first year students. Caron, Mosey, and Hovey (2005) upheld previous studies concerning higher alcohol usage among fraternity and sorority members. The research points to differences in regards to gender and fraternity/sorority affiliation. Whereas, Pike (2003) study found positive results, most studies found negative results (Alva, 1998, Caron, et al., 2005, Kilgannon & Erwin, 1992, McCabe & Bowers, 1996, Pascarella, et al., 1996, Pike & Askew, 1990). This study found no significant effect, which is in opposition to a majority of the literature.

The results of this study showed no effect for fraternity/sorority affiliation on psychosocial development of undergraduate students as measured by Purpose and Mature Interpersonal Relationships but significant interaction on psychosocial development in

regards to Autonomy (Hypothesis 5). In comparison with the research cited below, several studies have shown a significant effect for fraternity/sorority affiliation.

Williams and Williams (1985) found that students who participated in organized student activities and organizations showed significantly greater developmental task achievement. Wilder et al. (1986) suggested the impact of Greek values on members was not a result of their Greek membership but of their individual backgrounds. Hughes and Winston (1987) found there were no differences between fraternity/sorority members and non-members at the beginning of their college careers. Hughes and Winston implied that pledging a fraternity had an effect on student's personal values, some positive (leadership) and some negative (independence). Baier and Whipple (1990) found significant differences between Greek and non-Greek students. Greeks were found to be more dependent on peers and family members, and they were less concerned about social issues.

Eddy (1990) suggested that Greek affiliation had little relationship to autonomy development in general. Hunt and Rentz (1994) reported that the more involved a fraternity/sorority member was, the more psychosocial development occurred. Students who participated less in activities and organizations outside the fraternity or sorority reported less psychosocial development. Also, students who had lower levels of involvement within their fraternity/sorority reported less psychosocial development than those who were more involved. Pasquarella and Terenzini (1991) noted participation or involvement in extracurricular activities had been found to affect students and their educational experiences. Out of class activities, especially participation in student

organizations, have been assumed to contribute significantly to the development of the whole student and are considered an integral part of the education process. The Center for Advanced Social Research (1997) examined community participation and college satisfaction. Fraternity/sorority members belonged to more civic organizations, gave significantly more than non-members to their alma mater and religious organizations, and were less satisfied with their academic life in college.

Pike (2000) reported that the results of fraternity/sorority affiliation had more of a pronounced effect for college experiences than non-affiliated students. Membership in a fraternity/sorority was directly related to students' social involvement and integration of college experiences. Pascarella et al (2001) reported that sorority membership exerted positive effects on cognitive development. This study reported significance of the independent variable, affiliation, on Autonomy. Hayek et al. (2002) compared levels of student engagement on members of Greek-letter organizations and non-members. Greek membership had statistically significant positive effects, indicating that Greek students were more highly engaged than non-Greek students. Mathiasen (2004) concluded that adherence to high expectations by fraternity members can enhance moral development. Mathiasen's four major themes for this increasing development for their students were (a) recruiting quality members, (b) upholding tradition and reputation, (c) emphasizing moral development, and (d) encouraging community service.

Critics of the Greek system (fraternity/sorority affiliation) have pointed to research showing membership in a Greek-letter organization is associated with higher levels of alcohol use (Alva, 1998; Wechsler et al. 1996), lower levels of personal

development (Wilder, et al., 1978, Wilder, et al., 1986), and lower levels of academic achievement (Askew, 1990). Research has also shown that fraternity and sorority members tend to be more involved (Astin, 1977; Baier & Whipple, 1990; Pike & Askew, 1990) and that involvement is positively related to student learning and intellectual development (Astin, 1977; Pascarella & Terenzini, 1991). The significance of fraternity/sorority affiliation on Autonomy for this study follows other studies that have shown a significance of fraternity/sorority affiliation on Autonomy.

Gender had no effect on psychosocial development for undergraduate students as measured by Purpose and Mature Interpersonal Relationships (Hypothesis 6). Gender, however, had a significant interaction on psychosocial development of undergraduate students in regards to Autonomy.

This study reaffirmed what previous studies have reported have found for Autonomy. Other studies have found a difference in Mature Interpersonal Relationships. Gilligan (1982), one of the pioneers in women's development, believed that males and females view the world in different ways. Pollard et al. (1983) found significant gender differences in the Mature Interpersonal Relationship variable. Stonewater (1987) indicated that men and women perceived or responded differently as to the development of the variables (PUR, AUT, MIR) that took place. The differences occur because of different development patterns for decisions, relationships, priorities, and sense of self. Men and women may respond differently because of freedom from the need for reassurance and approval from others, ability to function on one's own without help from others, and a mature dependence and sense of reciprocal relationships. Jordan-Cox

(1987) found significant differences between men and women for Purpose and Autonomy. Jordan-Cox noted that women had mastered significantly more behaviors than men on Autonomy and Mature Interpersonal Relationships.

Straub (1987) suggested that the mastery of the dependent variable, Mature Interpersonal Relationships, had a significant impact on the development of the dependent variable, Autonomy, for women. Greeley and Tinsley (1988) reported that women scored slightly higher, but not significantly higher, than men on Autonomy. Zuschlag and Whitbourne (1994) reported females generally had significantly higher psychosocial development scores than males. Jones and Witt (2001) reported that women scored higher than men on several subtasks of Purpose and Autonomy and showed a significant result for Autonomy and Mature Interpersonal Relationships. Other studies had significant effect for Autonomy (Greeley & Tinsley, 1988; Jones & Witt, 2001; Jordan-Cox, 1987) and Mature Interpersonal Relationships (Pollard et al. 1983; Straub, 1987). The current study agrees with the previous literature in finding significance in development of Autonomy and Mature Interpersonal Relationships in regards to gender.

This study found that race had no effect on psychosocial development of undergraduate students as measured by Purpose, Autonomy, and Mature Interpersonal Relationships (Hypothesis 7). Most of the research in the area of race and psychosocial development has been done for one race instead of comparing two or more races. Previous studies have found significance in at least one area, Purpose, Autonomy, or Mature Interpersonal Relationships, whereas this study found no significance. Itzkowitz and Petrie (1986) and Cheatham et al (1990) studied different groups within Black

students. Ojano Sheehan and Pearson (1995) examined Asian students and found that Asian international students were significantly lower than American students on developmental tasks and scales. Higher scores for Black students than White students on the Mature Interpersonal Relationships variable have been reported by Taub & McEwen (1991) and Taub & McEwen (1992).

Implications for Improving Educational Practice, Policy and Research

Methods for improving practice and policy among educators, other professionals, leaders, and relevant stakeholders are explored. Recommendations for further research are proposed.

Implications for Improving Educational Practice

The results of this research study can positively impact educational systems and higher education administration decisions concerning programming for their students. Looking at students from the areas of gender, race, and fraternity/sorority affiliation can lead to programming that fits different segments of the campus population. All groups of students are affected in different ways. Finding the ways to have positive impacts on Autonomy, Purpose, and Mature Interpersonal Relationships, can lead to higher retention and graduation rates of the university's students. Pride (1996) shows that Greek fraternity members graduated at a higher rate than non-Greek members at Western Kentucky University in particular, Black Greeks. Information from this type of study can aid in forming programs that address developmental issues for specific groups of students such as fraternity/sorority members, men/women, and Black/White students: looking at Black students and what factors lead to higher scores for Black Greek students and translating

these factors to other Black students.

Implications for Improving Policy

The results of this research study can impact higher education institutions and the postsecondary board. Institutions can look at Greek-letter organizations and what they have to offer their students, in particular, the impact Greek life can have upon Black students. In the state of Kentucky, retention and graduation of Black students is a priority for the Council of Postsecondary Education. Several types of institutional funding are tied to the performance of Black students by the Council of Postsecondary Education in Kentucky. The opportunity to investigate what has had a positive effect upon the State of Kentucky's Black students is provided in this study. If the state can define what is causing the increased levels of psychosocial development, it can develop statewide programs to help this constituency. The state should look at funding Black Greeks programs to give more Black students the opportunity to join. This can be a major component in retention and graduation of Black students at the public institutions in Kentucky.

Implications for Further Research

Considering the findings gained from this study, the researcher suggests several recommendations for further study. The study was conducted at regional institutions in Kentucky; therefore, the results may not generalize to other types of universities or other states. To increase generalizability of the results, the researcher recommends that further research be performed on Greek and non-Greek students in other states and at different types of universities. In particular, research at Historically Black Colleges and

Universities would be helpful to see if Greek life promotes the same results as other campuses. Studies could be expanded to include, class level, number of years involved in a fraternity/sorority, and socio-economic factors.

Longitudinal studies can be conducted to find out more about students as individuals. A longitudinal study can track over time the effect that membership in a fraternity or sorority has on a student. Another possibility is to track students who pledged fraternities/sororities and decided not to join as members or joined and withdrew membership before graduation.

Conclusions

Higher education in Kentucky has moved into a new era with the creation of the Council on Postsecondary Education by House Bill 1. The “2020 Vision: An Agenda for Kentucky’s System of Postsecondary Education” (1997) aimed to educate citizens who desire advanced knowledge and skills and provide the opportunities to acquire them. Psychosocial development refines this vision. Psychosocial development is defined by the three independent variables, Purpose, Autonomy, and Mature Interpersonal Relationships. Purpose was defined as having well-defined goals and knowing what they needed to do to achieve their goals. The students also participated in cultural events and were efficient in managing personal finances and daily responsibilities. They have established a personal direction in their life and have allowed personal, ethical, and religious values to be a part of this direction.

Autonomy was defined as being capable of handling ambiguity and behaving in ways that allow them to succeed and fulfill responsibilities. These students met their

needs without constant reassurance from others, did not need extensive direction, met academic goals without the need of direction, and acted as a responsible and contributing member of their community.

Mature Interpersonal Relationships was defined as having independent, frank, and trustful relationships. By appreciating individual differences, these students respected and accepted other cultures and races.

House Bill 1 asked the questions, “Are we developing students who can perform in today’s society? Are they developing skills that will help them become good citizens? Are they developing skills that will allow them to survive economically?” The definitions of the three dependent variables relate back to these policy questions. If students are developing these definitions of psychosocial development, then we are developing skills for them to survive in today’s society.

Greek life plays a role in campus life at the three universities in the study. Fraternities and sororities claim to provide many outlets for the development of individuals who join their organizations such as scholarship, leadership, service, and social activities. There are conflicting opinions about Greek Life (fraternity/sorority affiliation). Various people in higher education claim that Greek-letter organizations are antithetical to the mission of the educational institution (Baier & Whipple, 1990; Maisel, 1990). Others believe Greek-letter organizations add to the university community (Astin, 1983; Strange, 1986). Part of the definition of Autonomy was being a contributing member of the community. Greek-letter organizations at the three institutions surveyed play a big part in their respective communities, both within the university and the

community at large. The amount of time that is devoted to community service and service projects leads to a high level of developing community. Whether positive (Hayek et al. 2002; Pascarella et al. 2001) or negative (Hagedorn et al. 1996) results were reported for Greek affiliation, claims were made that Greek membership (affiliation) had an affect on students.

A student's peer group can be the single most powerful influence on growth and development of a student in college (Astin, 1993). Finding out what peer groups influence students can be a valuable tool in a student's development and can provide information that can help with the retention and persistence to graduation of students. This is one of the most important areas for the new era of higher education in Kentucky.

The results of this study suggest that Greek affiliation for Black students can be very powerful in their development. This is a major finding for this study. The disordinal effect of affiliation and race on Black students shows that Greek affiliation has a tremendous influence on its members. These students may be predisposed to higher psychosocial development because of socioeconomic reasons, family support, or parents who attended college. This could lead to the different levels of development for Black students. It is incumbent upon university administrators to develop programs for the underrepresented populations in higher education to prepare this population for the benefit of society. With the findings of this study and Pride (1996), it is incumbent on the appropriate state and university entities to look at what the Black Greek-letter organizations have to offer our Black students that allows them to be successful at a higher level than non-Greek Black students.

The significance of gender on Autonomy and Mature Interpersonal Relationships shows the difference in development for males and females. The three universities used in this study have a larger female population than male population. It is very important that we look at the make up of the universities as we decide on programs and policies that will affect the students in regards to gender.

The significance of Greek affiliation on Autonomy shows that Greek Life has an effect on students, whether good or bad, in particular for Black students. Fraternities and sororities assert they assist members in development of life skills such as Purpose, Autonomy, and Mature Interpersonal Relationships. It is incumbent upon the universities to ensure that these groups are assisting their members in these pursuits. Too often we ignore dealing with Greek-letter organizations instead of working to develop them into organizations that can have the positive effect that is desired in developing students. Tying race and fraternity/sorority affiliation together has shown a significant interaction for Black Greeks who participated in this study. Furthermore, the disordinal interaction that has taken place shows the influence that Greek life can have on Black students.

Miller (1973) suggested there was a Greek type since there existed differences in his study between freshmen Greeks and freshmen non-Greeks before they pledged an organization. Following this line of thought, it is possible that there is a fraternity or sorority type between the Black Greeks and Black non-Greeks. The stimuli and challenges resulting from interaction with one's environment bring about growth and change (Miller & Winston, 1990). Following this line of thought, the significant results of this research (race with affiliation) suggest that Greek life for Black students may be

providing an environment that produces challenges for their individual members to change or grow more than the non-affiliated Black students. For affiliated White students, the non-significant results of this research suggest that, in general, fraternities and sororities do not seem to provide an environment that produces stimuli and provides challenges for their individual members to change or grow any more than what the average not affiliated White students receive from their environment. For affiliated White students, fraternities and sororities do not seem to provide more stimuli or challenges.

Black Greek students seem to have more defined goals than Black non-Greek students. Significantly higher levels of development of Autonomy for Black Greek students imply that the Greek organizations are better able to meet their needs without the need of continuous reassurance from others and that they better structure their time and recognize their responsibility to their community. Members of Black Greek-letter organizations have a readily available group of peers with whom they can identify. These organizations may provide a higher level and intensity of personal development, which could be a reason for the higher levels of Autonomy and Purpose for Black Greeks than Black non-Greeks. Membership in a historically Black fraternity serves to integrate members into the wider campus community by providing them with a network of social support from which to negotiate the predominantly White environment (McClure, 2006).

Findings from this study may stimulate additional research about Greek affiliation, particularly for Black students. The disordinal effect on psychosocial development for Black Greek students provides us with both challenges and opportunities

to look at our policies and programs concerning Black students in Kentucky. It is incumbent upon the State of Kentucky to look at all avenues to develop this underrepresented population and use information like this to evaluate what can be done.

Increasing psychosocial development can be a valuable tool for higher education, in particular the institutions in Kentucky, as we try to develop citizens for the new global society that has been evolving in recent years. By defining peer groups which can have an impact upon student development, we can work to provide stimuli and challenges to students. Defining the factors that lead to increased psychosocial development can help faculty, staff, and administrators develop a framework for students to develop and grow through Purpose, Autonomy, and Mature Interpersonal Relationships, as a basis for leading better lives and having positive effects on society.

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Appendix A

Prenotice Letter

L. T. Smith
1 Big Red Way
Bowling Green, KY 42103

A few days from now you will receive in the mail a request to fill out a questionnaire for an important research project being conduct through the University of Louisville.

It concerns the psychosocial development of students at regional institutions of higher learning in Kentucky.

I am writing in advance because we have found many people like to know ahead of time that they will be contacted. The study is an important one that may help in programming for students at the participating institutions.

Thank you for your time and consideration. It's only with the generous help of people like you that the research can be successful.

Sincerely,

Charles L. Pride

Appendix B

Cover Letter

L.T. Smith
1 Big Red Way
Bowling Green, KY 42103

I am writing to ask your help in a study of students at regional institutions in Kentucky. This study is part of an effort to learn about students' psychosocial development.

I am conducting a random sample of students who are between the ages of 18 and 24.

Results from the survey will be used to help develop possible programs for students at these institutions in Kentucky.

Your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified. When you return your completed questionnaire, your name will be deleted from the mailing list and never connected to your answers in any way. This survey is voluntary. However, you can help very much by taking some time to fill out the questionnaire. If for some reason you prefer not to respond, please let us know by returning the blank questionnaire in the enclosed stamped envelope.

If you have any questions or comments about this study, I would be happy to talk with you. My number is (270) 745-2459, or you can write to me at the address on the letterhead.

Thank you very much for helping with this study.

Sincerely,

Charles L. Pride

Group Differences in Psychosocial Development by Greek Status, Gender, and Race of Undergraduate Students

Dear Participant,

You are being invited to participate in a research study sponsored by the Leadership, Foundations, and Human Resource Education Department at the University of Louisville and conducted by the Principal Investigator, Dr. John Keedy and Charles L. Pride, doctoral graduate student.

The study seeks to find out group differences in psychosocial development involving college students. Your participation would consist infilling out the attached questionnaire and sending it in. It will be sent to 320 people and will take about 45 minutes to complete. You are free to decline to answer any question that makes you feel uncomfortable.

It is not clear that you will benefit directly from this study, but it is hoped that your participation will help others in the future. Foreseeable risks to you might be slight discomfort in answering certain questions.

Although absolute confidentiality cannot be guaranteed, confidentiality will be protected to the extent permitted by law. The data will be kept under lock and key. The sponsor, the Human Subjects Protection Program Office, and the Institutional Review Board may inspect the research records of this study. Should the data be published you will not be identified by name.

Your participation in this research is voluntary. You may refuse or discontinue participation at any time without losing any benefits to which you are otherwise entitled.

Should you have any questions you may call Dr. John Keedy at (502) 852-0619 or Charles Pride at (270) 745-2459. If you have any questions about your rights as a research subject, concerns or complaints about the research or research staff, you may call the Human Subjects Protection Program Office, (502) 852-5188, and they will put you in touch with the appropriate chair of the Institutional Review to discuss the matter. The Institutional Review Board is an independent committee composed of members of the University community, staff of the institutions, as well as lay members of the community not connected with these institutions. The IRB has reviewed this study. The Western Kentucky University Human Subjects Review Board has reviewed the study. You may contact them: WKU Human Subjects Review Board, Dr. Phillip Meyers, Human Protections Administrator, (270) 745-4652.

By sending the questionnaire you are indicating your willingness to participate freely in this research study. You are further indicating that all your present questions have been answered in language you understand and that you understand that all future questions

will be answered in a similar manner.

Thank you for considering my invitation to participate in this study.

Sincerely,

Charles L. Pride

Appendix C

2nd Notice

L.T. Smith
1 Big Red Way
Bowling Green, KY 42103

A few days ago a questionnaire seeking your help in a study of students at regional institutions in Kentucky was mailed to you. You were randomly selected from students attending the universities.

If you have already completed and returned the questionnaire, please accept my sincere thanks. If not, please do so today. I am especially grateful for your help because it is only by asking people like you to share your experiences that we can understand about students' psychosocial development at institutions in Kentucky.

If you did not receive a questionnaire, or if it was misplaced, please email me at charley.pride@wku.edu and I will get another one sent to you.

Sincerely,

Charles L. Pride

CURRICULUM VITAE

NAME: Charles Louis Pride

ADDRESS: 864 Nutwood St.
Bowling Green, KY 42103

DOB: Morganfield, Kentucky – July 22, 1964

EDUCATION
& TRAINING: B.S., History and Government
Western Kentucky University
1982-1987

M.A., History
Western Kentucky University
1987-1989

Ed. S., Student Personnel Services
1992-1996

AWARDS: Citizens Award
Western Kentucky University Student Government Association
1996, 2003, 2006

Fellowship Award
Order of Omega Honor Society
1997

Distinguished Service Award
Association of Fraternity Advisors
1996

Non-Member Honor Card Award
Alpha Omicron Pi Sorority
2004

Greek Advisor of the Year
Sigma Nu Fraternity
2006

PROFESSIONAL SOCIETIES:

Association of Fraternity Advisors
College Personnel Association of Kentucky
National Association of Student Personnel Administrators
Southern Association College Student Administrators