UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

IMPACT OF OUTSIDE-THE-CLASSROOM INVOLVEMENT ON COGNITIVE AND AFFECTIVE DEVELOPMENT FOR COMMUNITY COLLEGE STUDENTS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

By

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Norman, Oklahoma

2005

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IMPACT OF OUTSIDE-THE-CLASSROOM INVOLVEMENT

ON COGNITIVE AND AFFECTIVE DEVELOPMENT

FOR COMMUNITY COLLEGE STUDENTS

A DISSERTATION APPROVED FOR THE DEPARTMENT OF

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ACKNOWLEDGEMENTS

As with any significant accomplishment in life, this doctorate could not have been completed alone. My doctoral committee chair, Dr. David Tan, led my committee with a great deal of skill, diligence, and patience. Dr. Rosa Cintron was able to re-join my committee, and I appreciated her continued support and encouragement throughout. Dr. Irene Karpiak provided her vast knowledge of adult students and higher education, and a genuine sense of concern for me and the project. Dr. Becky Barker was an inspiration to me even before beginning the doctoral program, and her insight into student involvement (plus, her camaraderie) was always welcomed. Dr. Xun Ge graciously agreed to join my committee close to the end of the process and assist with the final stage.

Friends at Oklahoma City Community College assisted me greatly along the way. They were there to encourage me when I began, and many were still there offering support at the end. Among them were Dr. John Barker, Dr. Marion Paden, Dr. Charlotte French, andall my friends in the Office of Student Life. Staff, faculty, and students at Johnson County Community Collegewere essential to the research process, and students in the CEDAR office at OUwere a great help! And, it was my new co-workers at Park University who saw me through the final gate. Ms. Clarinda Creighton and Dr. Beverley Byers-Pevitts supported my completion of the project, Dr. John Tew assistedwith some of the analysis, Ms. Sue Huntoon was my editor extraordinaire, and great friends and colleagues in the Office ofStudent Life (especially Donna Rekittke, Katy Goodwin, and Eric Blair), provided inspiration and encouragement!

In addition, many friends have assisted by loving and caring for our children – to allow me time for research and writing. Dr. Kathy Brown, Dr. Donna Cloud, Miriam and Bobby Boydston, Fran Cox and Janet Podoll all continue to give loving nurturance to Elizabeth and Adam, and to Mike and me.

Glenn and Jenny McElroy are the kindest, most supportive friends that anyone could dream of finding, and luckily – they also happen to be my husband's parents. They have invested many hours and days of caring for our children and encouraging me in my studies.

My three wonderful big sisters: Linda Martin, Pat Allen, and Kathy Brull, were always convinced I would complete this goal and have been encouraging me throughout the process. My parents, Irene Boyd and the late Eugene Boyd, have been planting dreams and helping me fulfill them for 40 years now. They always made sure my sisters and I knew that we were bright, funny, competent and capable. Mom and Dad have always been there to love us and to demonstrate how to love one another. My mom is now passing that heritage, and the memory of my wonderful father, on to my children.

My husband, Mike, was there at the beginning – encouraging me to apply for the doctoral program just as we started dating. Throughout the years of studying, leaving for class, and staying at the office to write, he has been there providing support. Mike's loving nature, computer skills, witty interludes, and "Super Dad" status have made all of this possible. Thank you to all of these folks and to my magnificent, kind children: bright, loveable Elizabeth and funny, adorable Adam.

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ABSTRACT

It has been well-documented that involvement, both inside and outside the classroom, is an important element in the development of college students. Since 46% of first-time freshman are enrolled in community colleges (American Association of Community Colleges Enrollment Data, 2002), it is especially important to look at how involvement affects students at two-year institutions. In addition, it is helpful to know what types of involvement are likely to lead to particular gains.

For this study, students in 18 groups, ranging from the Student Newspaper to Men's Soccer, completed 267 surveys, and provided information about their type and level of involvement outside-the-classroom, the specific cognitive or affective gains they believe they experienced from their involvement, their motivation toward involvement, and other background information including their gender, age, ethnicity, GPA, and hours of enrollment. The researcher found that students who were involved in either Varsity Athletics or Student Government developed stronger leadership skills and greater self-confidence. For that reason, it is important to encourage students – even commuter students at a metropolitan community college – to get involved outside-the classroom, and it is essential for faculty and college administrators to understand the importance of co-curricular involvement opportunities in theaffective and cognitive development of students.

Chapter 1
Introduction

"The research is unequivocal: students who are actively involved in both academic and out-of-class activities gain more from the college experience than those who are not so involved" (Kuh, G.D., Schuh, J.H., Whitt, E.J., Andreas, R.E., Lyons, J.W., Strange, C.C., et al., 1991, p. xi). The reality is that it is a challenge to motivate community college students to be involved with campus life outside the classroom, especially since many of them commute, attend college only part-time, work full-time or part-time, and are older in age (Palmer, 1998). However, assuming that co-curricular participation is likely to result in desirable cognitive and affective gains, even for community college students, what can community colleges do to motivate their students to be more actively engaged and involved?

Community colleges currently enroll 44% of all post-secondary students in the nation (United States Department of Education, 2001); however, few studies are published which discuss ways to make the higher education experience more meaningful and rewarding for those students. Community colleges have historically emphasized access, serving the large demands after World War II for post-secondary education. Attention is usually devoted to funding issues related to student enrollment at two-year institutions, rather than to the more important issue of providing the best possible educational experiences for these students (Palmer, 1998). However, community colleges are now in need of a paradigm shift which will help them go beyond issues of access and funding, and include issues of opportunity and success for their students (Manning, 1998).

The concept of “involvement” is a sometimes overlooked, yet important factor in the success of all college students. Research has shown that involvement can be instrumental in retaining students in college, increasing their satisfaction of college, strengthening their academic performance, and providing greater career progress after college (Astin, 1977; Tinto, 1975, Pace, 1984). This study, however, will examine the impact that involvement can make on the affective and cognitive gains of college students.

One of the best-known proponents of the importance of involvement at colleges and universities has been AlexanderAstin (1977). Astin and subsequentlyothers have suggested that involvement outside the classroom can influence college students in many ways. For example, researchers have noted an impact of involvement on the development of identity (Chickering & Reisser, 1993), an increase of the students’ likelihood to persist in college (Tinto, 1993), greater academic performance (Astin, 1993), and a magnification of personality development and satisfaction with college (Pace, 1984; Tinto, 1975). There is no question that these and other affective qualities are important outcomes for all college students. Regardless of institutional type – be they technical schools, liberal arts colleges, or research universities – the goals of higher education include making a significant impact on the affective and cognitive devel opment of students. However, the obstacles to involvement for community college students are great, especially for those students who live off-campus, have part-time or full-time jobs, and havesignificant commitments away from their campuses – such as time they need to spend with their children (Palmer, 1998).

What are the important elements of student involvement that two-year colleges should consider? As Astin (1983) stated, “Involvement is not an esoteric or mysterious construct. It is manifested in how much time and how much physical and psychological energy the student invests in the educational process” (p. 129). Specific involvement elements include working and living on campus, interacting with faculty, participating in student organizations, getting involved in co-curricular activities, and being immersed in the academic curricula (Astin, 1983). Although working and living on campus may not be a possibilty for many students at two-year colleges, the other areas of involvement, such as working on curricular projects with faculty outside of class, meeting students in the library to study, or joining a student club can be encouraged.

The topic of involvement has been widely researched and recognized at four-year colleges and universities, but community colleges have generally been ignored in this discussion. There are probably many reasons for this oversight, the most important of which is methodological in that the student population in community colleges is more transient and short-term in nature. To be sure, while there are many community college students who attend full-time for two years, there are many others who enroll for the purpose of taking only one class, to upgrade their job skills, to fulfill a degree requirement at another institution, or to learn about a particular topic for self-fulfillment. The students’ varied goals and outcomes need to be accounted, making research more complicated (Palmer, 1998).

Another reason community college student experiences have not often been researched is the undeserved lower prestige assigned to the community colleges in the overall higher education system. Most two-year institutions have open enrollment policies, with few or no entrance requirements, which can contribute to a perception of less status, despite the fact that their missions may indeed be noble. Perhaps a fairer reason for the lack of research on community college students may be the historic emphasis put on the number of students enrolled rather than on the impact of the collegiate experience (Palmer, 1998).

It is a new millennium, however, and it is time to reconsider the importance of community colleges in the overall mission of higher education. It is important to remember that 46% of first-time freshman are enrolled in community colleges (American Association of Community Colleges [AACC] Enrollment Data, 2002). In 2000, 10.4 million students enrolled in community colleges, and 450,000 associate degrees were awarded by these institutions. In addition, graduates of two-year colleges are working in some vital professions. Community colleges educate many important health care and safety professionals, as 60% of new nurses and 80% of firefighters, law enforcement officers and emergency medical technicians are among their graduates. Many high-tech companies such as Microsoft, Cisco, and Intel also look to community college graduates to work in their businesses, in order to remain globally competitive (Boggs, 2004.) Therefore, it is a human resource issue, and it would not be in the public interest to overlook factors which may contribute to a more enriching educational experience for such a large population.

The above information suggests the importance of examining the educational experiences of studentsat the community colleg e. Two-year colleges enroll a large percentage of students enrolled in higher education, and the roles of those graduates after college are vital to the workforce of the nation. The challenges ofincreasing student retention and acad emic success for adut students at the community college, however, are especially difficult. Many non-traditional students have off-campus responsibilities that may impede academic progress (Palmer, 1998). Jobs, families, and homes are examples of the factors which can detract from the adult students' focus on education.

In addition, the community college population tends to consist of more first-generation college students and ethnic minorities. Such students could potentially benefit from a better sense of involvement with the campus since many of them come to the community college feeling "wounded" – that they are less capable academically, brought about by their doubts precipitated by previous academic experiences (Rendon, 1996). To be sure, close friends and family members can serve as an effective support mechanism for college students unsure about their academic abilities, but unfortunately many first-generation and minority students are less likely to have that support mechanism either in their communities or on their enrolled campuses (Rendon, 1996).

Continuing from the previous point, Rendon (1996) describe the students' need for "validation" from people inside or outside of class who affirm to the students that they are capable of learning and that they are welcome on campus. Although it is generally assumed that the students will take the initiative to get

involved, Rendon (1996) points out thatminority and first -generation students may not be accustomed to asking questions about student activities or events, or getting involved on their own. This reluctance to get involved, without a direct invitation, may be associated with the students' lack of familiarity with the situation, or with their lack of self-confidence in this new environment. For these students, the faculty and staff within the institution can play a role in encouraging their participation (Rendon, 1996).

The paradox is that students at risk can become more academically successful in college if they are more actively engaged in college life, yet they are the ones less likely to feel an initial connection with their colleges. This connection, or sense of "mattering," can be fostered more successfully if at risk students engage with the people and activities of their institutions. When students are involved in campus life, a sense of community is generated among the students. As the students develop a greater reliance on one another, it leads to a better support mechanism – facilitating their cognitive and affective development. In turn, students sense they matter when they believe they are important to their faculty and staff, when staff know their names or when faculty recognize their involvement in class discussions. The students' academic and social success is perpetuated when they realize they are known and cared about by individuals at the college. It makes them feel more accountable, fostering a greater sense of commitment to their academic and social obligations and connections (Schlossberg, 1989).

What kinds of “involvement” are important? While other research has looked at involvement aspects that faculty can utilize inside the classroom, the present study examined educational experiences that occurred outside the classroom. As in the *Involving Colleges* study by Kuh et al., the term “educational” is used to describe a broad “set of ideas that embrace moral and social development in addition to development of intellect and reason” (1991, p. 17). As an example,educational interactions may include experiences associated with student organizations, varsity or intramural sports, community service programs, and participation in the wide range of student activities available. There are also the informal interactions between students and faculty in the cafeteria, or formal associations between the entities on a research project or drama production. Involvement in any of these areas could and should contribute to the moral and social development and learning opportunities of students.

Background

“Involvement” can be animportant factor in th e success of students. Astin is one of the best-known researchers in the area of involvement at colleges and universities. Astin (1977) has suggested that involvement outside the classroom increases the students’ likelihood to persist and magnifies certain aspects of student development, such as their personality, behavior, career progress and satisfaction. Tinto (1975) and Pace (1984) noted that students who are involved on campus are more likely to stay in college and exhibit satisfaction with college. Astin (1993) found that involvement can benefit cognitive development and

enhance academic performance. As Kuh et al. stated, “The research is unequivocal: students who are actively involved in both academic and out-of-class activities gain more from the college experience than those who are not so involved” (1991, p. xi).

In addition to researchers, many presidents of higher education institutions are also aware of the importance of student involvement. The Carnegie Foundation for the Advancement of Teaching and the American Council on Education (ACE)conducted the *National Survey of College and University Presidents* in 1989. Over three-quarters of the college presidents that were surveyed rated the lack of student involvement as one of the most serious campus life problems they confront. It isnot difficult to understand why this is a concern of presidents, as retention and accreditation are important factors. Most college and university presidents are aware of the benefits of involvement relating to persistence (Astin, 1977) and they are sensitive to the need to retain students. Additionally, accrediting agencies are focusing more and more on institutional effectiveness and outcomes assessment (Burrill, 1994), and there is a plethora of evidence of the positive correlation between involvement, student success, and persistence (Pascarella & Terenzini, 1991).

Many well-known research projects on student involvement, such as those conducted by Astin (1977), Tinto (1975) and Pace (1984) were all focused on students enrolled at four-year institutions, leaving very little information about the experiences of two-year college students. In fact, Pascarella and Terenzini (1991) specifically point out the gap in the research in regards to students

representing minority cultures, part-time attendees, older students, commuters, and those students who are also working part-time or full-time. They state, "Indeed, we may need to revise our traditional ideas about what the impact of college really means for nontraditional students" (Pascarella& Terenzini, 1991, p. 632).

These populations listed by Pascarella and Terenzini are students who tend to select two-year colleges for their education. Among Hispanic and Native American students enrolled in colleges, 55% of each group chose two-year institutions. In the group of Black undergraduate students and Asian-Americans/Pacific Islanders, 46% of each group is enrolled at community colleges. In addition, the average age of students at community colleges is 29 and 63% of students at two-year schools are attending only part-time (Phillippe, 2000). However, some research is beginning to focus on community college students. Recent findings (Glover & Murrell, 1998; Douzenis, 1996; Halpin, 1990; Tinto & Russo, 1994 and Knight, 1994) confirm that many of the same benefits of involvement that were noted on four-year college campuses are also seen in students at the two-year colleges. In addition, Culp expressed her findings about opportunities for student growth at the community colleges with the following:

> Effective institutions realize that not all learning takes place in the classroom….These colleges invite faculty and students to design programs that focus on co-curricular rather than extracurricular activity, create incentives for faculty to build participation in co-curricular activities into their student grading systems, reward faculty who sponsor campus clubs and organizations, encourage volunteerism, and fund programs that send a message to students that they matter…. Teaching and learning are at the core of any

> educational institution, but in the community college some of the most significant teaching and learning opportunities occur outside of the classroom (1995, p. 42).

While this concept may seem idealistic, many in academe know that a change in this direction would prove vitally important to the lives of students and in the success of their institutions. If administrators, faculty, and staff are interested in increasing the likelihood of student excellence and achievement, then the traditional division between academic and student affairs that exists in many institutions should be minimized in order to pave the way for co-curricular programs that explore new and innovative learning opportunities for students outside the classroom.

Problem Statement

Many community college students are not involved on campus (Dougherty, 1994) despite the fact that we know of a positive correlation between involvement in campus life and persistence in college, academic achievement, and satisfaction with the collegeœxperience, through the works of Astin (1977). With a large number of two-year college students being commuters, adults, part-time students, and/or representative of minority cultures, the challenges of getting those students involved and retaining them are paramount (Astin, 1983). The more diverse the student population, the more efforts must be made to initiate involvement, and the more significant will be the outcomes to the students and to the institutions if these efforts are sincerely aimed at making a difference in the lives of the students. More research is evidently needed to address this void in the knowledge base.

Purpose

The primary purpose of this research project was to examine the correlation between student involvement and cognitive and affective gains. The project also took into consideration the roles that certain student background variables, types of student involvement, and motivational factors behind their involvement played in the mix.

Research Questions

1. What types of formal and informalactivit ies were the students involved with outside of class?
2. What motivational factors were related to the student involvement in co-curricular activities?
3. Which student background variables were associated with their motivational factors toward involvement, and were any of the background variables related to differences in cognitive or affective gains?
4. Were there relationships between motivational factors of involvement and certain types and levels of involvement?
5. Which cognitive and affective gains were perceived by the students to have been achieved by their participation in different types of outside-the classroom activities?
6. Controlling for certain student background variables, did the students' varying types of involvement (student-to-student, student-to-faculty, and student-to-staff) relate to their perceived gains?

Significance

Significance for students

What would be the benefit of encouraging more involvement of community college students? Many studies have been conducted which show a greater amount of cognitive and affective learning and personal development for students who have a higher degree of involvement (Pascarella & Terenzini, 1991). All kinds of involvement – with faculty and staff, with other students, and even the use of campus facilities, such as the college union, cafeteria, or library – lead to positive results. As students utilize the campus facilities, talk with other students, and work with staff, they connect with the institution and develop a familiarity with its services, programs, and people. As Astin (1993) stated, research demonstrates "the tremendous potential that student involvement has for enhancing most aspects of the undergraduate student's cognitive and affective development" (p. 394).

What, exactly, is gained though involvement? Most researchers believe that all learning is impacted – both cognitive and affective. Astin (1996) makes the point that faculty tend to use the term "student learning," and focus on cognitive outcomes such as knowledge, cognitive skill, and critical thinking. Student affairs staff, however, are more likely to emphasize "student development" and discuss affective outcomes such as self-understanding, interpersonal skills, leadership, tolerance, and social responsibility. Astin makes the case for looking at the issues in another way by stating that, "perhaps we

need to expand the concept of ‘learning’ to include affective as well as cognitive outcomes” (1996, p. 124).

These thoughts are also outlined in “The Student Learning Imperative: Implications for Student Affairs,” a product of the American College Personnel Association (ACPA). In it, the Association states, “The concepts of ‘learning,’ ‘personal development,’ and ‘student development’ are inextricably intertwined and inseparable” (ACPA, 1996, p. 118). This document calls into question the distinction of academic affairs impacting the cognitive development of students and student affairs working in the area of personal development. The Student Learning Imperative states that, “this dichotomy has little relevance to post-college life, where the quality of one’s job performance, family life, and community activities are all highly dependent on cognitive and affective skills. Indeed, it is difficult to classify many important adult skills as either cognitive or affective” (ACPA, 1996, p. 118).

The importance of the campus working together for the sake of the student was reinforced in 2004 when ACPA worked cooperatively with the National Association for Student Personnel Administrators (NASPA) to develop and publish a book entitled, *Learning Reconsidered: A Campus-Wide Focus on the Student Experience*. In it, the authors discuss the importance of integrating the entire campus to ensure better educational opportunities for the whole student (NASPA/ACPA, 2004).

Schroeder and Hurst (1996) wrote an article discussing ways to design effective learning environments, combining both curricular and co-curricular

elements. In it, they describe some lofty goals that most colleges and universities should probably aspire to, in order to impact their students in a positive way. Schroeder and Hurst (1996) illustrate ways to help students learn to apply their intellect toward productive ends, to develop a broader level of appreciation and creativity in the aesthetic domain, to increase their level of thought and commitment in the moral/ethical arena, and to appreciate and celebrate cultural and ethnic diversity – all with an integrated sense of self. With such complex agendas, they point out that both the academic and student services sides would need to work together to provide the best possible experiential learning for their students

In general, most faculty and professional staff in a college or university are aware of the benefits of involvement for students. However, with many external demands for the students' time and attention, it is sometimes a challenge to motivate students to get involved. This problem is especially apparent on the community college campus, as described by Astin in *Four Critical Years* (1977):

> Typically, these students [those who are not involved] come from less-educated families and have relatively poor academic preparation. Because of financial constraints and selective admissions policies in most public systems, such students are often forced to enroll in public community colleges. These students frequently have only modest educational aspirations and commute from home to college rather than living on campus. They often hold a job off campus. They do not participate in extracurricular activities, are seldom on campus except to attend classes, and interact infrequently with faculty and fellow students. This lack of involvement is exacerbated by living at home and by continuing associations with high school friends. Uninvolved students have relatively poor chances of persisting and of implementing career plans. These chances can be substantially increased, however, if these students become highly involved in their academic work (p. 241).

The barriers to degree completion for some community college students may seem daunting; however, research clearly demonstrates that some of the most effective contributions to student learning and academic success occur outside the classroom (Pascarella & Terenzini, 1991). Simply, the college experience for community college students can be greatly impacted in a positive way by their involvement. Schroeder points out that outside-of-class experiences are especially beneficial if they include activities aimed at "developing a sense of identity/community, encouraging high levels of involvement in- and out-of-class, encouraging high levels of interaction with faculty and peers, and providing students with an opportunity to integrate information from diverse experiences in and out of class" (1996, p. 3). On a policy perspective, these can be incorporated in student programming at the two-year colleges.

Significance for the institutions

An increased emphasis on student involvement outside the classroom can bring about significant institutional outcomes as well. Researchers have established that promoting greater student involvement leads to students who are more motivated to learn and develop and who are more likely to persist at the institution. In addition, studies show that involved students are more likely to enjoy both short-term and long-term loyalty to the institution (Schlossberg, 1989). This loyalty has implications for positive public relations for the college or university, plus the hope of alumni donations and participation in the future. Involvement is a win-win situation for all – students and the colleges – so why is it rarely targeted as a priority?

Bondeson (1996) points out that an entire generation of faculty were trained as researchers, with little preparation for teaching. Even though many faculty positions – including those at community colleges and some four-year institutions – do not emphasize research, the faculty themselves were educated at research institutions, where training to teach at non-research institutions and educating about students' personal development did not exist. Bondeson relates that since the late 1980's, progress has been made toward emphasizing the importance of teaching. The research uni versities are now rewarding faculty for both research and teaching, and the next step will be to begin honoring and valuing faculty for their participation in student development (Bondeson, 1996). Changes in emphasis are also happening at some two-year institutions, where faculty may be rewarded for developing new learner-centered teaching techniques or advising student clubs.

Definitions

These definitions were developed by the researcher, using information and ideas derived from the research done for this project, and other readings and experience. The specific examples provided for some of the definitionswere made by the reference noted.

Affective or non-cognitive development: Affective development is used to describe changes in the way students view the world, attitudes or opinions about other people or other cultures, or their concept of themselves in relation to others. These are conceptual changes that students may experiencein the

psychosocial, attitudinal and moral domains, effecting student's judgment and values. Examples include self-concept, aspirations and behavior (Astin, 1977).

Cognitive development: Cognitive development describes changes in students' abilities to process new knowledge, examine things critically, and compare and contrast different forms of information. Higher order mental processes like reasoning and logic fall within this realm (Astin, 1977).

Outside-the-Classroom Involvement: This describes all interactions occurring on campus (yet outside of class) between students and faculty, students and staff, and students with other students. It includes all formal activities (such as planned student activities) as well as informal activities (such as a student talking with a faculty member in the hallway after class).

Involved Students: These are students who interact with other people on campus – study with other students in the library, talk with faculty or staff in the union, play intramural sports, become a member of a student organization, and do work-study in the financial aid office.

Uninvolved Students: Students, who only come to campus to attend class, then leave campus immediately following their class period, seeking no additional interactions from the faculty, staff or other students.

Involved Faculty: For the purposes of this study, the reference is to their involvement with students. This includes faculty who conduct research projects with students, serve as advisors to student clubs, offer additional assistance to students in need of help, and dine occasionally with students in the union or cafeteria, among others.

Uninvolved Faculty: Faculty who do not spend any additional time with students, except in class or during theiroffice hours.

Student Satisfaction: Students consider various elements of the campus environment to determine if they have a positive impression of and experience with their college or university. Does this college meet their student needs?

Assumptions

It was assumed that the campus selectedfor this study was fairly representative of other large, metropolitan community colleges in the United States. The students they served, the problems they encountered, the student gains they reported and the responses they provided should be fairly similar to results that may be found on any similar community college campus. However, each campus – with its unique people, location, history, mission and traditions – has a distinct program of outside-the classroom opportunities designed to meet the needs of their students, faculty, staff, and community.

Because advisors, coaches, and faculty and staff leaders of all areas of involvement on the campus were invited to have their students participate in the study, the researcher assumed that the sample of students who completed the survey were representative of all the involved students on the campus. The researcher personally facilitated the completion of the survey for each group, and instructed the students to answer each question fully, with care to provide as much honest, insightful feedback as possible. The researcher was available throughout the completion of the survey, inviting students to ask questions about

the instrument or process as needed.

Limitations

Research was conducted on one campus, and only with students who were classified as “involved.” The sample was also limited to students who were involved in particular groups, teams or clubs led by faculty and staff sponsors who responded to the inquiries and allowed the researcher time to survey their students. Because only “involved” students were surveyed, no analysis was done to compare student satisfaction rates or persistence rates between “involved” and “uninvolved” students. Also – since the survey was a one-time “snapshot” of these students at that particular time and place, the researcher did not attempt to examine changes in attitude or persistence among this group of involved students. Another limitation is that the information gathered cannot be easily compared to data that could be obtained from students attending a small, rural, residential community college. Because the targeted institution was a large, metropolitan, commuter-only two-year college, the students attending the campus and participating in the study were unique to that type of institution. Additionally, because the survey instrument for this study was designed to gather only quantitative data, the researcher was not able to gather thick descriptions of students’ attitudes about involvement or in-depth perceptions of what areas the students’ believed they had experienced growth based on involvement.

Summary

In this study, the researcher surveyed involved students at a large metropolitan community college to seek information about motivations and outcomes associated with involvement outside the classroom.

Organization of the Study

Chapter one provides an overview of the study, plus research questions, and points of significance on the topic. Chapter two discusses the various research areas that served as the basis of this study, including literature on student involvement in higher education institutions, student-faculty involvement, the community college student population, and student involvement at the community college. Chapter three outlines the research methodology utilized for this study. Chapter four describes the results of the study, and Chapter five includes the researcher's interpretation of the findings.

Chapter 2

The primary purpose of this research project was to examine the correlation between student involvement and cognitive and affective gains. The project also took into consideration the impact that certain student background variables, types of student involvement, and motivational factors behind their involvement may have played. The literature review examined past studies focusing on student involvement in higher education, including various affective and cognitive gains found to be made as a result of involvement; faculty involvement with students; community colleges and the various student groups represented on the two-year college campus, such as first -generation college students, ethnic minority students and adult students; and finally, student involvement on the community college campus.

Student Involvement in Higher Education

It is important to begin with an understanding of the various research already conducted on the topic of student involvement. Much of the research on the importance of involvement for college students is well documented. Influential researchers such as Astin, Tinto, Pascarella, Terenzini, and Pace repeatedly demonstrate the importance of students taking an active role in their college experience – both in and out of the classroom. Most of this research has historically been conducted on four-year college students, however. The needs of community college students have been examined only in the most recent literature, and these findings are typically very general in nature. Although there is some research which demonstrates that involvement for community college

students has a meaningful impact on persistence, student success, and student satisfaction, the studies do not discern what particulargains are impacted by certain types of involvement.

To begin, it is important to clarify what is meant by “involvement.” Astin defines involvement as “the quality of physical and psychological energy that students invest in the college experience” (1984, p. 297). Astin (1985) further describes the five elements of involvement as follows:

1. The investment of physical and psychological energy in various “objects.” (The objects may be specific – such as a particular event, or general – as in the sense of involvement in the life of the campus.)
2. Involvement occurs along a continuum – different for different students or types of involvement.
3. Both qualitative and quantitative elements are part of the involvement picture.
4. The amount of learning and personal development that students gain through an educational program is directly proportional to the quality and quantity of student involvement in that project.
5. The effectiveness of an educational program is related to the ability of that program to increase student involvement.

Basically, Astin’s theory of student involvement states that students who are involved in outside-the-classroom college experiences generally exhibit more academic and social development. Relationships with faculty, staff and other

students – through these common activities – tend to contribute to the students' development in ways that are not typically impacted through classes (Astin, 1985). The involvement theory is especially critical to community college students, as many of them fall into categories that are considered "high risk" (such as first-generation college students, students of color, older students, and part-time students) and any variable that could assist them toward greater development should be examined.

Tinto (1987) is best known for his research in the area of student persistence. He specifically discusses the importance of academic and social integration for college students. Tinto found that for those students who do not develop this integration, there is a higher probability of dissatisfaction with the institution, low academic performance and eventually – dropping out. Tinto's study demonstrated that a sense of belonging is essential for student retention (1987). The populations that tend to enroll in two-year colleges are especially vulnerable to dropping out. Involvement has been shown to impact persistence, which is vitally important for many of the student groups found at community colleges, such as adult students with families, first-generation college students, and students of color.

In one of his more recent studies, Tinto discusses certain aspects of student involvement and relates important findings and distinctions among students at a community college versus a four-year college. He stated that the time on campus for students at a two-year college is more likely limited to class periods than for students at a residential campus. For most commuter students,

their interactions with peers and faculty are based only on experiences in the laboratory or classroom. For that reason, those "academic" involvements are relatively more important to persistence for two-year college students. Residential students have more opportunities for social involvements that may also impact persistence (Tinto, 1998).

Since Tinto believed that community college student involvement is more closely tied to classroom involvement, while four-year college student involvement is more reliant on outside-the classroom involvement, he suggested several ideas for increasing classroom involvement at the two-year campus. One idea for building academic and social integration among students in community colleges is the development of learning communities. Learning communities are important tools for collaborative learning among students but also bring about "shared learning experiences" with faculty from different disciplines and often, student affairs staff (Tinto, 1998, p. 174).

An example of a learning community is the *Coordinated Studies Program* at Seattle Central Community College. The project linked courses and faculty from different disciplines into a theme-based semester of classes, forming a "learning community" of four faculty and 80-100 students. Class activities included group projects, field trips and guest speakers, and emphasized team teaching and collaborative learning. Tinto and Russ (1994) found that the "learning community" students re-enrolled at a rate significantly greater than like students who were enrolled in traditional classes. The students in the "learning community" coursework developed supportive peer groups, and they helped

motivate one another to enroll for more classes and complete their degrees. The students in these groups developed friendships in the early stages of their education, when community college students are especially vulnerable to external negative pressure. The learning communities also helped bridge the gap between academic and social needs, and allowed the students to experience both areas at once – rather than being forced to choose between the two. In addition, the faculty involved in the project took care to create a collaborative team, where students had the opportunity to learn concepts from many different perspectives (Tinto & Russ, 1994).

Tinto also discussed the importance of involvement outside the classroom for two-year college students, since participation in both areas is vital. Because the academic and social systems of colleges are present both in and outside the classroom, it is essential that the two areas work together to positively impact student persistence (Tinto, 1998).

Pascarella and Terenzini wrote one of the most complete syntheses on the topic of student involvement in their book *How College Affects Students: Findings and Insights from Twenty Years of Research* (1991). In it, theydescribe a wide variety of literature showing the many ways that students are impacted by their time in college. Pascarella and Terenzini review over 2,600 studies and discuss all the various cognitive and affective changes that students encounter as a consequence of attending college.

Among other topics, Pascarella and Terenzini (1991)acknowledge that colleges and universities have long had a goal to educate students beyond the

cognitive or intellectual domains. They state that most colleges and universities have a broad mission to include helping students develop a deeper self-awareness and anunders tanding of cultural and social mores. In addition, most institutions hope to engage the students in a level of thinking to move them beyond prejudice and narrow-mindedness. The majority of colleges also have a goal of preparing students for gainful employment, positive membership in society and an overall enhancement of their lives after college (Pascarella & Terenzini, 1991). All of these elements of development would be grouped within the affective domain.

Pascarella and Terenzini described the potential impact on a wide scope of development when students are actively engaged in the learning process. If students are encouraged to go beyond the regular expectations of classroom homework, they will be benefited in many ways, in both the cognitive and affective domains. They make the point that although students must take the initiative to seek out programs, people, and activities that could contribute to their educational experiences, educators – faculty, student services staff, and administrators – are responsible for providing a variety of these opportunities in the first place (Pascarella & Terenzini, 1991). This concept is especially important on the community college campus. Even though the level of student involvement is generally low when compared to four-year campuses, an effort must still be made to provide opportunities for various types of involvement.

One of the last points made by Pascarella and Terenzini (1991) is that research has clearly shown the strong influence that faculty members have over

student change in nearly all areas. They go on to state that faculty must understand their very important role in fostering student learning by becoming actively involved in the lives of the students (Pascarella & Terenzini, 1991).

An example of a study which examines the impact of student-faculty interactions was conducted by Springer, Terenzini, Pascarella, and Nora (1996). In this research, the authors examined four sets of independent variables – pre-college characteristics, courses, class-related experiences and out of-class experiences. The dependent variable was the students' scores on the end-of-first-year Learning for Self-Understanding scale. The analytical procedures were conducted with the aim of studying the unique and combined contributions of both the academic and out-of-class experiences on the students' changes in learning.

Springer, Terenzini, Pascarella, and Nora (1996) used several instruments in their study, including the Collegiate Assessment of Academic Proficiency (CAAP), developed by the American College Testing Program (1989), Pace's (1984) College Student Experiences Questionnaire (CSEQ), and another survey designed specifically for this study to gather students' demographic and background characteristics. The results revealed that two class-related experiences (instructor effectiveness in social science and the CSEQ Experiences with Faculty scale) and three out-of-class experiences (hours per week socializing with friends and two CSEQ scales: personal experiences and "art, music and theater") were found to have significant, positive correlations with the student's slant toward learning for self-understanding (Springer et al., 1996).

It is important to note that the CSEQ Experiences with Faculty scale incorporates both in-class and outside-of-class interactions between students and faculty. Items such as discussing an idea for a class project, asking the instructor for feedback on the student's performance, and meeting the faculty person for a soft drink are all reflected in this scale.

In this study, both class-related and outside-of-class experiences were found to have made significant and unique contributions toward a learning orientation – beyond students' pre-college traits and other college experiences. In the aforementioned study, class-related experiences explained 5% of the total variance and out-of-class experiences uniquely explained 10 to 18% of the total. This study provided further support for the belief that student learning is heavily influenced by both types of experiences – those in the classroom and those outside the classroom (Springer et al., 1996). Were students aware of these effects and did they associate various changes in development to particular experiences outside the classroom? This study asked involved students those very questions.

Another researcher who has attempted to understand more about the effects of college on students is Pace. Research by Pace (1984) has shown that the "quality of effort" made by the student is the single most important element which impacts college success. Quality of effort is defined as "the amount, scope, and quality of effort students put into taking advantage of the opportunities offered to them by the college" (Pace, 1984). Examples include

students' use of campus programs and facilities such as the library, art exhibits and science labs.

Pace's 1982 study was based on questionnaires completed by 12,000 undergraduate students from 40 different colleges within a three-year period. The instrument included 14 quality of effort scales and asked students to rate their level of use of campus facilities and their amount of involvement with people and events on the campus. An important finding from the project revealed that students' academic achievement in college was related to the quality of effort students made in college, regardless of their background or college choice (Pace, 1982).

Pace developed the College Student Experiences Questionnaire (1982), a widely used instrument designed to examine involvement variables and the "quality of effort" that students invest in various elements of the campus. A revised version for community colleges was published in 1990, the Community College Student Experiences Questionnaire (Friedlander, Pace, & Lehman). Several studies cited in the upcoming sections utilized the CSEQ in their research.

Affective and Cognitive Development

Although much of Pace's work focused on cognitive-type gains in college students, he did not ignore the affective side. He noted that it is equally important to examine college's impact on the personal attitudes, values, aspirations, traits, and interests of students (Pace, 1979).

Astin echoed this sentiment and stated it would be a mistake to focus on only the cognitive development of college students. He discussed the need for cultural understanding, empathy, and social responsibility to influence our relationships with others, plus citizenship and volunteerism in order to positively impact our society (Astin, 1996). Although Astin commented on the need for these traits in the mid-1990's, this list of characteristics seems even more essential in our post-September 11, 2001 world.

These types of affective development were studied in a research project by Endo and Harpel (1982), where they examine the kinds of student- faculty interactions that have an impact ondifferent sorts of student changes. They looked at both "formal" and "informal" student-faculty interactions. The authors categorized interactions as informal when the faculty demonstrated a friendly attitude toward the student and exhibited a personal concern for the students' overall emotional and cognitive growth. Interactions were considered formal when the discussions centered only on course materials or academic advising, and were professional, rather than informal, in tone. The researchersexamin ed the quality of academic and vocational advising provided by faculty the helpfulness of faculty, and general faculty concern (Endo & Harpel, 1982).

Endo and Harpel's study used a causal modeling approach and included three sets of variables: students' background characteristics, four aspects of student-faculty interaction, and four categories of outcomes. For students' background characteristics, they included five demographic/academic variables (sex, socioeconomic status, program type, academic ability, and religiousness),

six expectation variables (degree aspiration, expectations for making friends, expectations for finding friendly faculty, expectations for exciting classes, expectations for participating in extracurricular activities, and openness to change) and the initial value for each specific outcome measured. The four categories of outcomes were: personal/social, intellectual, academic achievement, and satisfaction with education.

A sample of students from a freshman class completed the *Freshman Questionnaire* and the results were compared four years later with the results of the *Graduating Students Survey*. These two surveys were designed so that different scales could be combined to measure one expectation variable, four student-faculty interaction variables, and nine outcome variables. For the simplification of interpretation, the researchers determined that one variable would be determined to have an effect on another only if the standardized regression coefficient was at least twice its standard error (Endo & Harpel, 1982).

The researchers found that their overall expectation was confirmed by the study – that student outcomes are affected by student-faculty interactions even after controlling for background variables. Overall, frequency of informal student-faculty interactions affected 9 of the 14 outcomes (two of the five personal/social outcomes, six of the seven intellectual outcomes, and satisfaction with education), while frequency of formal interactions impacted only 2 of the 14 outcomes (involvement in extracurricular activities and satisfaction with education) – and the influence was negative (Endo & Harpel, 1982). Additionally, they noted that interactions classified as informal had a positive effect on

satisfaction with college and the frequency of formal interactions had a negative effect. The researchers also found that helpfulness of faculty greatly affected satisfaction with education, progress toward intellectual goals and participation in cultural activities. Quality of faculty advising did not impact satisfaction with education; the only outcome associated with quality of faculty advising was social self-confidence (Endo & Harpel, 1982). This information was important for the current study, as faculty-student involvement was one of the main types of interaction examined.

Astin (1993) was the principle researcher in another important study examining the impact of the college experience on students. The interesting results were the basis for his book, *What Matters in Colege: Four Critical Years Revisited* (Astin, 1993). It focusedprimarily on full -time students who went to college directly from high school. The project included more than 20,000 students, 25,000 faculties, and over 200 institutions of higher education. Astin's conceptual framework is based on the "input-environment-outcome (I-E-O) model" for studying student development. Input refers to the students' characteristics prior to entering college. Environment includes the experiences and people to which the students were exposed at college, such as faculty, staff, other students, programs and living arrangements. Outcome is used to describe the students' development after the college experience (Astin, 1993).

This study is somewhat unique in that Astin (1993) examined both cognitive and affective outcomes. The study utilizedpsychological data (internal qualities, such as happiness or joy) and behavioral data (observable actions,

such as interactions with others), and compared student questionnaires completed at college entry and again four years later. In addition to these two sets of student questionnaires, many other student aptitude tests and faculty questionnaires were analyzed. Pretests and posttests included 82 different measures of student outcomes, both cognitive and affective. The study controlled for over 140 characteristics of the entering students, and examined the effects of 190 environmental characteristics, which included 57 forms of student involvement (Astin, 1993).

The results of this study reveal a strong connection between involvement and nearly all aspects of cognitive and affective development. Specifically, Astin found that most "involvement variables showing significant residual associations with self-reported growth in interpersonal skills have to do with student-student interaction: hours per week spent in student clubs or organizations, working on group projects for a class, hours per week spent visiting with friends, giving presentations in class, socializing with students from different racial or ethnic groups, participating in a college internship program, participating in intramural sports, discussing racial or ethnic issues, and hours per week spent partying" (1993, p. 233-234). Astin (1993) alsofound a positive correlat ion between student-faculty interaction and all self-reported areas of personal and intellectual growth. Student-faculty interaction had a positive correlation with many personality and attitudinal outcomes as well, such as social activism and leadership (Astin, 1993). It is interesting to note that some of these findings are also prevalent in the current study.

Faculty Involvement with Students

The idea that student-faculty involvement is important for students is not new. In the early years of higher education in America, faculties were responsible for nearly all functions associated with students. In the colonial colleges, the president and faculty were focused on the intellectual and moral development of the students, and with the small residential colleges that were prevalent at the time; it was possible to focus on holistic learning. In many areas, these four-year liberal arts colleges are still the most visible types of institutions, and many still provide a personal relationship between the students and faculty or staff.

As the German model of a university gained prevalence in much of the United States, however, there was an increased emphasis on research and scholarship. There was also a large influx of students in the early 1900's, and universities began to employ support staff, such as Dean of Men or Dean of Women to handle the social and emotional responsibilities of students. In addition, the positivist paradigm of placing emphasis only on what can be observed further de-emphasized areas such as values, aesthetics and motivations. During the twentieth century, faculty focused on the intellectual development of students, and social and emotional development was left to student services staff and to the students themselves (Love & Love, 1995).

Community colleges entered the higher education scene in the early twentieth century with Joliet Junior College. Many two-year colleges started out with the same small college thinking as the colonial colleges – providing

individual attention to students. There was a large influx of students in the late 1960's and early 1970's when many two-year institutions were created, and several of these community colleges evolved into large, multi-dimensional, multi-campus operations. Some ommunity colleges have chosen to be very flexible to meet the changing demands of students, communities, business, and industry. Two-year colleges have been responsive to the public and have adapted to provide technical degrees, associate degrees for transfer, certificate programs, short-term training, and other programs needed in a particulararea . Although community colleges are traditionally very teaching oriented, with little or no research required of its faculty, many of them are now are very large – lessening some of the personal, student-centered focus.

Another change which impacts student-faculty interactions is the dissolution of *in locop arentis* around the mid-twentieth century. Prior to that time, there was an assumption that colleges – mostly faculty, but later student personnel staff – should act as parents on behalf of their students. Students were seen as children still in need of character development, and college faculty and staff were believed to be responsible for that development. Strict rules and regulations were enacted to guide their behavior, and the parent/child relationship was enforced with very specific codes of discipline. In the late 1950's, student activists started challenging the "child" role of the students and emerging models of student development were beginning to materialize – all leading to the end of *in loco parentis* (Upcraft, 1989).

As a result of these changes, student-faculty interactions outside the classroom have continued to decline since the beginning of the twentieth century. Faculty have been encouraged to spend more time in research-related activities rather than with students, and student services professionals have been hired to provide the majority of the outside-of-class enrichment opportunities. Faculty realized that they were rewarded for the time they spent on scholarship, while the time they devoted to student advising and other student-centered activities was ignored. For this reason, many faculty greatly reduced their outside of class interactions with students and began to spend more time in their classrooms, labs and offices (Love & Love, 1995).

In fact, Kuh (1996) states that many faculty do not value the learning that can occur outside the classroom. In his research, Kuh found that some faculty members see co-curricular offerings as a “mild diversion” for students and other faculty views such participation as distracting students from the important business of studying. Student affairs professionals, on the other hand, sometimes overstate the importance of the student development which occurs outside the classroom, thereby diminishing the classroom learning experiences (Kuh, 1996).

This split has continued to gain momentum on both sides of the campus. In regard to student development, many believethose facultie s are accountable solely for cognitive development and student services staff have responsibility for affective development. In addition,faculty tends to put greater emphasis on thinking, while student affairs professionals put more emphasis on doing (Love

and Love, 1995). Also contributing to this separation is the belief that intellectual development must occur within the classroom while social and emotional development should happen only outside-of-class. In fact, of course, student learning and student development occur throughout the college campus and can, and should, be influenced by both faculty and staff.

Student development theories, which have been derived out of various other development theories, including Erikson's theory of psychosocial development, Chickering's vectors of development, Perry's theory of intellectual and ethical development, and Kohlberg's cognitive-stage theory of moral judgment, have long been utilized by student development practitioners. In recent years, Gilligan's theories have been utilized to address particular needs of female students, Cross has developed a development theory specifically for minority students in a majority culture, and Cross's chain of response model addresses adult student development. Faculty and student development professionals work to create a campus environment that will be supportive, nourishing and challenging for a wide variety of students. This student development theory is the basis for program development, teaching, counseling, advising, and all the various components of a college campus (Upcraft, 1989).

Why is faculty involvement with students such an important issue? As far back as 1977, Astin found that student-faculty interaction was the strongest link to student satisfaction with college – even more important than other types of involvement, student trait, or institutionalcharacteristic. Unfortunately, fewer and fewer faculty distinguish themselves as student-centered, with a strong

commitment toward the institution and the betterment of undergraduate students (Kuh et al., 1991).

This fact is easy to understand in light of the pressures sometimes placed on faculty. Kuh found that many faculty report being reprimanded for spending too much time on teaching-related activities or in talking with students after class, as this time detracts from their accomplishments in scholarship and research. Regardless of this attitude, however, there are numerous faculty who devote much time and attention to students and to their affective development. There are also many institutions that encourage this involvement and reward faculty for their time spent with students (Kuh et al., 1991).

Dealing with this same issue, Pascarella and Terenzini (1991) state that faculty members are often recruited because of their research potential, and it is their research that is quickly and visibly rewarded, nottheir involvement with undergraduate students. The authors note that if institutions are serious about their commitment to student learning, both in and out of the classroom, they must send a clear message to faculty and provide specific incentives for their work in this area (Pascarella & Terenzini, 1991).

Community Colleges

Student Population at theC ommunity College

The involvement of faculty outside the classroom is especially important on the community college campus, as it is widely believed that community colleges face a relatively more difficult challenge in integrating their students into the academic and social life of the campus (Dougherty, 1994). This involvement

challenge is easily understood since the majority of community college students live off-campus, attend school only part-time, and are older than traditional-aged students. They may have significant commitments away from campus, such as a full-time job, a household, or children. For all of these reasons, they are simply less likely to be engaged in co-curricular activities than 18-year olds who are full-time students and who are required to live in residence halls – as at many four-year institutions.

Adult students

As mentioned earlier, many of the students on the community college campus are adult students – older than the traditional age of 18 to 25. Who is the typical adult learner? Cross (1981) reports that adult learners are more typically women than men, are most likely white rather than a person of color, are generally from the middle or upper classes as opposed to the lower classes, and have typically accomplished some educational goals in the past.

Unfortunately, the task of facilitating involvement for adult students is especially difficult, since many of them have significant commitments away from campus, such as a full-time job and/or children (Palmer, 1998). However, Schlossberg, Lynch and Chickering (1989) make the point that involvement may be even more important for adults, as those students often feel isolated and different. The authors believe that both self-esteem and support are enhanced through involvement, which would greatly impact the adult students' chances of persisting in college (Schlossberg, Lynch, & Chickering, 1989).

In fact, Stage (1989) found that students are more likely to persist when they are either socially or academically integrated in the college, or even more likely to persist when bothforms of integration occur. Each type of integration can increase the other type of integration – social and academic integration are reciprocal (Stage, 1989). For that reason, it is especially important to encourage the involvement of adult students both in and outside the classroom.

First-generation students in higher education

Dealing with the unique issues associated with adult learners is a challenge, as is the charge of working with first-generation college students. For many students at the two-year college, they are the first in their family to attend college. Does this characteristic impact their college experience? The National Center for Educational Statistics (NCES) conducted a study to examine the outcomes and experiences offirst -generation college students, relative to students who were not first-generation (1998). Among other findings, the research indicates that first-generation students are less likely to persist in college.

In addition, the NCES study found that first-generation students scored lower on social integration scales than their peers. The authors tied responses from several questions together to form the social integration score. They examined questions regarding the number of outings with friends from school, the level of involvement with college clubs, any outside of class interactions with faculty and participation in student assistance programs (NCES, 1998).

Since we know from the research by Astin (1977) and others that involvement outside the classroom increases the students' likelihood to persist and magnifies certain aspects of student development, such as their personality, behavior, career progress and satisfaction, then it seems first-generation students would be especially benefited by their involvement. We also know that with first-generation students, faculty and staff must make the effort to invite the students to participate, make them feel welcome and let them know they are an important part of the campus community (Rendon, 1994).

Students representing ethnic minority groups

In addition to first-generation students, many community collegestudents are also representative of minority cultures. Studies show that students from both of these groups may not be as likely to integrate socially on campus (McConnell, 2000; Rendon & Garza, 1996). Special efforts must sometimes be made to get them involved with other students, with staff, and with faculty. Community college faculty and administrators must make themselves aware of the large percentage of students from ethnic minority groups who choose two year colleges. Efforts must be made to welcome minority students to the campus and to assist them in integrating to the college experience.

A large number of ethnic minority students select the two-year college for their higher education experience. Current figures reveal that 55% of Hispanics in higher education are in two-year colleges, as are 55% of Native Americans. Among black undergraduate students, 46% attend community colleges. In addition, 46% of Asian/Pacific Islander students are enrolled in two-year

institutions (Phillippe, 2000). The challenges for these students may be even greater than for Caucasian students. Rendon and Garza (1996) make the point that transitioning to college life away from family and friends is more difficult if students must also change their identities and mannerisms, make their way in a world where they are seen as different, and adapt to new traditions and expectations.

The Transition to College Project of the National Center on Post-Secondary Teaching, Learning and Assessment (Rendon, 1994) was initiated to discover how students get actively involved in the college community and to determine how student learning is impacted by involvement, both in and out of the classroom. The researchers interviewed a total of 132 students from four distinct institutions: a predominantly minority community college; a mostly white, residential, liberal arts college; a predominantly black, urban, commuter, comprehensive state university; and a large, predominantly white, research university – all in different parts of the country. Students were interviewed in small groups and were asked several open-ended questions about their selection of this college, their expectations and realities of college, meaningful people and events in this phase of college, and personal impact of the college experience, among others (Rendon, 1994).

After an analysis of the information, the researchers summarized several important findings. They found that even the most vulnerable minority students (those “high risk” students with a lower GPA, little or no family support, and personal pressures on them from off-campus) were transformed into strong

learners when they were integrated into the college environment – both in and out of class. The most important element seemed to be "validation," making the students feel a welcome part of the institution and affirming their ability to learn. Involvement can be especially daunting for minority students, as they are often reluctant to take the initiative toward participating in new experiences. Rendon states that "Validation may be the missing link to involvement, and may be a prerequisite for involvement to occur" (1994, p. 9). In addition, the report provides an "interpersonal validating model" that gives suggestions on ways that faculty and staff can assist nontraditional students toward involvement in college. It includes faculty and staff actively inviting students to get involved; making themselves available to students outside of class; meeting with students at athletic events, the union, or the library; and providing events that bring families together with students (Rendon, 1994).

There are many potential obstacles to integration, including differences in age, gender, ethnicity, job duties, proximity to campus, and prior educational experiences. For all of these reasons and more, it is especially important that researchers discover what factors might be most influential to community college students in encouraging them to get involved on campus and make connections with faculty, staff, other students and the campus itself.

Research on Involvement at the Community College

In the fall of 1997, there were 5.4 million students enrolled in credit classes at community colleges in the United States (AACC, 2002). Although researchers tend to concentrate only on traditional-aged students at doctoral-

granting institutions, community college students are too large of a population to ignore. Efforts must be made to examine the extent to which certain changes would encourage these students to get the most from their experiences by accentuating the opportunities for academic and social development.

One study designed to research the concept of involvement at the community college was conducted by Tinto and Russo (1994). Their study was both quantitative and qualitative in nature, and examined the *Coordinated Studies Programs* at Seattle Central Community College. The project linked courses and faculty from different disciplines into a theme-based semester of classes, forming a "learning community" of four faculty and 80-100 students. Class activities included group projects, field trips and guest speakers, and emphasized team teaching and collaborative learning.

Tinto and Russo (1994) found that the learning community students continued school at a rate 25 points higher than those students in the traditional classes. What would account for this increased persistence? The authors believe that the students in the program developed their own "supportive peer group" that held them together both in class and out of class. In addition, the students spent more time on their class projects because they enjoyed working together. Their connected learning experiences encouraged them to make friends while studying, which positively contributed to both their social and academic integration. In addition, since the students were investing more time on learning, their knowledge increased. Both the quality and quantity of the learning were enhanced, and since they were learning together, each person

was gaining in understanding and knowledge. Many of the students experienced – for the first time – a feeling of adding to the body of knowledge. They discovered a "voice"that they might not ha ve previously heard or had acknowledged by others (Tinto & Russo, 1994). Rendon (1994) would use the term "validation" for the impact this experience had on these students (Tinto, 1998).

Tinto and Russo concluded from their research that they had witnessed one way in which involvement can actually work for students at the two-year college, despite the many other obligations of these commuter students. They found that utilizing the class time is one effective method of generating involvement for community college students, and for incorporating both academic and social integration into their routines (Tinto & Russo, 1994).

What other methods might impact involvement for students at the two-year college? Halpin (1990) conducted a study focusing on the nonresidential, public, comprehensive community college and looking at the student persistence of first semester students enrolling full-time. He modified Tinto's 1975 model for the analysis, and the findings suggest that, "varying levels of integration are significant predictors of persistence, withdrawal and academic dismissal, with the effects of background and environmental factors controlled" (Halpin, 1990, p. 30). He found, however, that the academic integration factors were more important for these students (while the social integration variables are most predictive for students at a residential university). For this reason, the author suggested that community colleges emphasize a number of elements that could positively

impact academic integration and retention, such as small, interactive classes; an accessible, involved faculty; a manageable academic advising system; mentoring; and small group class projects (Halpin, 1990).

Another community college study was conducted at Santa Barbara City College (Friedlander & MacDougall, 1992). In this project, 1,765 students from a cross-section of classes were asked to complete the Community College Student Experiences Questionnaire (CCSEQ) toward the end of the fall semester.The results reflected a vast difference in the amount of involvement by the various students, specifically in the amount of time they spent in the facilities and in the programs available to students on campus. Not surprisingly, the more student involvement which was reported, the greater degree of academic progress the students believed they were making (Friedlander & MacDougall, 1992). The researchers concluded that, “The amount and quality of effort invested by students in taking advantage of the opportunities in the college setting has been found to be a much more important factor in explaining achievement than student background characteristics and type of college attended” (Friedlander & MacDougall, 1992, pp. 26-27).

The CCSEQ was also utilized in a study conducted by Knight (1994), involving 1,062 students from seven community colleges, part of a single two-year college system, in the Midwest. The study was designed to explore the relationships among student background characteristics, CCSEQ quality of effort scales, student gains that were identified, and levels of satisfaction. Student background variables were found to influence the collegiate experience and the

quality of effort made by the student, which in turn was related to substantial academic, career, and personal gains. Knight noted that this study validated Astin's (1984) involvement theory and Pace's (1984) quality of effort construct.

One interesting note is that this study found no significant influence of student-faculty interactions outside of class on reported gains. The author stated that this finding may have been related to the fact that classroom involvement, which was significantly related to gains in this study, may account for most of the influence of student-faculty interactions and that student-faculty contact outside of class was significantly associated with student-faculty in-class interactions (Knight, 1994).

Another study utilizing the CCSEQ examined the data collected from 478 students at four community colleges in west Tennessee (Douzenis, 1996). The mean values for this sample reflected a relatively low level of involvement in the various activities. However, the results did show a positive relationship between the degree of effort in college activities and the estimate of knowledge gain. As with the Halpin (1990) study, the level of participation in the academic activities was a better predictor of academic gains than the level of social activity participation. The researcher concluded that, "If students at a particular institution are not involved in a wide array of collegiate experiences, there is a potential that their educational growth may be limited" (Douzenis, 1996, p. 33). However, this study does not address the issue of social activity participation and gains in the affective domain.

Glover and Murrell (1998) used data from 4,210 respondents of the CCSEQ to examine campus environment and student involvement scores as predictors of outcomes for community college students. All of the participants indicated that their reason for attending that two-year college was to prepare to transfer to a four-year college or university. Students who listed their age as twenty-seven or younger comprised 84% of the respondents, and 60% of them were enrolled full-time. The two dependent variables in the analysis were both self-assessments from the CCSEQ, their personal and social growth score and their perceived gains in general education.

The researchers found two variables that were reliable predictors of student-reported gains in their personal and social development: quality and quantity of student effort, and a positive perception about the campus atmosphere. Glover and Murrell also note that even though their study was conducted on students who intend to transfer, all students (including vocational students) can benefit from faculty who require involvement in the classroom and a campus experience that is exciting and challenging (1998).

A dissertation by Borglum (1998) examined academic integration, social integration and background skills of community college students at an institution in Florida. The researcher points out that the results were contrary to Tinto's model, in that no statistical significance was found between either academic integration or social integration and withdrawal rates. Some statistical significance was found between certain background skills and withdrawal rates, however. Students with higher mean scores on the CPTA (algebra placement

test) had no withdrawals, yet students with lower mean CPTA scores had one or more withdrawals. These results indicate that the higher students scored on the CPTA, the less likely those students were to withdraw.

Borglum's study also found the total number of withdrawals revealed that students who earned lower mean scores on the CPTA, CPTI (math placement test) and CPTW (writing placement test) were also more likely to withdraw. Perhaps there were some factors such as lower placement test scores (which may be linked to poorer background skills or weaker academic goals), which were overriding the expected impact of academic and social integration. The students with lower test scores were placed in pre-college or "preparatory" courses, which may have been discouraging for them. Even if "involvement" steps were taken with these students (leading them to feel both academically and socially integrated on the campus), they may still be more prone to withdrawing from classes if they have weaker academic skills and/or are not as strongly focused on their academic goals. Or, the observer might question the procedure used to gather the information about social and academic integration in this particular study. It may be that the students who were withdrawing, in spite of being labeled as "academically integrated" or "socially integrated," did not really feel they were a part of the campus community, since they were enrolled in pre-college level courses.

Another study examining social and academic involvement on the two-year campus was Ferrer's (1997) dissertation. This project focused on academic integration, social integration, and environmental factors of community college

students, and looked at the comparisons among new, successful and unsuccessful students. Successful students were identified by their academic success and length of enrollment, unsuccessful students demonstrated a lack of academic success and eventually left the institution, and new students were in their first semester or year of college.

Contrary to expectations, the three groups scored similarly on the social integration instrument, and the researcher determined that social integration did not appear to be related to student retention. Also surprising, Ferrer found that membership in groups, hours worked, ethnic designation, gender, high school GPA, first language, income, job loss, or entry-level course placement had no relationship to social and academic integration. Ferrer hypothesized that his findings are different than what researchers have learned about students at four-year colleges because community college students are just different. He states that community colleges may simply be unable to develop social integration among its students, since most of them are non-traditional, commuter students. Further, he adds that the increased family responsibilities of many students at the two-year college make it very difficult to develop any kind of social integration at the institution. However, as might be hypothesized, “unsuccessful” students were found to have fewer linkages interactions with faculty and staff within the classroom (Ferrer, 1997). This last point may be closer to the findings of other researchers, since Tinto (1998) found that academic integration is more important than social integration for students at the two-year college.

Summary

This literature review examined past studies focusing on student involvement in higher education, including various affective and cognitive gains found to be made as a result of involvement, and looked particularly at faculty involvement with students. The review also focused on community colleges and the various student groups represented on the two year college campus, such as first-generation college students, ethnic minority students and adult students. The conclusion of the literature review examined student involvement on the community college campus.

As mentioned earlier, a great deal of research has been conducted on the topic of involvement and the impact on students of this involvement. Many studies have demonstrated the affective and cognitive gains made by students who are actively involved. Researchers have examined both in-class and outside-of-class types of involvement, and have looked at the impact of student-faculty interactions. However, there are still many questions to be answered.

Pascarella and Terenzini (1991) state that the next major direction for future research into college impact needs to be on “nontraditional” students whom they categorize as minorities, older students, commuters, people who work part- or full-time, and part-time college attendees. This study responded to the aforementioned need, in that the majority of students at the typical community college fall within these classifications. This project examined “involved” students on a large community college campus and determined what motivated these students toward involvement, what background variables may

have been associated with certain motivational factors and/or types of involvement, and what particular affective and cognitive changes the students believed had been gained due to these different types of involvement.

Based on the majority of other studies highlighted in this review, the researcher believed significant gains in knowledge could be found in both affective and cognitive development reported by these involved students. However, it was interesting to note the types of involvement the students associated with particular abilities, skills and knowledge development. There seems to be no question, however, that many studies have found conclusions consistent with Kuh's findings when he stated, "The research is unequivocal: students who are actively involved in both academic and out-of-class activities gain more from the college experience than those who are not so involved" (Kuh et al., 1991, p. xi). This study attempted to demonstrate which particular gains were noted among involved students at a metropolitan, commuter, community college.

Chapter 3

In this project, “involved” community college students were surveyed to determine the correlation between student involvement and cognitive and affective gains. The project also took into consideration the roles that certain student background variables, types of student involvement, and motivational factors behind their involvement played in the development.

Research Questions

1. **What types of formal and informal activities were the students involved with outside of class?**

The formal activities included student clubs and organizations, varsity athletics, musical groups, drama productions, honors programs, service learning programs, student newspaper, and/or other related programs. Campus informal involvement included any outside-of-class interactions between a faculty member and student, staff person and student, or student with student. This informal involvement included activities such as: dining on campus, working in the library, meeting for an co-curricular project, discussing academic matters, or talking about social issues. For this question, the researcher examined the types and quantity of involvement – both formal and informal – noted by the participants. Descriptive statistics were provided for these activities, and the information was used for later analysis.

2. What motivational factors were related to the student involvement in co-curricular activities?

The students were asked about motivating factors that ledto their involvement on campus. Optional responses included: to socialize and make new friends, to learn something new, to develop leadership skills, to be of service to campus and/or community, to develop skills to assist in getting a job, to develop communication or public speaking skills, to develop health and physical fitness, or to have fun. Descriptive statistics were provided for those responses, and the information was used in later analysis.

3. Which student background variables were associated with their motivational factors toward involvement, and were any of the background variables related to differences in cognitive or affective gains?

An Analysis of Variance was conducted to determine if any relationships existed between particular motivation areas and background variables. The researcher used an Analysis of Variance to examine the independent, categorical variables of age (divided into categories of 23 and younger or 24 and older for this analysis), gender, ethnicity, GPA (categorized as under 3.00 and 3.00 and higher for this question), current hours of enrollment (examined in categories of less than 12 hours, 12 – 15 hours, and more than 15 hours), presence or absence of on-campus work, and presence or absence of an off-campus job in relation to the dependent, continuous variables of motivation (zero to four scale for each). A two-sample t-test was used to determine if there was a relationship between certain background variables and affective or cognitive gains.

4. Were there relationships between motivational factors of involvement and certain types and levels of involvement?

A Pearson Chi-square analysis was completed to determine if there were significant relationships between motivation factors and types of involvement. This test is used when both independent variables and dependent variables are categorical.

5. Which cognitive and affective gains were perceived by the students to have been achieved by their participation in different types of outside-the classroom activities?

An Analysis of Variance was conducted to determine if there were significant differences in the gains of any of the cognitive or affective skills that were related to certain areas of involvement. For those dependent variables with a significant difference, a post hoc test was conducted to determinespecific involvement areas that provided the impact.

6. Controlling for certain student background variables, did the students' varying types of involvement (student-to-student, student-to-faculty, and student-to-staff) relate to their perceived gains?

One important element of this study was to examine groups based on their principal interaction type and to determine if different types of outside-the-classroom involvement opportunities for students varied in terms of the type of skills that were impacted. Prior to analysis, the different involvement areas were divided based on whether the activities of the program primarily involved student-

to-student interactions, student-to-faculty interactions, or student-to-staff interactions as follows:

Group 1: **The activities in this involvement category include mostly Student-to-Student Interactions:**
Student Clubs and Organizations
Campus-Wide Activities and Events
Study Groups
Volunteer Programs
Service Learning Programs
Student Government
Intramural Sports
Debate Team
Dance Team

Group 2: **The activities in this involvement category include mostly Student-to-Faculty Interactions:**
Campus Musical Groups
Drama Productions
Scholarship Groups
Honors Program
Student Newspaper

Group 3: **The activities in this involvement category include mostly Student-to-Staff Interactions**
Varsity Athletics
Student Ambassadors

To examine this final question, the researcher opted to analyze examples in each of the areas and look more closely at the variables that demonstrated greater significance in earlier stages of analysis. In terms of these groupings of activities, the researcher selected one student-to-student interaction activity that had demonstrated greater impact, student government. As for an activity in the student-to-faculty group, the researcher chose scholarship groups. For the student-to-staff interaction group, the researcher examined varsity athletes. The researcher conducted a multivariate analysis of covariance (MANCOVA) to

determine possible significant relationships between involvement areas and gains, holding background variables and motivation factors constant.

Design

This project was an ex post facto study. The involvement had already occurred and the researcher was asking the students to consider that involvement and determine what led them to be involved and what benefits they believe they gained through that involvement. The researcher examined the level and types of involvement reported by students and compared that information to the cognitive and affective development which the students believed they had gained The projectexplored any predictive relationships between these variables.

The researcher used Astin's 2 x 2 design as the basis for considering both affective and cognitive outcomes and determining which particular outside-the classroom involvement areas were associated with different outcomes (1993). Astin commonly used this design for much of his research. He examined types of outcomes and grouped them into two domains: cognitive and affective. Astin placed mental processes such as reasoning and logic into the cognitive realm and grouped the student's attitudes, aspirations, self- concept, and values into the affective domain. The second part of the 2 x 2 design is the type of data gathered. Astin divided the information into two fields: psychological and behavioral. He identified psychological data as the internal traits of the student and referred to behavioral data as the activities of the student that could be observed (Astin, 1993).

In this study, the psychological information about the involved students was determined by the items marked in the list of skills – which included both cognitive and affective abilities. The students were asked to rate each knowledge, skill, or ability that may have been developed and/or enhanced in them by their involvement on campus. The behavioraldata were gathered by examining the level and types of involvement reported by the involved students.

The list of cognitive and affective skills and abilities on the survey was gathered from research identified in chapters one and two of this study. Many researchers have noted specific skills and abilities that are often developed or enhanced through involvement outside the classroom. Kuh et al. (1996) mentions moral and social development, in addition to intellect and reason, as qualities that can be impacted through many types of educational experiences – both in and out of the classroom.

Astin (1996) noted that faculty are more likely to consider cognitive outcomes such as knowledge and critical thinking. Student services staff, on the other hand, are more likely to emphasize affective outcomes such as self-understanding, interpersonal skills, leadership, tolerance, and social responsibility. Astin suggested that both faculty and staff to look at the issue in a more general way – focusing on student learning and including both affective and cognitive skill development (Astin, 1996). Astin also discussed the need for cultural understanding, empathy, and social responsibility to assist students in their development of relationships with others. Citizenship and volunteerism were also noted by Astin as important affective skills for students to develop

during college. All of these skills and abilities were included as options on the survey.

Schroeder and Hurst (1996) wrote about the benefits of combining both curricular and co-curricular elements to ensure that students had the opportunity to develop their thinking in the moral/ethical areas, to celebrate cultural and ethnic diversity and to integrate a broad sense of self. Pascarella and Terenzini (1991) note that students' understanding of cultural and social mores can be positively influenced while in college, in addition to the student's level of self-awareness. Schlossberg, Lynch and Chickering (1989) researched adult students in particular and found that their self-esteem could be greatly enhanced through involvement. These elements were also included on the survey as options for students to select, as possible impacts of involvement.

As mentioned earlier, Tinto and Russo found that both academic integration and social integration are important for community college students, can contribute to their enjoyment of the college experience, can help them learn more, and can ensure the students feel a connection to the institution and to one another (1994). In addition, Halpin (1990) found that commuter students at the two-year college are more impacted by academic integration, and that this involvement led to higher levels of persistence for first-semester students enrolled full-time. This information was used in the development of the survey, as attempts were made to identify and access the impact of both academic and social integration elements.

Friedlander and MacDougall (1992) found that those community college students who reported more student involvement, defined as greater time spent in campus facilities and with student programs, the more academic progress the students believed they were making. Knight (1994) found that student background variables were found to influence the collegiate experience and the quality of effort made by community college students, which in turn was related to substantial academic, career, and personal gains. However, Knight found no relationship between these gains and student-faculty interactions outside of class. This survey was designed to check those findings and to further examine specific involvement associated with certain gains.

Glover and Murrell (1998) found that student-reported gains in social and personal development of community college students was related to quality and quantity of student effort - involvement - and a positive perception of the campus atmosphere. Ferrer (1997) found that “unsuccessful” community college students – as defined by poor academic progress and lack of retention with the institution – had less “involvement” with faculty and staff within the classroom, confirmation of other studies that cited academic integration as most important for community college students. This study will examine those same issues, determining the level of impact various types of involvement were believed to have.

Variables

Independent variables in this study included background variables such as age, gender, ethnic background, hours of enrollment, grade point average, on-

campus employment, and off-campus employment. Dependent variables were the motivation factors toward involvement– options including having fun, learning skills for employment, developing new friends, and so on. In other analyses, frequency and type of involvement were used as dependent variables, to determine if there were any relationships with motivation factors. Later, the quantity and type of involvement were independent variables, and analysis was completed to determine if this involvement was related to particular cognitive or affective gains, the dependent variables.

Instrument

The researcher developed a survey to examine the various elements previously described. It was a self-reported instrument. The first section included basic demographic information, and in the second section, students were asked to provide information about their type and level of involvement on campus. An extensive list of involvement opportunities were listed and students were asked to select whether they had been involved in each program or activity “never” (0), “occasionally” (1-2 times), “often” (3-5 times) or “very often” (more than 5 times) in an average month. There were two separate lists – one for formal Participation Areas (survey question 15), and one for Informal Involvement (survey question 18).

In addition, students had the opportunity to select from a list of cognitive and affective changes and determine if they believed they had made gains, through outside-of-class involvement, in any of the characteristics described (survey question 16). A list of 20 skills, abilities and knowledge areas were

provided on the survey, representing both cognitive and affective gains. Students were asked to assign a “3” to the traits most impacted by their outside-of-class involvement; a “2” to those traits which were somewhat impacted by their co-curricular involvement; a “1” for traits only slightly impacted through involvement and an “N/A” to those traits not applicable to them or their experiences out-of-class. Lastly, the students were asked to rate possible motivation factors toward involvement (survey question 17).

A draft of this survey was completed before meeting with representatives of the targeted institution, and attempts were made to include any other questions which would be important to the college staff. The researcher accommodated any items that staff wanted to add which were relative to this instrument and pertinent to this group of subjects. One change made as a result of recommendations by staff at the institution was to add definitions for three of the terms in the list of skills, abilities, and knowledge in survey question #16. Definitions from an online source of the Merriam – Webster Unabridged dictionary were included for empathy, integrity, and critical thinking (Merriam-Webster, 2002). Staff also suggested that “time management” and “self-discipline” be added to the list, as they are interested in whether student participants view these as traits that are enhanced through involvement.

Institution

Johnson County Community College (JCCC) is by far the largest community college in Kansas, with a Fall, 2001 headcount enrollment of 17,776 (JCCC web site, 2002). It is located in a large metropolitan area, near Kansas

City, Missouri. It is a public institution, offers no residential living, and approximately 30% of its students attend on a full-time basis. In fall, 2001, 55% of the students were female and the average age of the students was 26.9 years. In terms of ethnicity, 88.8% identified themselves as Caucasian/other, 4.1% as Asian, 3.3% as African American, 3.3% as Hispanic and .6% as American Indian. One-third of the entering students in fall, 2001 listed "transfer to another college/university" as their educational objective, with 20% stating they were undecided and 14% entering for "personal interest or self-improvement" (JCCC Website, April, 2002).

Procedures

The researcher made initial contact with appropriate individuals at the institution, to include the Vice President for Student Services, the Director of Institutional Research, the Director of Student Life and Leadership Development, and the Director of Athletics to discuss the purpose of the study, planned procedures, guidelines for the researcher, and expectations of the institution. After approval was obtained from the targeted institution, that written documentation was included with the university's Institutional Review Board application. After the university's review board approved the study, the pilot study was completed. A few minor changes were made to the survey after the Pilot Study, then letters were sent to advisors, coaches, and group facilitators to seek their group's participation in the study.

The researcher made specific plans with various coaches and advisors to attend the first part of a meeting or practice. At the gathering, the researcher

briefly introduced herself and let the students know that she was conducting this research to learn more about the impact of co-curricular involvement for college students. The researcher distributed one copy of the survey, plus a writing instrument, to each student. She explained that the process would take approximately ten minutes, and she thanked them for their time. The students were also asked to complete a separate slip of paper, asking only for their e-mail addresses, that they could submit to the researcher following the survey. Those slips were used following the completion of the study – to draw the name of the student who would win the $25 food card.

Pilot Study

A pilot study was conducted on the target campus with five “involved” students – during a meeting of student government officers. They were given brief instructions, similar to what was to be given to other groups of students who were completing the survey during the regular study, except they were also asked to mark any items or terms that were confusing to them. One student took about five minutes to complete the survey, and the other four people took approximately ten minutes to complete the questionnaire.

The researcher held a brief discussion with the students after they had completed the instrument. The students’ apprehension during this discussion centered on the number of completed surveys the researcher could gather. The student officers expressed concern about the low number of involved students since only 200 students (out of approximately 18,000 credit students) had voted in their recent student government election. They also questioned whether students would be willing to take the time to complete the survey while eating lunch or chatting with friends.

The researcher addressed these issues by explaining that the students would be asked to complete the survey while attending a club meeting, play rehearsal, or athletic practice – not while walking through the courtyard or sitting in the union. This plan ensured that the researcher gotthe desired number of respondents, as more group advisors were contacted until the target number was reached. The opportunity to gain honest, insightful feedback was enhanced in that there was a greater sense of importance given to the survey, since the

survey instrument was administered by the researcher during recognized events wherein active encouragement to participate in the survey was given by athletic coaches, club advisors, and drama instructors.

One of the students also asked that the survey emphasize the word “average” in survey question #11, when the researcher asks about the amount of time the student devotes to various activities on the campus each week. Since there is a great deal of variability from one week to another, based on particular co-curricular happenings, the student believed that question may be difficult or confusing for some students to answer. The researcher concurred and agreed that the word “average” would be capitalized for emphasis on the final draft of the survey.

On two occasions, the researcher asked about the terms on survey question #16, seeking suggestions from the students as to whether they thought all the students on campus could easily understand the meaning of each of the words on the list. They each responded positively both times the question was asked. The students stated they believed that all of the terms were common to the students on campus. In the initial instructions, the researcher also invited the students in the pilot study to mark their surveys with question marks for each term or question that was confusing to them. Still, not a single question or term was marked on any of the five surveys. The activities coordinator for the campus is the advisor for this group, and she was also asked to provide her input into the survey. She concurred that she believed all of the terms were commonly used by the students at this campus.

Solicitation of Groups to Participate in the Study

To begin the formal study, the researcher sent introductory letters to contact people (such as the sponsors of clubs and organizations, coaches of athletic teams, and directors of the music groups) to explain the purpose of the study and to ask for their assistance. When these individuals responded to the e-mail, the researcher scheduled a portion of time in a meeting, practice, or rehearsal to provide an overview of the study and ask students tocomplete the surveys. A second targeted e-mail message and some follow-up telephone calls were also utilized, in order to reach the target of 250 students and to maintain a balanced representation of the students at the institution. Initially, many of the athletic team coaches responded to the general inquiry, resulting in a male-dominant response rate. However, the researcher aimed tosample a broad range of involved students, from a wide spectrum of involvement areas.

After surveys were gathered for a particular group, the researcher also asked the sponsors, coaches, and directors to identify whether that particular area of involvement should be considered as primarily involving student-student, student-staff, or student-faculty interactions. All of the surveys were gathered over a 19-day period, toward the end of the fall semester in 2002.

The researcher determined that these procedures would be the most effective method (in terms of both temporal and fiscal resources) in order to assure an adequate number of completed surveys, representing a strong balance of involved students in different arenas. As mentioned earlier, the

sample of students who completed the survey were very similar to the population of students at the college.

Sample

Faculty and staff sponsors, coaches, and directors of approximately 63 campus clubs, musical groups, athletic teams, and similar student groups were contacted and asked to allow their members to participate in this study of involved students. The coordinators of 18 of these student groups responded to the inquiry and invited the researcher to attend a meeting, rehearsal or practice. The researcher personally oversaw the project and attended each session when surveys were distributed, completed, and collected. The collection of data occurred over a period of nineteen days, during the late part of the fall semester, 2002, and 267 students completed the instrument.

Incentive for Participation

To provide an additional incentive to the students for completing the survey, the researcher provided the prize of a $25.00 “food card” that could be used in any of the dining areas of the campus. On a separate slip of paper, the researcher collected e-mail addresses from those returning completed surveys, and following the completion of the study, there was a drawing for the prize. In hearing the students respond to the opportunity for the food card prize, the researcher was led to believe that it did encourage some students to participate more fully.

Limitations of the Study

One of the limitations of the study is that it cannot be generalized to the entire population of involved students on the sampled campus. While an effort was made to gather surveys from students involved in a wide variety of programs, rather than having all responses from one involvement area, the researcher relied on the cooperation of faculty and staff sponsors, coaches, and advisors to allow the researcher to come into their meetings and practices to gain access to their students.

Additionally, since there is no existing demographic information about the population of students at this college who are "involved," the researcher was not able to determine if the sample is comparable to the population of involved students. However, the researcher does cite comparisons between the demographics of the sample and the entire college population. In addition, basic personality and background information about the respondents which would greatly influence their desire or ability to achieve gains in the various knowledge, skills, and abilities listed, could not be included in the survey. The survey was limited to educational factors and influences relevant to this study.

Methodological limitations include the lack of a true experimental design, with no manipulation of variables. The study is an ex-post facto research study. In addition, the study is based on a self-reported information dependent on the honest, insightful responses of the college students who agreed to complete the survey during a practice, meeting or activity.

The survey itself is also a limitation. It was created specifically for this study and has not been validated against other instruments. In addition, it may have been difficult for students to distinguish between gains made in curricular and co-curricular involvement on campus.

There was also a concern as to whether the respondents had a common understanding of all the terms on the survey. Definitions were provided for the more complex words; however, the researcher believed that including definitions for all the knowledge, skills, and abilities could potentially overwhelm the respondents and make the survey too complicated and lengthy to complete. Instead, the researcher relied on the students having a general knowledge and understanding of the terms.

As mentioned earlier, to test this general understanding of the terms and to better judge whether the remainder of the survey could easily be negotiated by students, a pilot study was conducted with five involved students on the targeted campus. All of the participants reported that they understood the terms used in the survey and that they were easily able to follow the instructions for the completion of the instrument.

Conclusion

The goal of student involvement outside-the classroom is challenging at a commuter, metropolitan community college. Students have many different priorities, both on and off the campus. Because we know the benefits of involvement are important, however, it is imperative that we examine various

types of involvement and discover what areas might be most meaningful to different students.

This study was conducted to learn what particular involvement areas benefited students in different ways. Involved students were surveyed to determine basic background information about each of them, their motivations toward involvement, their type and level of involvement on campus, and what cognitive and affective development the students believed they had achieved by outside-the-classroom involvement.

Chapter 4

The purpose of this research project was to examine the correlation between student involvement and cognitive and affective gains. The study also took into consideration the impact that certain student background variables, types of student involvement, and motivational factors behind their involvement may have played.

A total of 267 completed applications were gathered at a metropolitan community college, from students who were members of18 campus groups, ranging from men's baseball to the campus newspaper and from the Improv Society to Campus Crusade for Christ. As mentioned earlier, all students at this institution are commuters; there are no residential facilities on-campus. Among the respondents, 51.1% were male, 78.4% identified themselves as white, and the median age was 21.8 years. In the general population of students at this campus, 45% of the students are male, 88.8% self-identify as Caucasian, and the median age is 26.9 years (JCCC, 2001). It is believed that the variation between the sample and the population was due in large part to the relatively high proportion of varsity athletes which were included in the study. Approximately 32% of the respondents were athletes, which may have impacted all three of these areas.

Among the students in the study, nearly half (48.7%) stated that their original intent in enrolling was to prepare to transfer to another college. This compares to one-third of the students in the general population of entering students in fall, 2001 (JCCC, 2001). Again, it is believed that this difference was

impacted partly because of the relatively large number of varsity athletes in the study, as the athletic director stated that many of them have the intent of transferring to a four-year college or university to continue their athletic participation and education. Students involved in many of the other groups may also have influenced that data. The researcher believes that students active in The Campus Ledger (student newspaper, mostly journalism majors), the United Nations Association (mostly political science and government majors), and Psi Beta (honors club for social science majors) are all more likely to pursue bachelor's degrees at another institution, as these areas are not among the programs that conclude with an associate's degree in applied science and provide job-ready skills.

In the study, another 20% of the participants said they enrolled because of personal interest in an activity or for self-improvement, compared with 14% in the general population (JCCC, 2001). According to the athletic director, many of the student athletes chose the college because of a particular sport, and he initially speculated that many of the athletes would provide this response as their reason for enrolling.

Another 20% of the respondents stated that they were preparing to enter the job market, compared to 10.5%, in the general population (JCCC, 2001). The researcher believes that one of the reasons for this difference is that a large group of students from the Student American Dental Hygienists Association were participants in the study. This group was made up mostly of older, non-traditional

students who had enrolled for the sole purpose of gaining the Associate of Applied Science degree in dental hygiene, then immediately entering that field.

The mean cumulative grade point average reported by study participants was 3.25 and the average number of hours the participants had completed at the targeted institution was 24.8, so the majority of students in the sample were second-year students with above-average grades. The average number of hours in which they were currently enrolled was 13.3, so most were full-time students. When asked if they had completed classes at other institutions, 40% of the participants reported they had. The mean commute to college each day was 13.9 miles, and only 7% of the participants had children under age 16 living with them. From among the participants, 20% had on-campus jobs and 51% had off-campus jobs. Most of those off-campus jobs are considered part-time however, as only 5% had jobs of 40 hours or more per week.

As mentioned, the aim of this research study was to examine the correlation between student involvement and cognitive and affective gains. The study also took into consideration the impact that certain student background variables, types of student involvement, and motivational factors behind their involvement may have played. There was not a desire to compare involved students against uninvolved students; for that reason, only involved students were targeted in the study. Facilitators of 18 groups invited the researcher to visit their meeting or practice and seek the participation of their group members (Table 1).

Table 1

Overview of Participants: Name of group visited; number of completed surveys

Name of Group	# Completing Surveys
Campus Activities Board	4
Campus Crusade for Christ	10
Gay, Lesbian & BisexualS upport Group	3
Improv Society	10
International Club	12
Mosaic	10
Psi Beta	8
Student American Dental Hygiene Association	48
Student Senate	17
United Nations Association	14
The Campus Ledger	10
Choir	27
Drama Productions	12
Baseball Team	19
Men’s Soccer	23
Student Ambassadors	5
Track and Field	25
Women’s Basketball	12

The results of the study are presented in terms of the six research questions:

1. **What types of formal and informal activities were the students involved with outside of class?**

Among the formal activities cited, 55.9% of these involved students reported being involved in clubs and organizations on campus, 55.5% said they participate in campus-wide activities or events (concerts, lectures, dances, etc.), and 33.1% stated that they are active in varsity athletics (Table 2). The percentage of students involved in volunteer programs was 27.3%, the number active in study groups was 26.6%, and 20.2% stated they were involved in service learning on campus (Table 2).

Table 2

Level of Participation in Formal Activities

Participation Areas: Formal Involvement	Total # Involved (% of surveyed students)	# involved 1-2 /month	#involved 3-4/mo.	# involved over 4 times/mo.
Student Clubs	147 (56%)	81	27	39
Campus-wide events	146 (55%)	118	19	9
Varsity Athletics	87 (33%)	3	4	80
Volunteer Programs	72 (27%)	54	11	7
Study Groups	70 (27%)	45	14	11
Service Learning	53 (20%)	41	8	4
Campus Music Grps.	40 (17%)	20	3	17
Drama Productions	33 (14%)	19	3	11
Student Newspaper	31 (13%)	17	4	10
Student Government	29 (12%)	9	6	14
Scholarship Groups	29 (12%)	20	3	6
Honors Program	24 (11%)	15	6	3
Intramural Sports	22 (11%)	15	4	3
Student Ambass.	14 (7%)	5	0	9
Debate Team	8 (5%)	7	1	0
Dance Team	2 (2%)	1	0	1

The question of informal involvement can be seen by examining the responses to survey question #18. Of the students surveyed, 87% of them stated that they participated in social, out-of-class interactions with other students on campus in an average month. In addition, 85% of them reported having dined with another student on campus, and 76% of them had had out-of-class interactions with other students dealing with academic matters. Results also indicate the following: 68% had met another person on campus to work on an co-curricular project; 62% had had an out-of-class interaction with a faculty or staff member dealing with academic matters; 61% had worked in the library with a student, staff person or faculty member;44 % had participated in non-academic or social interactions with faculty or staff on campus; and 34% had dined on campus with a faculty or staff person (Table 3).

Table 3

Number of students involved in various types of Informal Involvement

Participation Types: Informal Involvement	Total No. Involved (% of all surveyed students)	# involved 1-2 /month	#involved 3-4 / mo.	# involved over 4 times / month
Social interaction w/ student	229 (87%)	65	52	112
Dining w/ student	223 (85%)	70	53	100
Academic interaction w/ student	199 (85%)	113	42	44
Working on extracurr. project	178 (68%)	107	33	38
Academic interaction w/ faculty or staff	162 (62%)	92	45	25
Working in library w/ stu., staff, or faculty	159 (61%)	111	19	29
Social interaction w/ faculty or staff	115 (44%)	68	20	27
Dining on campus w/ faculty or staff	90 (34%)	65	14	11

2. What motivational factors were related to the student involvement in co-curricular activities?

In survey question #17, the students were asked to rate the level of Importance various factors had on their decision to get involved on campus. The factor receiving the highest overall score was “to learn something new” with a mean of 2.44. “Having fun” came in a close second and “developing new job skills” was the third most-important motivatorinfluencing involvement. “Making new friends” and “developing communication and public speaking skills” both earned a mean score of 2.04 (Table 4).

Table 4

Factors Influencing Involvement on Campus

Possible Motivating Factors	**Mean score**
To learn something new	2.44
To have fun	2.35
To develop skills to assist in getting a job	2.25
To socialize or make new friends	2.04
To develop my communication or public speaking skills	2.04
To develop my leadership skills	2.00
To be of service to campus and/or community	1.81
To develop health and physical fitness	1.70

Note. Students were asked to rate the various possible influences toward their involvement on campus with 0– 4 based on: 0 = NoImportance ; 1 = Little Importance; 2 = Somewhat Important; 3 = Extremely Important

3. **Which student background variables were associated with their motivational factors toward involvement, and were any of the background variables related to differences in cognitive or affective gains?**

An Analysis of Variance was conducted to determine if any relationships existed between background variables and particular motivation areas. The researcher learned that age was significant in predicting the motivation factors of socializing, physical fitness, and fun (Table 5). Those students aged 23 and younger (compared to students 24 and older) were significantly more likely to become involved in outside-of-class activities motivated by the desire to socialize with others, F (1, 261) = 10.841, p = .001, gain greater physical fitness, F (1, 261) = 16.212, p < .01, and have fun F (1, 261) = 11.812, p = .001. In addition, the researcher found that gender was important in predicting certain motivations (Table 6). Males were significantly more likely to be interested in participation based on the opportunity to develop leadership skills, F (1, 260) = 6.536, p = .011, to develop communication skills, F (1, 260) = 4.714, p = .031, to gain greater physical fitness, F (1, 260) = 17.502, p < .01, or to have fun, F (1, 260) = 15.142, p < .01.

Significant differences were also found among students based on their cumulative grade point average (Table 7). Students with a GPA under 3.0 were significantly more likely to be motivated by the desire to be physically fit than were the students with a GPA 3.00 and higher, F (1, 219) = 4.237, p = .041. Motivation differences were also found based on whether students had an on-

campus job (Table 8). Students who worked on campus were significantly more likely to be motivated to be involved in outside-the-classroom activities if there was an opportunity to learn something new, F (1, 261) = 10.495, p = .001, provide service to others, F (1, 261) = 15.855, p < .01, or have fun, F (1, 261) = 6.329, p = .012. No significant motivation differences were found to exist based on the background variables of ethnicity, current credit hours of enrollment, or the presence of an off-campus job.

Table 5

Age Differences in Motivations Toward Involvement (Divided student responses as 23 years of age or younger and 24 years of age and older.)

	N	Mean	Standard Dev.	p value
Socialize ≤ 23	211	2.13	.866	.001[a]
Socialize ≥ 24	52	1.69	.805	
Lead. Sk. ≤ 23	211	2.05	.937	.074
Lead. Sk. ≥ 24	52	1.79	.997	
Job Skills ≤ 23	211	2.25	.925	.993
Job Skills ≥ 24	52	2.25	.968	
Comm. Sk. ≤ 23	211	2.05	.957	.729
Comm. Sk. ≥ 24	52	2.00	1.029	
Learn-New ≤ 23	211	2.46	.835	.479
Learn-New ≥ 24	52	2.37	.950	
Phys. Fit. ≤ 23	211	1.83	1.095	.000 [a]
Phys. Fit. ≥ 24	52	1.17	.857	
Service ≤ 23	211	1.78	.937	.265
Service ≥ 24	52	1.94	1.018	
Fun ≤ 23	211	2.45	.884	.001 [a]
Fun ≥ 24	52	1.96	1.047	

Note. [a] significant difference

Table 6

Gender Differences in Motivations Toward Involvement

	N	Mean	Standard Dev.	p value
Socialize/Male	133	2.14	.736	.079
Socialize/Female	129	1.95	.987	
Lead. Sk/Male	133	2.14	.854	.011[a]
Lead. Sk/Female	129	1.84	1.027	
Job Skills/Male	133	2.31	.889	.322
Job Skills/Female	129	2.19	.977	
Comm. Sk./Male	133	2.17	.889	.031[a]
Comm. Sk./Female	129	1.91	1.034	
Learn-New/Male	133	2.54	.713	.059
Learn-New/Female	129	2.32	.980	
Phys. Fit. /Male	133	1.97	1.007	.000[a]
Phys. Fit. /Female	129	1.43	1.095	
Service/Male	133	1.90	.824	.095
Service/Female	129	1.71	1.064	
Fun/Male	133	2.57	.710	.000 [a]
Fun/Female	129	2.13	1.085	

Note. [a]significant difference

Table 7

GPA Differences in Motivations Toward Involvement

	N	Mean	Standard Dev.	p value
Socialize < 3.00	48	1.96	.849	.862
Socialize ≥ 3.00	173	1.98	.859	
Lead. Sk < 3.00	48	2.06	.954	.582
Lead. Sk ≥ 3.00	173	1.98	.952	
Job Skills < 3.00	48	2.40	.893	.298
Job Skills ≥ 3.00	173	2.24	.944	
Comm. Sk < 3.00	48	2.19	.960	.188
Comm. Sk ≥ 3.00	173	1.98	.982	
Learn-New < 3.00	48	2.65	.699	.080
Learn-New ≥ 3.00	173	2.40	.875	
Phys. Fit < 3.00	48	1.88	1.044	.041[a]
Phys. Fit. ≥ 3.00	173	1.52	1.060	
Service < 3.00	48	1.83	.907	.791
Service ≥ 3.00	173	1.79	.972	
Fun < 3.00	48	2.38	.914	.738
Fun ≥ 3.00	173	2.32	.946	

Note. [a]significant difference

Table 8

On-Campus Work Differences in Motivations Toward Involvement

	N	Mean	Standard Dev.	p value
Socialize/No job	212	2.00	.895	.077
Socialize/Job	51	2.24	.737	
Lead. Sk /No job	212	1.95	.992	.102
Lead. Sk/Job	51	2.20	.749	
Job Skills/No job	212	2.20	.948	.061
Job Skills/Job	51	2.47	.833	
Comm. Sk/No job	212	2.00	1.005	.207
Comm. Sk/Job	51	2.20	.800	
Learn-New/No job	212	2.36	.900	.001 [a]
Learn-New/Job	51	2.78	.541	
Phys. Fit/No job	212	1.67	1.099	.364
Phys. Fit/Job	51	1.82	1.014	
Service/ No job	212	1.70	.961	.000 [a]
Service/Job	51	2.27	.777	
Fun/ No job	212	2.28	.976	.012 [a]
Fun/Job	51	2.65	.688	

Note. [a]significant difference

A number of background variables were also examined to see if they proved significant in determining differences in the cognitive and affective gains reported by students. The researcher looked at the number of credit hours in which the student was enrolled, the presence or absence of an on-campus job, and the presence or absence of an off-campus job.

In examining the possible impact of current enrollment hours, the researcher divided the responses into three categories: less than 12 hours of classes, 12 to 15 hours of classes, and more than 15 hours of classes. The far majority of the participants, 179 out of 261 completed surveys, enrolled as full time students with 12 to 15 credit hours. Only 34 were enrolled as part-time students, and 48 were enrolled in more than 15 credit hours that particular semester. An ANOVA was conducted to compare the affective gains scores of students in these three groups (Table 9). No significant differences among the mean affective gains scores of students in these 3 enrollment categories were found. The researcher did not reject the null hypothesis, F (2, 45) = .988, p = .38.

An ANOVA was also conducted to see if credit hours of enrollment was a significant variable in the presence of cognitive gains (Table 10). There was no significant difference between the mean cognitive gains scores of students in the three enrollment groups, F (2, 9) = 1.52, p = .269. The researcher did not reject the null hypothesis.

The second potential background factor in the development of affective and cognitive gains was the presence or absence of an on-campus job. A two-

sample t-test of the mean affective gains of students in those two groups was conducted. The test was significant, t (30) = - 2.02, p = .026. The researcher rejected the null hypothesis. There was a significant difference in the mean affective gains of students who had an on campus job when compared to those students who did not have an on-campus job (Table11).

It was also important to examine if the presence of an on-campus job was a contributing factor in the presence of perceived cognitive skills (Table 12). Another two-sample t-test was used to examine that interaction, but it was not significant, t (6) = - 1.80,p = .061.

Another potential intermediary variable was off-campus employment. A t-test was conducted to determine if the presence or absence of an off-campus job was a significant variable in the affective gains noted by students (Table 13). The researcher found that off-campus employment was not a significant variable in affective gains among students, t (6) = 2.41, p = .026.

A two-sample t-test was also conducted to determine whether students working at off-campus jobs demonstrated a significant difference in cognitive gains compared to students who did not work at off-campus jobs (Table 14). The researcher learned that off-campus employment was not a significant contributing factor to the cognitive skill gains found in these students, t (6) = 3.14, p = .01.

Table 9

Percentage of student respondents (by credit hrs.) who expressed affective gains

Affective Gains	<12 credit hrs. (34 students)	12-15 credit hrs. (179 students)	>15 credit hrs. (48 students)
Empathy	71%	80%	79%
Integrity	71%	76%	75%
Social Responsibility	68%	83%	81%
Morals & Ethics	71%	77%	75%
Self-Discipline	85%	84%	85%%
Cultural Awareness	76%	74%	71%
Citizenship	62%	59%	52%
Self-Understanding	68%	77%	71%
Interpersonal Skills	79%	83%	90%
Volunteerism	71%	73%	63%
Sense of Community	68%	76%	75%
Time Management	79%	82%	85%
Self-Confidence	76%	81%	81%
Leadership	76%	82%	83%
Tolerance	85%	84%	92%
Creativity	79%	73%	73%
Avg. # stu. whoclaimed gains in affective skills	80%	78%	77%

Table 10

Percentage of respondents (by credit hrs.) who expressed cognitive gains

Cognitive Gains	<12 credit hours (34 students)	12-15 credit hours (179 students)	>15 credit hours (48 students)
Comm. Skills	88%	79%	75%
Critical Thinking	76%	75%	79%
Intellect	76%	73%	75%
Knowledge	79%	76%	73%
Avg. # stu. who claimed gains in cognitive skills	80%	76%	76%

Table 11

Percentage of respondents (by job category) who expressed affective gains.

Affective Gains	On-campus job (51 students)	No on-campus job (210 students)
Empathy	88%	78%
Integrity	80%	76%
Social Responsibility	86%	81%
Morals & Ethics	80%	74%
Self-Discipline	86%	84%
Cultural Awareness	82%	71%
Citizenship	63%	57%
Self-Understanding	80%	73%
Interpersonal Skills	88%	83%
Volunteerism	69%	71%
Sense of Community	76%	74%
Time Management	90%	80%
Self-Confidence	80%	80%
Leadership	90%	80%
Tolerance	86%	85%
Creativity	78%	73%
Avg. # who expressed gains in affective skills	82%	76%

Table 12

Percentage of respondents (by job category) who expressed cognitive gains.

Cognitive Gains	On-campus job (51 students)	No on-campus job (210 students)
Communication Skills	88%	78%
Critical Thinking	76%	76%
Intellect	80%	72%
Knowledge	78%	75%
Average number of students in this category who expressed gains in cognitive skills	81%	75%

Table 13

Percentage of respondents (by job category) who expressed affective gains.

Affective Gains	Off-campus job (133)	No Off-campus job (128)
Empathy	77%	84%
Integrity	76%	77%
Social Responsibility	78%	86%
Morals & Ethics	70%	80%
Self-Discipline	81%	88%
Cultural Awareness	71%	76%
Citizenship	55%	60%
Self-Understanding	71%	78%
Interpersonal Skills	79%	84%
Volunteerism	63%	77%
Sense of Community	72%	77%
Time Management	79%	85%
Self-Confidence	74%	86%
Leadership	76%	87%
Tolerance	82%	88%
Creativity	73%	74%
Avg. # who expressed gains in affective skills	74%	80%

Table 14

Percentage of respondents (by job category) who expressed cognitive gains

Cognitive Gains	Off-campus job(133 students)	No Off-campus job (128 students)
Communication Skills	77%	82%
Critical Thinking	74%	78%
Intellect	69%	77%
Knowledge	71%	80%
Average # who expressed gains in cognitive skills	73%	79%

4. **Were there particular motivational factors of involvement that were related to certain types and levels of involvement?**

The researcher conducted Pearson Chi-Square analyses to determine if there were any significant relationships between motivation factors and types of involvement, and several dependent relationships were found to exist. There was a relationship between students who were motivated by the desire to have fun and those students who were involved in campus-wide activities (p = .034). Of the 146 students who reported involvement in campus-wide events such as concerts, lectures, and dances, 91% were highly or moderately motivated by the desire for fun (Table 15).

Table 14
Involvement in campus-wide activities and the motivation factor of fun

	Fun - No Interest	Fun Little Imp.	Fun Some Imp.	Fun Very Imp.	Total
Campus-wide Act: no involvement	16	10	32	59	117
1-2 times/mo.	7	5	34	72	118
3-4 times/mo.	0	1	3	15	19
>4 times/mo.	0	0	0	9	9
Totals	23	16	69	155	263

A relationship was found among students who were involved in clubs and organizations and those students who were motivated by the desire to develop leadership skills (p = .017). Of the 147 students who were involved in student organizations on campus, 72% reported being highly or moderately motivated by the desire to development leadership skills (Table 16). Club and organization involvement and the desire for physical fitness also seem to be related (p = .028). Of the 147 students involved in student clubs and organizations on campus, 46% were highly or moderately motivated toward involvement by the desire to become more physically fit (Table 17). A relationship was also found to exist between club and organization involvement and the desire to be of service to campus and/or community (p = .005), with 61% of the students stating that they are highly or moderately motivated by their interest in campus and/or community service (Table 18). Club and organization involvement was also related to an interest in having fun (p = .023), with 84% of the students reporting being highly or moderately motivated by the goal of having fun (Table 19).

Table 15

Involvement in student clubs and the motivation of developing leadership skills

	Lead. Skills No interest	Lead. Sk. Little Imp	Lead. Sk. Some Imp.	Lead. Sk. Very Imp.	Total
Clubs and orgs. No involvement	10	22	43	41	116
1-2 times/mo.	9	18	34	20	81
3-4 times/mo.	3	7	7	10	27
>4 times/mo.	1	3	10	25	39
Totals	23	50	94	96	263

Table 16

Involvement in student clubs and the motivation factor of physical fitness

	Phys.Fitness No interest	Phys. Fit. Little Imp	Phys. Fit. Some Imp.	Phys. Fit. Very Imp.	Total
Clubs and orgs. No involvement	15	21	35	45	116
1-2 times/mo.	17	25	17	22	81
3-4 times/mo.	8	10	4	5	27
>4 times/mo.	5	14	11	9	39
Totals	45	70	67	81	263

Table 17

Involvement in student clubs and organizations and the motivation factor of service to campus and/or community

	Service No interest	Service Little Imp.	Service Some Imp.	Service Very Imp.	Total
Clubs and orgs. No involvement	11	32	51	22	116
1-2 times/mo.	11	18	32	20	81
3-4 times/mo.	5	8	7	7	27
>4 times/mo.	2	4	12	21	39
Totals	29	62	102	70	263

Table 18

Involvement in student clubs and organizations and the motivation factor of fun

	Fun – No Interest	Fun Little Imp.	Fun Some Imp.	Fun Very Imp.	Total
Clubs and orgs. No involvement	8	7	35	66	116
1-2 times/mo.	13	7	18	43	81
3-4 times/mo.	2	1	10	14	27
>4 times/mo.	0	1	6	32	39
Totals	23	16	69	155	263

There were three motivational factors that were found to be significant among students involved in student government. A relationship existed between students involved in student government and those students who were motivated toward involvement by their desire to learn leadership skills (p = .008). Of the 29 students involved in student government, 97% reported being highly or moderately motivated by the opportunity to develop leadership skills (Table 20). A relationship also existed between students involved in student government and an interest in physical fitness (p = .043). In this case, 52% reported being only slightly motivated toward involvement by the desire to become more physically fit (Table 21). A strong relationship existed among students who were involved in student government and those students who were motivated by an interest in providing service to the campus and/or the community (p = .000), with 90% stating that they are highly or moderately motivated toward involvement by the interest of service to the campus or community (Table 22).

Table 19

Involvement in student govt. and the motivation of developing leadership skills

	Lead. Skills No Interest	Lead. Skills Little Imp.	Lead. Sk. Some Imp.	Lead. Sk. Very Imp.	Total
Student Govt. No involvement	22	50	86	76	234
1-2 times/mo.	0	0	2	7	9
3-4 times/mo.	1	0	3	2	6
>4 times/mo.	0	0	3	11	14
Totals	23	50	94	96	263

Table 20

Involvement in student government and the motivation factor of physical fitness

	Phy. Fitness No Interest	Phy. Fit. Little Imp	Phy. Fit. Some Imp.	Phy. Fit. Very Imp.	Total
Student Govt. No involvement	44	55	62	73	234
1-2 times/mo.	0	5	1	3	9
3-4 times/mo.	1	2	0	3	6
>4 times/mo.	0	8	4	2	14
Totals	45	70	67	81	263

Table 21

Involvement in student government and the motivation factor of service to campus and/or community

	Service No Interest	Service Little Imp.	Service Some Imp.	Service Very Imp.	Total
Student Govt. No involvemt.	29	58	96	51	234
1-2 times/mo.	0	1	0	8	9
3-4 times/mo.	0	0	1	5	6
>4 times/mo.	0	3	5	6	14
Totals	29	62	102	70	263

The researcher also found relationships among students involved in the debate team and three motivation factors, the first one being the desire to socialize with others (p = .019). Of the eight students who reported involvement with the debate team, 75% reported being moderately or highly motivated toward involvement by the opportunity to socialize with others (Table 23). Debate team participation was also significantly related to the desire to develop job skills (p = .020), with 75% stating that they were moderately or highly motivated by an interest in developing job skills (Table 24). There was also a relationship found among students involved in the debate teamand those motivated by the opportunity to develop communication skills (p = .009), as 75% of the team were highly motivated by an opportunity for better communication skills (Table 25).

Table 22

Involvement in debate team and the motivation factor of socializing with others

	Socializing No Interest	Socializing Little Imp.	Socializing Some Imp.	Socializing Very Imp.	Total
Debate Team No involvemt.	18	36	116	85	255
1-2 times/mo.	0	1	5	1	7
3-4 times/mo.	1	0	0	0	1
>4 times/mo.	19	37	121	86	263
Totals	18	36	116	85	255

Table 23

Involvement in debate team and the motivation factor ofdeveloping job skills

	Job Skills No Interest	Job Skills Little Imp	Job Skills Some Imp.	Job Skills Very Imp.	Total
Debate Team No involvemt.	16	37	68	134	255
1-2 times/mo.	0	1	2	4	7
3-4 times/mo.	1	0	0	0	1
>4 times/mo.	17	38	70	138	263
Totals	16	37	68	134	255

Table 24

Involvement in debate team and the motivation factor ofdeveloping communication skills

	Comm. Sk. No Interest	Comm. Sk. Little Imp.	Comm. Sk. Some Imp.	Comm. Sk. Very Imp.	Total
Debate Team No involve.	22	48	85	100	255
1-2 times/mo.	0	1	0	6	7
3-4 times/mo.	1	0	0	0	1
Totals	23	49	85	106	263

The analysis revealed a relationship between students involved in the organized scholarship groups and students who were motivated by the desire to do service for the campus or community (p = .037). Of the 29 students who reported involvement with a scholarship group, 86% were highly or moderately motivated by an opportunity to do service (Table 26).

Table 25

Involvement in organized scholarship groups and the motivation factor of service for the campus or community

	Service No Interest	Service Little Imp.	Service Some Imp.	Service Very Imp.	Total
Scholar. Grp. No involvement	29	58	93	54	234
1-2 times/mo.	0	3	6	11	20
3-4 times/mo.	0	0	2	1	3
>4 times/mo.	0	1	1	4	6
Totals	29	62	102	70	263

The researcher found three motivation factors that were significantly related to students who were involved with varsity athletics. A strong positive relationship existed between varsity athletes and the desire to develop greater physical fitness (p = .000). Of the 87 varsity athletes in the study, 95% reported being highly or moderately motivated toward involvement by the opportunity to gain physical fitness (Table 27). A relationship also existed among varsity athletes and the desire to do campus or community service (p = .033), with 76% stating they are moderately or highly motivated by the opportunity to be of service to campus and/or community (Table 28). There was also a relationship between varsity athletes and the desire for fun (p = .001), as 95% of the varsity athletes reported that having fun is a moderate or high motivator for them to be involved in outside-the-classroom activities (Table 29).

Table 26

Involvement in varsity athletics and the motivation factor ofphysical fitness

	Phy. Fitness No Interest	Phy. Fit. Little Imp	Phy. Fit. Some Imp.	Phy. Fit. Very Imp.	Total
Varsity Athlet. No involvement	42	69	48	17	176
1-2 times/mo.	1	0	0	3	4
3-4 times/mo.	0	0	2	1	3
>4 times/mo.	2	1	17	60	80
Totals	45	70	67	81	263

Table 27

Involvement in varsity athletics and the motivation factor of community service

	Service No Interest	Service Little Imp.	Service Some Imp.	Service Very Imp.	Total
Varsity Athletics No involvement	25	45	56	50	176
1-2 times/mo.	1	0	1	2	4
3-4 times/mo.	0	0	2	1	3
>4 times/mo.	3	17	43	17	80
Totals	29	62	102	70	263

Table 28

Involvement in varsity athletics and the motivation factor of fun

	Fun – No Interest	Fun Little Imp.	Fun Some Imp.	Fun Very Imp.	Total
Varsity Athletics No involvement	19	16	53	88	176
1-2 times/mo.	1	0	1	2	4
3-4 times/mo.	0	0	2	1	3
>4 times/mo.	3	0	13	64	80
Totals	23	16	69	155	263

A relationship was also detected for students involved in intramural sports and those students desiring to be more physically fit (p = .006). Among the 22 students who reported being involved in intramural sports,91% stated that they were moderately or highly motivated toward involvement by the opportunity to develop greater physical fitness (Table 30).

Table 29

Involvement in intramural sports and the motivation of becoming physically fit

	Phy. Fitness No Interest	Phy. Fit. Little Imp	Phy. Fit. Some Imp.	Phy. Fit. Very Imp.	Total
Intramurals No involvement	45	68	62	66	241
1-2 times/mo.	0	1	2	12	15
3-4 times/mo.	0	1	2	1	4
>4 times/mo.	0	0	1	2	3
Totals	45	70	67	81	263

5. Which cognitive and affective gains were perceived by the students to have been achieved by their participation in different types of outside-the classroom activities?

Among the list of knowledge, skills, and abilities the students could state they were gaining as a result of outside-the classroom involvement, an ANOVA revealed that twelve dependent variables showed significant differences between the groups. A significant proportion of the variance for those 12 gains can be explained by examining the independent variables. Significant differences were determined for self-discipline (p = .002), cultural understanding (p = .022), citizenship (p = .006), self-understanding (p = .007), communication skills (p = .018), interpersonal skills (p = .031), volunteerism (p = .000), critical thinking (p = .009), time management (p = .000), self-confidence (p = .006), leadership (p = .000), and creativity (p = .003). A post hoc test was then conducted to determine significant differences in the various groups, among these dependent variables.

With the dependent variable self-discipline, significant involvement areas included student government, as those students involved in student government were significantly more likely to report a gain in self-discipline when compared to students involved in campus-wide activities (p = .0391) or those in music groups (p = .0036). In addition, students involved in the drama club gained significantly more self-discipline when compared to students in campus-wide activities (p = .0324) or compared with music group students (p = .0006). Students involved in service learning were significantly more likely to report gains in self-discipline compared with students in campus clubs and organizations (p = .0361), and

student ambassadors reported significantly higher self-discipline gains as compared to all the students who were involved in clubs and organizations (p = .0122). Students involved in study groups reported higher increases in self-discipline when compared to students in student government (p = .0404), and also when compared to students in the drama club (p = .0354). Varsity athletes reported a greater increase in self-discipline as compared to students in service learning (p = .0288).

Examining significant differences in gains in cultural understanding, the researcher learned that student ambassadors were more likely to develop that affective ability compared to students on the student newspaper (p = .0146) and also more than students in the scholarship groups (p = .0478). Student government members were more likely to gain in cultural understanding compared to students in organized study groups (p = .0190), and students in volunteer programs also gained in cultural understanding more than study group members (p = .0434). Students in the honors program were significantly more likely to note a gain in cultural understanding when compared to students in service learning, and student scholarship groups were more likely in increase in terms of cultural understanding when compared to varsity athletes (p = .0105). Finally, students in service learning programs gained more cultural understanding than varsity athletes (p =- 0444).

In terms of citizenship, the debate team members gained more than students involved in campus-wide activities like concerts and dances (p = .0350) and also when compared to students in all the student clubs and organizations (p

= .0145). Honors program students gained more than students in campus-wide activities (p = .0400) and more than students in clubs and organizations (p = .0096). Student ambassadors gained more citizenship than student club members (p = .0082), and scholarship students increased in citizenship more than student newspaper staff (p = .0155). Student government participants cited a significant increase in citizenship compared with students in the volunteer program (p = .0047), and also a greater increase than varsity athletes (p = .0203). Students in service learning gained more citizenship awareness than music group students (p = .0308).

Honors group students significantly increased in self-understanding compared with students in campus-wide activities (p = .0034), when compared with student club and organization participants (p = .0183) and also in comparison with study group participants (p = .0186). Varsity athletes gained more self-understanding compared to campus-wide activity participants (p = .0101), more in relationship to student club members overall (p = .0248), and in comparison with study group participants (p = .0451). Scholarship groups increased self-understanding more than student government members (p = .0120) and more than the volunteer groups (p = .0304). Drama club members gained significantly in self-understanding compared with student government members (p = .0051) and more than volunteers (p = .0198). The debate team (p = .0412), newspaper staff (p = .0408), and the study group participants (p = .0342) all gained in self-confidence by a significant margin when compared with student in the music groups.

Student government members were more likely to report an increase in communication skills than the study group participants (p = .0233) and more than the volunteer program students (p = .0354). Student ambassadors developed greater communication skills than the study group participants (p = .0210) and more than members of the volunteer program (p = .0086). Honors program students reported development of communication skills than the study group participants (p = .0094) and more than the volunteer program members (p = .0027). Drama club members reported a significant increase in communication skills compared with service learning students (p = .0382), and scholarship group students cited more of an increase in communication skills in comparison to the volunteer program students (p = .0009). Campus-wide activity participants (p = .0457), newspaper student staff (p = .0033), and varsity athletes (p = .0440) all noted a significant increase in communication skills as compared with music group members.

As for the development of interpersonal skills when involved in outside-the-classroom activities, scholarship group students reported a larger increase when compared with campus-wide activity participants (p = .0462) and in comparison with newspaper student staff (p = .0025). Student government participants reported a bigger increase to interpersonal skills than the student club and organization participants (p =.0473) and more than volunteer program students (p = .0474). Honors program students reported more development of interpersonal skills than study group participants (p = .0442) and more than volunteer program students (p = .0408). Service learning participants stated that

they gained in interpersonal skills significantly more than all the students in clubs and organizations (p = .0306), varsity athletes expressed greater development than those in student clubs (p = .0407), and drama students also scored higher than club and organization participants (p = .0325). Students involved in campus-wide activities (p = .0472) and student ambassadors (p = .0170) both reported greater increases in interpersonal skills than students involved in the music groups on campus.

Regarding the affective development of volunteerism, service learning participants reported a significantly greater development than students in clubs and organizations (p = .0359) and when compared to students in varsity sports (p = .0100). Scholarship group participants reported a greaterincrease in volunteerism than study group participants (p = .0019), and more than students involved in drama productions (p = .0195). Students involved in organized volunteer programs reported a higher increase in volunteerism when compared to all the students in clubs and organizations, and volunteer program students also scored higher than varsity athletes. Debate team members claimed a stronger increase in volunteerism as compared with those involved in campus-wide activities such as lectures and concerts (p = .0406).

In examining significant differences in the cognitive category of critical thinking, the researcher found that students in the honors program reported greater increases when compared with students in campus-wide activities (p = .0267), student clubs and organizations (p = .0069), and student groups (p = .0366). Scholarship group participants marked higher scores for critical thinking

development than those in campus-wide activities (p = .0464) and student government participants reported significantly greater increases than varsity athletes (p = .0186).

When the researcher looked at the significant differences in time management, students in scholarship groups scored higher than those in campus-wide activities (p = .0295) and higher than participants of study groups (p = .0274). Student ambassadors reported greater development of time management skills than the newspaper student staff (p = .0017) and more than students in clubs and organizations (p = .0310). Drama club students also developed greater time management when compared to student clubs and organizations (p = .0143). Service learning participants gained greater time management skills than the student newspaper staff (p = .0215) and more than the students in volunteer programs (p = .0306). Varsity athletes also gained in time management more than the volunteer program participants (p = .0496). When compared to the music group students, participants of campus-wide activities (p = .0410), the honors program (p = .0454), and study groups (p = .0245) reported significantly greater increases in time management skills as a result of their outside-of-class involvement.

As for self-confidence, students in the honors program reported significantly greater increases when compared with students in campus-wide activities (p = .0216), student newspaper staff (p = .0395), and students in the volunteer program (p = .0267). Students in drama productions stated they gained more self confidence than the students in campus-wide activities (p =

.0315), the student newspaper staff (p = .0174), and the volunteer program (p = .0124). Student government participants reported greater increases in self-confidence than the newspaper student staff (p = .0324), and the volunteer program participants (p =.0406), and service learning participants also reported greater increases than the volunteer program students (p = .0448). Students involved in organized scholarship groups reported greater self-confidence increases than the students in all the clubs and organizations (p = .0378) and varsity athletes reported greater increases than the study group participants (p = .0107).

When the researcher evaluated differences in leadership skills, honors program students rated increases significantly greater than students involved in campus-wide activities (p = .0473) and more than students in clubs and organizations (p = .0262). Scholarship group students also rated higher leadership skills than campus-wide activity participants (p = .0227) and student clubs and organizations (p = .0015). Varsity athletes estimated greater increases in leadership skills when compared to newspaper student staff (p = .0215) and service learning students (p = .0197). Intramural sports participants recorded higher increases in leadership than newspaper staff (p = .0152) and service learning participants (p = .0064). Student government participants rated greater development of leadership skills than the debate team (p = .0113). Participants of three groups: service learning (p = .0050), student ambassadors (p = .0481), and drama productions (p = .0154) all rated significantly higher levels of leadership development compared to the music group participants.

Differences in the development of creativity were noted by students in the honors program at a significantly greater level than students in campus-wide activities (p = .0278) and varsity sports (p = .0126). Student government participants noted greater increases in creativity than students in clubs and organizations (p = .0143) and greater than the varsity athletes (p = .0423). Scholarship group participants noted a greater increase in creativity than study group participants (p = .0066) and more than volunteer program students (p = .0159). Newspaper student staff reported greater increases in creativity than study group participants (p = .0094) and volunteer program participants (p = .0131). Additionally, drama production participants reported significantly greater increases in creativity while participating in outside-the classroom activities when compared to students in intramural sports (p = .0410).

6. **Controlling for certain student background variables, did the students' varying types of involvement (student-to-student, student-to-faculty, and student-to-staff) relate to their perceived gains?**

To examine this question, the researcher opted to analyze examples in each of the areas and looked more closely at the variables that demonstrated greater significance in earlier stages of the analyses. In terms of gains, the researcher considered one affective trait that students most often reported, leadership (p = .000), and one cognitive trait that was most mentioned, critical thinking (p = .009). As for areas of involvement, the researcher examined scholarship groups, which consist of mostly student-faculty interactions, and whose members gave very high marks for both cognitive and affective gains

outside-the-classroom. The activity with mostly student-staff interactions whose participants gave the highest marks for gains was varsity athletics. As for groups with mostly student-student interactions, student government will be examined more closely.

The three motivation factors toward involvement most often cited by students in the studywas an opportunity to learn something new, a chance to have fun, and the development of future job skills, so those factors were included as co-variates. In terms of background variables, cumulative grade point average (GPA), gender, and age were also held stable, as they were the background items that were significantly related to particular gains in earlier stages of analyses . The researcher conducted a multivariate analysis of co-variance (MANCOVA) with these variables.

The analysis revealed a significant relationship between involvement in varsity athletics and the development of leadership skills, F (2, 209) = 5.201, MSE = .945, p = .002. The researcher learned that 6.9% of the finding of leadership was associated with the participants' involvement with varsity athletics, after controlling for the background variables of GPA, gender, and age and the motivation factors of having fun, learning something new, and development of job skills.

Results of the MANCOVA revealed that there was not a significant relationship between involvement in varsity athletics and the development of critical thinking skills, F (2, 209) = 1.815, MSE = 1.245, p = .146. After controlling for the three motivation factors and GPA, age, and gender, the researcher found

that 2.5% of the critical thinking gain was significantly related to the participants' involvement in varsity athletics.

The multivariate analysis of covariance revealed a significant relationship between student government involvement and the development of leadership skills, F (2, 209) = 3.291, MSE = .970, p = .022. After controlling for the background and motivation factors, 4.5% of the gain in leadership skills was related to the students' involvement in student government. No significant relationship was found for student government involvement and the development of critical thinking skills, F (2, 209) = 1.330,MSE = 1.253, p = .265.

The MANCOVA for scholarship groups revealed no significant relationship between involvement in this activity and gains in leadership skills, F (2, 209) = .414, MSE = 1.009, p = .743. Also, no significant relationship existed between involvement in scholarship groups and the development of critical thinking F (2, 209) = 1.087, MSE = 1.258, p = .356.

Summary

Major findings in this study included learning how motivation variables toward outside-of-class involvement were different for students withvarious background variables. Students under age 23 were more likely to be motivated toward involvement based on the opportunity to gain physical fitness and have fun, as compared to students in the study who were 23 and older. Males were more likely than females to be motivated toward outside-of-class involvement if there was an opportunity to develop leadership skills, develop communication skills, gain greater physical fitness or to have fun. Students with a cumulative

GPA under 3.00 were more motivated by the desire to be physically fit, and students who worked on campus were more motivated by an opportunity to learn something new, provide service to others, or to have fun.

The researcher also discovered that students with particular background variables were more likely to report gains in overall affective or cognitive areas. Specifically, students with on-campus jobs reported significantly greater affective gains than students who were not employed on campus.

The researcher noted several significant relationships between certain motivation factors toward involvement and particular involvement areas (Table 30).

Table 30

Motivation and Involvement Areas

Motivation Factor	Involvement	Level of Significance
Desire to have fun	Campus-wide activities	$p = .034$
Desire to have fun	Clubs and organizations	$p = .023$
Develop leadership skills	Clubs and organizations	$p = .017$
Greater physical fitness	Clubs and organizations	$p = .028$
Service to campus/comm.	Clubs and organizations	$p = .005$
Develop leadership skills	Student Government	$p = .008$
Greater physical fitness	Student Government	$p = .043$
Service to campus/comm.	Student Government	$p = .000$
Desire to socialize	Debate Team	$p = .019$
Develop job skills	Debate Team	$p = .020$
Communication Skills	Debate Team	$p = .009$
Service to campus/comm.	Scholarship Groups	$p = .037$
Service to campus/comm.	Varsity Athletics	$p = .033$
Desire to have fun	Varsity Athletics	$p = .001$
Greater physical fitness	Varsity Athletics	$p = .000$
Greater physical fitness	Intramural Sports	$p = .006$

The researcher identified twelve different cognitive and affective gains that were significantly related to different involvement areas: self-discipline, cultural understanding citizenship, self-understanding, communication skills, interpersonal skills, volunteerism, critical thinking, time management, self-confidence, leadership, and creativity. In examining involvement groups whose students expressed significant gains in cognitive or affective areas, the researcher first eliminated the areas where the comparison was in relationship to students in clubs and organizations and/or campus-wide activities. Both of these involvement areas were so broad in spectrum that almost any specific group could have significant gains in comparison. The researcher then eliminated involvement areas with four or fewer positive comparisons, to narrow down to the groups whose students expressed greatest gains. The groups are listed, grouped by involvement area (Table 31).

Table 31

Significant Gains, by group, as compared to other groups

Involvement Area	Aff./Cog. Gain	Greater gains than	Level of Sig.
Student Govt.	Self-Discipline	Music Groups	*p* = .0036
Student Govt.	Cultural Understanding	Org. Study Grps.	*p* = .0190
Student Govt.	Citizenship	Volunteer Prog.	*p* = .0047
Student Govt.	Citizenship	Varsity Athletes	*p* = .0203
Student Govt.	Communication Skills	Org. Study Grps.	*p* = .0233
Student Govt.	Communication Skills	Volunteer Prog.	*p* = .0354
Student Govt.	Interpersonal Skills	Volunteer Prog.	*p* = .0474
Student Govt.	Critical Thinking	Varsity Athletes	*p* = .0186
Student Govt.	Self-Confidence	Stu. Newspaper	*p* = .0324
Student Govt.	Self- Confidence	Volunteer Prog.	*p* = .0406
Student Govt.	Leadership	DebateTeam	*p* = .0113
Student Govt.	Creativity	Varsity Athletes	*p* = .0423
Drama Club	Self-Confidence	Music Groups	*p* = .0006
Drama Club	Self-Understanding	Student Govt.	*p* = .0051
Drama Club	Self-Understanding	Volunteer Prog.	*p* = .0198
Drama Club	Communication Skills	Service Learning	*p* = .0382
Drama Club	Self-Confidence	Stu. Newspaper	*p* = .0174
Drama Club	Self-Confidence	Volunteer Prog.	*p* = .0124
Drama Club	Leadership	Music Groups	*p* = .0154
Drama Club	Creativity	Intramural Sports	*p* = .0410

Service Learning	Cultural Understanding	Varsity Athletes	$p = .0444$
Service Learning	Self-Understanding	Org. Study Grps.	$p = .0186$
Service Learning	Citizenship	Music Groups	$p = .0308$
Service Learning	Volunteerism	Varsity Athletes	$p = .0100$
Service Learning	Time Mgmt.	Stu. Newspaper	$p = .0215$
Service Learning	Time Mgmt.	Volunteer Prog.	$p = .0306$
Service Learning	Self-Confidence	Volunteer Prog.	$p = .0448$
Service Learning	Leadership	Music Groups	$p = .0050$
Stu. Ambassadors	Cultural Understanding	Stu. Newspaper	$p = .0146$
Stu. Ambassadors	Cultural Understanding	Stu. Newspaper	$p = .0146$
Stu. Ambassadors	Cultural Understanding	Scholarship Grps.	$p = .0478$
Stu. Ambassadors	Communication Skills	Org. Study Grps.	$p = .0210$
Stu. Ambassadors	Communication Skills	Volunteer Prog.	$p = .0086$
Stu. Ambassadors	Interpersonal Skills	Music Groups	$p = .0170$
Stu. Ambassadors	Time Mgmt.	Stu. Newspaper	$p = .0017$
Varsity Athletes	Leadership	Music Groups	$p = .0481$
Varsity Athletes	Self-Discipline	Service Learning	$p = .0288$
Varsity Athletes	Self-Understanding	Org. Study Grps.	$p = .0451$
Varsity Athletes	Communication Skills	Music Groups	$p = .0440$
Varsity Athletes	Time Mgmt.	Volunteer Prog.	$p = .0496$
Varsity Athletes	Self-Confidence	Org. Study Grps.	$p = .0107$
Varsity Athletes	Leadership	Stu. Newspaper	$p = .0215$
Varsity Athletes	Leadership	Service Learning	$p = .0197$

Honors Program	Cultural Understanding	Service Learning	$p = .0283$
Honors Program	Communication Skills	Org. Study Grps.	$p = .0094$
Honors Program	Communication Skills	Volunteer Prog.	$p = .0027$
Honors Program	Interpersonal Skills	Org. Study Grps.	$p = .0442$
Honors Program	Interpersonal Skills	Volunteer Prog.	$p = .0408$
Honors Program	Critical Thinking	Org. Study Grps.	$p = .0366$
Honors Program	Time Mgmt.	Music Groups	$p = .0454$
Honors Program	Self-Confidence	Stu. Newspaper	$p = .0395$
Honors Program	Self-Confidence	Volunteer Prog.	$p = .0267$
Honors Program	Creativity	Varsity Athletes	$p = .0126$
Stu. Scholar. Grp.	Cultural Understanding	Varsity Athletes	$p = .0105$
Stu. Scholar. Grp.	Citizenship	Stu. Newspaper	$p = .0155$
Stu. Scholar. Grp.	Self-Understanding	Student Govt.	$p = .0120$
Stu. Scholar. Grp.	Self-Understanding	Volunteer Prog.	$p = .0304$
Stu. Scholar. Grp.	Communication Skills	Volunteer Prog.	$p = .0009$
Stu. Scholar. Grp.	Interpersonal Skills	Stu. Newspaper	$p = .0025$
Stu. Scholar. Grp.	Volunteerism	Org. Study Grps.	$p = .0019$
Stu. Scholar. Grp.	Volunteerism	Drama Club	$p = .0195$
Stu. Scholar. Grp.	Time Mgmt.	Org. Study Grps.	$p = .0274$
Stu. Scholar. Grp.	Creativity	Org. Study Grps.	$p = .0066$
Stu. Scholar. Grp.	Creativity	Volunteer Prog.	$p = .0159$

The conclusive findings from question 6 are most important, as the researcher learned that there was a significant gain in leadership skills noted by students involved in either varsity athletics or student government even after controlling for background variables of age, gender, and GPA and the various motivation factors.

Chapter 5

Discussion

Why is it important to examine the outside-the classroom involvement of community college students? College students spend only a relatively small portion of their time in the classroom, in the laboratory, studying, and preparing for class. The far majority of their time is spent outside of class; therefore, it is important to determine how that time is spent and to look at ways to make those experiences more meaningful. In addition, there are many important skills and lessons that cannot generally be taught and learned in the classroom, and ensuring significant programs outside-the classroom would offer an opportunity for that growth. Critical qualities such as leadership, effective communication, and the ability to work cooperatively with others can be greatly enhanced through involvement outside of class (Kuh et al., 1991). Finally, outside-the-class involvement provides a great opportunity for development of a sense of community, which is vitally important for any type of campus (Carnegie Foundation for the Advancement of Teaching, 1990).

Specifically, these issues are even more important on community college campuses, as many believe that community colleges have a greater challenge of integrating their students into the academic and social life of the campus (Dougherty, 1994). As has been stated, students enrolled in community colleges are more likely to be commuters, adult students, first-generation college students and/or representative of ethnic minorities. Because students in each of these categories are less likely to integrate socially on campus, additional efforts must

be made to encourage this involvement and to examine the potential benefits of various types of outside-of-class involvement (Palmer, 1998; NCES, 1998; McConnell, 2000; Rendon & Garza, 1996).

In what outside-the classroom activities were the students in this study involved? As for formal activities, the most popular activities among the students taking the survey were student clubs and organizations, varsity athletics, and campus-wide activities and events. The informal activities most often cited by these students were social interactions with other students, dining on campus with other students, and academic interactions with other students; informal interactions with faculty and staff outside of class fell at the bottom of the scale of involvement, though some involvement was present.

The study by Endo and Harpel (1982) also examined informal interactions between faculty and students. In their study, about half of the student participants stated that they had been involved in non-academic interactions outside the classroom with faculty In the current study , 44% of the student participants reported they had had a “social interaction with a faculty or staff person” and 34% noted that they had “dined on campus with a faculty or staff person.” Both studies were conducted at community colleges, with mostly traditional-aged students, and the level of informal involvement students cited outside-the-classroom with faculty was about the same in both projects.

Some of the formal and informal involvement findings in the current study are also similar to those found by Tan and Pope (2003),in a university study in which both formal and informal types of involvement were within the same pool.

Their study found that academic interactions with other students, clubs and organizations, and campus-wide activities or events were rated by a group of university students among their top six in level of co-curricular involvement. However, that study also found two types of faculty involvement within the top 6 overall rankings: out-of-class interactions with faculty dealing with academic matters came in number two on their list, and out-of-class interactions with faculty dealing with non-academic matters was ranked number five overall in that study.

One reason for these varying responses may be in the level of students involved in the different studies. It may be that the upper class students involved in the Tan and Pope study were more likely to engage in out-of-class interactions with faculty than the freshman and sophomore students in the current study, which occurred on a community college campus. Additionally, the mean age of respondents in the Tan and Pope study was 28.3 years, while the mean age of students in this study was 21.8 years. It seems likely that older students are more likely to seek and develop out-of-class interactions with faculty than younger students (Tan & Pope, 2003).

As for motivation toward involvement, the responses by the students in this study were similar to the responses found in the Tan and Pope research (2003). Both groups of students ranked, “to learn something new,” “to have fun,” and “to develop skills to assist in getting a job” within the top four of their ratings. In this case, the differences in years of college or age of the students did not seem to impact the various motivations toward involvement.

These responses are not surprising, as students of all ages are attracted to learning new things and having fun. Specifically, Tinto found that community college students are more interested in involvement opportunities that are related to career building and/or classroom experiences than are students at a four-year college or university; so it is fitting that this group of students cited “developing job skills” as one of their top choices (Tinto, 1998).

Motivation variables toward outside-of-class involvement were different for students with various background variables. As might be anticipated, younger students were more likely to be motivated toward involvement based on the opportunity to gain physical fitness and have fun. This finding is consistent with other experience in the college setting, where practitioners find that “fun” is not as great of a motivator for older students as is the opportunity to make professional connections.

In this study, males were more likely to be motivated toward outside-of-class involvement if there was an opportunity to develop leadership skills, enhance communication skills, to gain greater physical fitness or to have fun. One reason for this difference may be in the specific groups who made up a large portion of the students in the study. Of the 262 students surveyed, 42 were members of men’s athletic teams (soccer and baseball), and other 25 were members of the track and field team – made up of mostly men. Inversely, 48 of the students surveyed were members of the Student American Dental Hygiene Association, made up entirely of women, most of whom were older than traditional age. The researcher believes that the different responses from

students in these two groups may explain part of the linkage of males with physical fitness and fun, and even with a desire for leadership skills.

Turning to the question of background variables and involvement, there was a significant positive relationship in the affective gains of students who have an on-campus job as compared to those students who do not have an on-campus job. Many studies have shown that working on-campus can impact students in much the same way as other types of on-campus involvement (Astin, 1983). If students have an on campus job, they are working with other students, faculty, and/or staff; becoming acquainted with the campus environment; and developing those same valuable connections they would be making with other sorts of involvement outside-the classroom. As Astin (1993) stated, "holding a part-time job on campus is positively associated with attainment of a bachelor's degree and with virtually all areas of self-reported cognitive and affective growth" (p. 388). For that reason, it is no surprise that employment on campus was found to be a significant background variable related to affective gains in the current study as well. Knight's 1994 study found specifically that on-campus employment has a direct positive influence on personal and social development gains, which is also consistent with the findings in this study.

On-campus employment was not found to be a significant background variable in the development of cognitive gains among students in this study. This finding would coincide with the assumption that staff tend to shape affective gains in students, and faculty tend to affect cognitive gains in students. Most on-campus employment at a community college would have the students working

with staff in various departments. At a research institution, however, students could be working with faculty in laboratories or other research, and on-campus employment may prove to influence cognitive gains as well.

The fact that age was not found to be a significant factor in determining gains in the current study is consistent with findings by Glover and Murrell (1998). In their study of community college students, students who were more involved reported greater personal and social development, regardless of age.

Many of the relationships found between motivation and involvement areas in the current study should not be surprising to practitioners in the field. As expected, students motivated by the desire to become more physically fit tend to be involved in varsity athletics and intramural sports. In addition to a desire to become physically fit, many varsity athletes were also motivated by the desire to have fun and to be involved in community service. Students active in student government were motivated by the desire to develop leadership skills, be of service to campus or community, and surprisingly – to become physically fit. The motivating factors found to be significant for members of the Debate Team seemed reasonable, as those students are motivated by the desire to develop communication skills, develop job skills, and to socialize. Because the types of student clubs and organizations offered were so diverse, the motivations for joining them were also dissimilar: have fun, develop leadership skills, provide community service, and develop physical fitness.

Regarding specific gains that were associated with particular types of involvement, Student Government participants expressed gains in nine areas, and

most are cognitive or affective developments that would normally be associated with student government participation. Citizenship is predictable, as part of the objective of student government is to assist the students in understanding the democratic process and seeing their responsibilities as citizens. Communication skills are also an expected gain, as participants in student government are generally expected to speak before the group to make motions, introduce new ideas, and discuss various topics. Self-Confidence is also a likely gain, as students are typically elected to student government positions. Because of the challenge of the electoral process, students may have possessed self-confidence prior to running or soon developed self-confidence after winning the election. Leadership, interpersonal skills, and critical thinking are all essential components of an effective student government representative, and it is important to note that cultural understanding and creativity were also among the stated gains.

Drama Club students related gains in five areas, including self-understanding and self-confidence. It seems to make sense, as students who are exploring different characters would also come to develop a better understanding of themselves. Self-confidence would also seem to be a natural factor generated by a successful public performance of a drama production. Drama Club participants' gains in creativity and communication skills are consistent with findings in the community college research conducted by Knight (1994). In that study, Knight found that time spent in art, music, or theatre lead to gains in the arts, and the same would seem to be true in this study.

Service Learning participants detailed gains in seven areas, including cultural understanding, volunteerism, citizenship, and self-understanding. These gains are affective components that would be expected outcomes of service learning involvement. Most service learning experiences are time-rich events, usually involving a full day of involvement at one time, and sometimes even a multiple-day trip, as with the service learning trip that Student American Dental Hygienist Association (SADHA) students take to Las Pintas, Mexico each year. The researcher learned that many dental hygiene students take a trip to Las Pintas, Mexico each year and provide dental services to children and adults who do not typically have access to dental health professionals. The experience was mentioned by the students to be very meaningful to them, even several months after the experience. Other students at the institution also participate in various service-learning programs, and other overall benefits cited among students involved in service learning were time management, self-confidence, and leadership. This is consistent with Astin's (1993) findings, where involvement in volunteer work was found to be positively correlated with leadership, cultural awareness and the development of interpersonal skills.

Student Ambassadors reported gains in four areas, cultural understanding, communication skills, interpersonal skills, and time management. All these affective skills seemed consistent with the work of student ambassadors, as they work with many different prospective students and guests who visited the campus, providing tours and talking about the college.

Varsity Athletes made gains in six different areas, including leadership, self-discipline, and time management. All these were expected outcomes for varsity athletes. They work very closely as a team, and leadership is needed and rewarded. Self-discipline is evident because of the challenge of maintaining the training and motivation over a long period of time. Time management among athletes on this campus was especially prevalent, as student athletes had required study groups and training time, in addition to practice schedules and games. Some of these findings are consistent with research by Astin (1993), who found that participation in intercollegiate sports was positively associated with leadership and satisfaction with student life.

Honors Program students detailed seven areas of gains, including critical thinking and creativity, which are typical gains expected in an honors program. Honors Program participants also showed significant gains in communication skills, which is consistent with findings reported in a study byKnight (1994). In his research, Knight found that students who exerted a higher quality of effort in their courses and in writing activities demonstrated significant gains in communication skills. Because the Honors Program includes both of these features, the results are similar. Interpersonal skills and self-confidence were also significant gains reported by participants in the Honors Program, which would be anticipated outcomes because of the time the students spend with one another and in terms of the academic accomplishments of those students.

Student Scholarship Group participants reported eight areas of gains, including volunteerism, time management, citizenship, cultural understanding, and

self-understanding. These affective gains are consistent with expected findings, as the scholarship groups at the institution are required to participate in community and campus service projects – expanding their understanding of these areas.

The cumulative question of this study was whether students involved in different types of activities demonstrated the development of specific gains, regardless of background and motivation. As mentioned earlier, the researcher found a significant relationship between involvement in varsity athletics and the development of leadership skills, while controlling for various background and motivation factors. The researcher also found a significant relationship between student government involvement and the development of leadership skills, with the same controlling variables in place.

No significant relationship was found between outside-of-class involvement and critical thinking, the cognitive skill analyzed in the final question. The discovery that an affective skill was found to be significantly related to outside-of-class involvement and not the cognitive skill, is consistent with the notion that cognitive skills are developed mostly in the classroom and affective skills are developed mostly outside-the classroom. This finding is similar to Hood's (1984) study, in which no relationship was found between participating in extracurricular activities and the development of cognitive complexity.

In the study by Knight (1994), the researcher found a significant relationship between student background characteristics, quality of effort scales, and student gains that were identified. Some of those same findings were

evident in the current study, as a relationship was discovered between certain background characteristics, motivation variables, and specific cognitive and affective outcomes.

Implications

Findings in the current study are for the most part consistent with those from previous research in that involvement in outside-the-classroom activities on campus leads to the development of greater gains. Further, it was determined that involvement in certain activities is related to particular types of gains, regardless of environmental factors or student background variables. All students, especially commuter students on a community college campus, gain more from the college experience if they become involved in various outside-the-classroom activities and events. An analysis of and reasons for these benefits could assist practitioners in their advising responsibilities, particularly when they are encouraging students to take part in co-curricular activities.

Additionally, faculty can benefit from this study by recognizing the significant impact they have on students, through their co-curricular involvement with students. As Astin stated in one of his studies, “these findings highlight the critical importance to student development of frequent interaction between faculty and students” (1993, p. 384). In addition to student development, Astin found that academic involvement with faculty and student peers can positively impact retention, academic performance, and learning in general (1993). Faculty have many priorities competing for their time, but involvement with students outside the classroom is critically important to the overall development of students.

Administrators should use this information when making budget and staffing decisions for the institution. While many academic administrators may place co-curricular programming toward the bottom of the priority scale when budget decisions are made, it is important that they realize the implications of those decisions. If appropriate staffing and funding allocations are directed toward purposeful co-curricular programming, the impact for the students and the institution could be great. Most administrators would agree on the common goal of self-confident alumni with strong leadership skills, and some of the important elements in reaching that goal are to provide adequate resources for co-curricular programming, to reward faculty and staff who become involved with students outside the classroom, and to encourage the involvement of faculty, staff, and students on the campus.

Recommendations for Further Research

Although many aspects of involvement have been researched in the past, there remain several critical voids in the knowledge base. Students at community colleges continue to be overlooked in most research projects, as do commuter students. Many community colleges themselves are aware of the positive impacts of involvement, but the per-credit hour funding to two-year institutions is often significantly less than the state funding provided to four-year colleges and research institutions in most states. One area of research that would be beneficial would be a longitudinal study of community college graduates (both persons with only two-year degrees and persons who transferred into a senior institution) – examining their currentemployment status, volunteer positions,

community leadership, and similar accomplishments, and determining any possible links between these characteristics and their outside-the classroom involvement f when they were community college students. The AACC is making great strides in publicizing the accomplishments of two-year college graduates, but additional research on the outside-the classroom involvement of those students could be timely and beneficial. An examination of the community college experiences of those two-year college graduates who have now accomplished much could help make a difference in demonstrating to state and federal legislatures what an impact community college education can make. Additional funding would mean a wider range of involvement opportunities.

Another possible research area is an examination of the faculty-student involvement outside-the classroom at the community college, particularly in regards to adult students. The researcher predicts that a targeted examination of faculty-student involvement among adult students may generate some interesting results, as adult students typically seek more interactions with faculty. While it is true that adult students are less likely to get involved outside-the-classroom due to time restrictions, those students are often more aware of the possible benefits of involvement as they may know someone who got a job because of a professional connection, been in interviews when they were asked about their involvement, or other similar situations. Adult students are typically more self-confident, more inquisitive about some subject areas, more interested in developing career-enhancing opportunities, and more likely to pursue relationships with the faculty. It would be interesting to capture specific

differences in motivations toward involvement, time devoted to involvement, and the impact of that involvement for adult students at the community college.

Conclusion

There are many factors that vie for the time, attention and budgets of higher education faculty, staff, and administrators. However, many faculty and staff would agree that an emphasis put on students' learning could bring noteworthy benefits to all. The Study Group on the Conditions of Excellence in American Higher Education left no doubt what it believed was the central initiative, when the following statement was made:

> Perhaps the most important [condition] for improving undergraduate education – is student involvement…. There is now a good deal of evidence to suggest that the more time and effort students invest in the learning process and the more intensely they engage in their own education, the greater will be their growth and achievement, their satisfaction with their educational experiences, and their persistence in college, and the more likely they are to continue their learning (1984, p. 17).

This is especially true at the community college, where most students are commuters, and are more likely to have distractions away from the campus – such as families, jobs and homes. For students in this situation, it is especially important that they develop connections with their institutions – vis-à-vis their involvement in student organizations, study groups, or collaborative learning opportunities – that can assist them in knowing others with similar objectives, enjoying the experience, and completing their educational and developmental goals. For the students in the current study, those who were heavily involved in Varsity Athletes, Student Government, and Scholarship Groups did benefit from

their involvement in the form of improved leadership skills, better interpersonal interactions, and greater self-confidence.

How do colleges encourage students, especially commuter students at community colleges, to participate in inside- and outside-the classroom college experiences? Kuh et al. stated, “Students are more likely to take advantage of educationally purposeful out-of-class learning opportunities when both the institution and students devote time, effort, and resources toward this end” (1991, p. 366). It rarely happens by accident. For meaningful involvement to exist, it must be a priority of the institution and of its many constituencies. All – faculty, administrators, board members, staff and students – should attempt to provide the best possible scenario for student learning and development. If student involvement is the necessary conduit to successful student achievement in both the cognitive and affective domains, then institutions should be more purposeful in their policies, objectives, and activities in ensuring that student involvement is fostered and encouraged in multiple and varied ways. This current study has highlighted the positive benefits of co-curricular student involvement. If student involvement is taken seriously as a priority of a college or university, both funding and staffing resources must be committed to co-curricular programming. Further, if colleges can work toward fostering this kind of involvement, the meaning and richness of the student experience will likely be enhanced.

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Appendix

Johnson County Community College Student Survey: Fall 2002

Johnson County Community College
Student Survey: Fall 2002

1. **Age**: ___

2. **Gender**: ___male ___female

3. **What is your ethnic background?**

☐ White ☐ Black ☐ Hispanic ☐ Asian-American/Pacific Islander

☐ Native American ☐ Multi-Ethnic ☐ Non-US Citizen or Non-Permanent Resident

4. **How many credit hours have you <u>completed</u> at JCCC? ____**

5. **In how many credit hours are you <u>currently enrolled</u> at JCCC? ____**

6. **Have you completed classes at other institutions? If yes, please include the number of credit hours completed at other colleges or universities: ____**

7. **Are you the parent of children (under age 16) who live with you? ____ If yes, how many? ____**

8. **How many miles each way do you drive to come to campus? _____**

9. **What is your current cumulative grade-point average? _____**

10. **If you have a job (on- or off-campus), how many hours per week do you work?**

<u>On</u> campus Job - Hours/Week: ____ <u>Off</u>-campus Job - Hours/Week: _____

11. **How many hours <u>per week</u> (in an AVERAGE week during the regular semester) do you spend on campus in each of the following activities?**

Attending Class: ___ Studying on your own: ___ Studying with a group: ___

Attending meetings, practices, & rehearsals: ___ Attending organized activities & events: ___

Eating: ___ Socializing with other students: ___ Socializing with faculty or staff: ___

12. **What is your intended type of degree or certificate?**

☐ Associate of Arts ☐ Associate of Science ☐ Assoc. of Applied Science

☐ Kansas AVS/TC Articulated Assoc. of Applied Science Degree

☐ Certificate of Completion ☐ Professional Certification ☐ Not applicable

13. **What is your major area of study? _____**

14. What was your <u>original</u> reason and what is your <u>current</u> reason for enrolling at this institution? (Please choose ONE response in each column.)

<u>Original reason</u>:

- ☐ prepare to transfer to another college
- ☐ prepare to enter job market
- ☐ improve skills for present or future job
- ☐ prepare to change careers
- ☐ personal interest in an activity/self-imprvmt.
- ☐ other (please specify _____)

<u>Current reason</u>:

- ☐ prepare to transfer to another college
- ☐ prepare to enter job market
- ☐ improve skills for present or future job
- ☐ prepare to change careers
- ☐ personal interest or self-improvement
- ☐ other (please specify _____)

15. How frequently do you take part in the following activities in an average <u>month</u> during the regular semester?

Participation Areas	Never	Occasionally (1-2 times)	Often (3-4 times)	Very Often (over 4 times)
Campus wide activities or events (concerts, lectures, dances, etc.)				
Student Clubs and Organizations				
Student Government				
Debate Team				
Student Newspaper				
Honors Program				
Organized Scholarship Groups				
Organized Study Groups				
Service Learning Programs				
Volunteer Programs				
Varsity Athletics				
Intramural Sports				
Dance Team				
Student Ambassadors				
Campus Musical Groups				
Drama Productions				
Other (please specify _____)				

16. Below is a list of potential benefits of campus involvement outside the classroom. Please consider each statement carefully and mark the items you believe have been enhanced and/or developed in <u>you</u> through your participation in co-curricular activities at the college. Please also list the specific club, program, activity, sport, etc. most influential to this process.

Knowledge/Skills/Abilities	Please mark 1–3 or N/A "1": little impact "2": some impact "3": great impact N/A: Not Applicable	What <u>specific</u> activity, program, club, sport, or experience affected this trait?
Empathy (understanding the feelings & experiences of others)	1 2 3 N/A	
Integrity (maintaining a firm code of moral or artistic values)	1 2 3 N/A	
Social Responsibility	1 2 3 N/A	
Moral and Ethical Standards	1 2 3 N/A	
Self-Discipline	1 2 3 N/A	
Awareness & Understanding of Other Cultures	1 2 3 N/A	
Citizenship	1 2 3 N/A	
Self-Understanding	1 2 3 N/A	
Communication Skills (oral &/or written)	1 2 3 N/A	
Interpersonal Skills (ability to form positive relationships with others)	1 2 3 N/A	
Volunteerism (understanding the importance of helping others)	1 2 3 N/A	
Critical Thinking (to see something clearly in order to judge it fairly)	1 2 3 N/A	
Sense of Community	1 2 3 N/A	
Time Management (ability to manage multiple priorities & responsibilities)	1 2 3 N/A	
Self-Confidence	1 2 3 N/A	
Intellect	1 2 3 N/A	
Leadership	1 2 3 N/A	
Tolerance for people & thoughts different from yours	1 2 3 N/A	
General and/or Specific Knowledge	1 2 3 N/A	
Creativity	1 2 3 N/A	

17. Please rate the level of importance the following factors have had on your decision to get involved on campus.

Possible Factors	Not Very Important	Somewhat Important	Extremely Important	Not Applicable
To socialize or make new friends				
To develop my leadership skills				
To develop skills to assist in getting a job				
To develop my communication or public speaking skills				
To learn something new				
To develop health & physical fitness				
To be of service to campus and/or community				
To have fun				
Other (Please specify _____)				

18. How frequently do you take part in the following activities on campus in an average <u>month</u> during the regular semester – either last year or this year?

Informal Involvement	Never	Occasionally (1-2 times)	Often (3-4 times)	Very Often (over 4 times)
Dining on campus with a faculty person or college staff person				
Dining on campus with another student				
Working in the library with another student, staff person or faculty member				
Meeting another person on campus to work on an extracurricular project				
Out-of-class interaction with faculty or staff dealing with academic matters				
Out-of-class interaction with faculty or staff dealing with non-academic-related (social) matters				
Out-of-class interaction with students dealing with academic matters (e.g. organized study groups and collaborative learning)				
Out-of-class interaction with students on a social basis				

You have finished - thank you for your assistance!