

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Public Access Theses and Dissertations from  
the College of Education and Human Sciences

Education and Human Sciences, College of  
(CEHS)

---

7-28-2009

## The Relationship of Involvement in Co-Curricular Programs on Community College Student Success and Development

Jacquelyn R. Elliott

University of Nebraska - Lincoln, [jackiee@nwmissouri.edu](mailto:jackiee@nwmissouri.edu)

Follow this and additional works at: <https://digitalcommons.unl.edu/cehsdiss>



Part of the [Education Commons](#)

---

Elliott, Jacquelyn R., "The Relationship of Involvement in Co-Curricular Programs on Community College Student Success and Development" (2009). *Public Access Theses and Dissertations from the College of Education and Human Sciences*. 44.

<https://digitalcommons.unl.edu/cehsdiss/44>

This Article is brought to you for free and open access by the Education and Human Sciences, College of (CEHS) at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Public Access Theses and Dissertations from the College of Education and Human Sciences by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

The Relationship of Involvement in Co-Curricular Programs on  
Community College Student Success and Development

By

Jacquelyn R. Elliott

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

Major: Educational Studies

(Educational Leadership and Higher Education)

Under the Supervision of Professor Ronald Joekel

Lincoln, Nebraska

July, 2009

The Relationship of Involvement in Co-Curricular Programs on  
Community College Student Success and Development

Jackie R. Elliott, Ed.D.

University of Nebraska, 2009

Adviser: Ronald Joekel

The purpose of this study was to determine the relationship between involvement in formal, college-sponsored, co-curricular programs and student success and development at the community college, with success defined as grade point average and overall student satisfaction with the college experience and with development defined as self-confidence, ability to manage emotions, and emotional independence from parents. The study took place at three public community colleges located in central Kansas. Ninety-four community college students who were involved in one of three formal, college-sponsored, co-curricular programs during their freshman year (student government, a service oriented program – Phi Theta Kappa, and intercollegiate athletics) were compared to 96 of their peers who were not involved in a formal, college-sponsored program of this type.

All students in the sample completed a survey that consisted of demographic, grade point average, satisfaction, involvement questions, and the Iowa Student Development Inventories of Developing Competence Self-Confidence Subscale, Managing Emotions, and Developing Autonomy Emotional Independence from Parents Subscale (Hood & Jackson, 1997a, 1997b, 1997c). Analyses consisted of evaluating the relationship between the variables.

Some marginal relationships were found among the groups; however, the analysis of the group membership and outcome measures controlled for these demographic differences. The analysis indicated that students involved in formal, college-sponsored, co-curricular programs had significantly higher grade point averages and satisfaction with the college experience. In

addition, the involved students proved to be more self-confident, better able to manage emotions, and more emotionally independent from parents. The results substantiate consistent findings in the literature that the involvement in college- or university-sponsored co-curricular programs has a positive impact on student success and development.

## TABLE OF CONTENTS

### CHAPTER

#### I. INTRODUCTION TO THE STUDY

Conceptual Underpinnings.....	1
Statement of the Problem.....	9
Purpose of the Study.....	11
Theoretical Base for the Study.....	11
Research Questions.....	15
Need for the Study.....	15
Overview of the Study.....	17
Limitations of the Study.....	20
Definition of Key Terms.....	22
Significance of the Study.....	24

#### II. REVIEW OF THE LITERATURE

Introduction.....	26
Student Development Theories.....	26
Student Involvement Studies.....	35
Summary.....	51

#### III. METHODOLOGY

Purpose of the Study.....	56
Location of the Study.....	57
Population and Sample.....	60
Research Procedures.....	62
Instrumentation.....	66
Data Collection and Analysis.....	70
Research Questions and Hypothesis.....	75
Study Hypothesis.....	79

#### IV. RESULTS OF THE STUDY

Review of Research Design.....	80
Population and Sample.....	80

Demographic Data Analysis .....	81
Hypothesis Results .....	84
Summary .....	95
V. SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND SUGGESTIONS	
Summary .....	96
Conclusions .....	98
Recommendations .....	99
Suggestions for Further Study.....	104
REFERENCES .....	105
APPENDICES .....	115
A Instrument .....	116
B Statement of Informed Consent.....	125
C Correspondences with Subjects, Advisors, and Coaches .....	127
D Support Letter.....	133
E Pilot Study Results.....	134

## LIST OF TABLES

Table 1	Summary of Student Involvement Research Relevant to the Study.....	52
Table 2	Summary of Community Colleges Used in the Study.....	60
Table 3	Construct of Student Success and Development in College .....	70
Table 4	Study Response Rate .....	73
Table 5	Response Rate: Breakdown of involved students by co-curricular activity .....	73
Table 6	Final Study Sample .....	74
Table 7	Final Study Sample .....	81
Table 8	Sample Gender and Age .....	83
Table 9	Summary of Demographic Characteristics by Group.....	84
Table 10	Mean Grade Point Average .....	86
Table 11	Grade Point Average.....	87
Table 12	Mean Overall College Satisfaction.....	88
Table 13	Overall College Satisfaction.....	89
Table 14	ANOVA for Self-Confidence.....	90
Table 15	Isolated Means for Self-Confidence .....	91
Table 16	ANOVA for Ability to Manage Emotions .....	91
Table 17	Isolated Means for Ability to Manage Emotions .....	92
Table 18	ANOVA for Emotional Independence.....	93
Table 19	Isolated Means for Emotional Independence .....	94

## CHAPTER ONE

### STATEMENT OF THE PROBLEM

#### **Conceptual Underpinnings**

##### *Assessment in American Higher Education*

Born of public policy mandates during the economic slowdown in the mid 1980s (Hutchings & Marchese, 1990), assessment of student outcomes had become a widespread practice, encompassing both public and private institutions. Although assessment had been one of the principle thrusts in American higher education, relatively few assessment activities focused on the impact of co-curricular programs.

The term assessment carries many meanings. Perhaps the most comprehensive definition of assessment was offered by Erwin (1991): “. . . the systematic basis for making inferences about the learning and development of students. More specifically, assessment is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students’ learning and development” (p.15). Through the use of such assessment activities, institutions were acknowledging the importance of accountability in the academy.

The original goal of assessment in the public sector was to measure academic attainment. In the mid 1980s for example, the states of Texas, Florida, and Georgia required students in all public colleges and universities to demonstrate “college level skills” in order to advance to their junior year. In recent years, the trend shifted from this type of simplistic assessment to a more complex approach that encompassed factors beyond normative testing of academic skills, including outside evaluation, one-on-one meetings, and criterion-based instruction. By 2001, most states had mandated some type of assessment of institutional effectiveness, as did all regional accrediting agencies (Banta, 2005).



Over the past 10 years both public and private institutions have implemented their own assessment programs. At many of these institutions, assessment generally goes well beyond the administration of standardized tests (Ewell, 1993). For example, at Alverno College in Milwaukee, Wisconsin, assessment activities encompassed a multiplicity of forms. These included objective and subjective measures, student self-assessment, feedback, external assessment, and assessment in a variety of settings, including one-on-one communications and group interaction (Hutchings & Marchese, 1990).

According to the American Council of Education, public and private institutions in nearly all 50 states were active in assessment as of 2000 (Banta, 2005). In a study conducted by the National Association of Student Personnel Administrators (Woodward, Hyman, Distinon & Jamison, 2003), 98% of the 821 responding institutions, from both the public and private sectors, reported that they had some type of institutional assessment program in place at the time of the survey. Banta (2005) indicated that not only did most states require some type of assessment effort, but all of the regional accrediting agencies did so as well. Accountability was the most frequently given reason for assessment on the campuses, followed by curricular reform, academic reorganization, and accreditation (Banta, 2005).

Current literature in the assessment arena indicates that, in addition to state-based and accreditation association-based requirements for assessment and public accountability, there was a growing movement to develop a national assessment effort (Ewell, 2007). A panel of governors promoted this movement, hoping to develop “performance-based assessment of the ability of graduating college seniors in state colleges and universities to think critically, communicate effectively and solve problems” (Ewell, 2007, p. 16). The enactment of the 1990 “Student’s Right to Know” legislation, which required all colleges and universities to publish statistics such

as graduation rates, may also be viewed as a early form of national assessment accountability (Ewell, 2007).

Although the increased emphasis on assessment activities still focused on academic outcomes, it can be argued that issues such as graduation rates and student academic performance were related not just to classroom learning, but to such factors as the quality of student life and student satisfaction with the institution (Tinto, 1987). These issues, in turn, were closely aligned with the co-curricular component of the university as demonstrated by researchers such as Astin (1975, 1977) and Pascarella and Terenzini (1991). Until recently, assessment literature made scant mention of student affairs, student development, and the co-curricular experience. Nor had it looked at the relationship between co-curricular activities and the academic mission of the institution (McCluskey-Titus, 2003). Thus, in spite of the call for integration of academic and co-curricular life (Carnegie Foundation for the Advancement of Teaching, 1990) and mounting evidence indicating the contributions of co-curricular programs to student psychosocial development (Pascarella & Terenzini, 1991) and cognitive development (Magolda, 1992; Terenzini, Pascarella, & Blimling, 1996), co-curricular involvement was often not considered in overall assessment efforts.

In summary, most comprehensive assessment efforts to date have involved student academic outcomes as opposed to student development or psychosocial growth (Ewell, 2007, RiCharde, Olney & Erwin, 1993). Little attention has been paid to assessing the developmental mission of colleges and universities, even though research indicated that co-curricular involvement has a major positive impact on the overall college experience for students (Ewell, 2007).

### *Assessment of Student Psychosocial Outcomes*

Student psychosocial development was generally recognized as a major component of the mission of American colleges and universities. Prominent theorists such as Kohlberg, Chickering, and Perry conducted substantial research in this area (Pascarella & Terenzini, 1991). The type of outcomes specified by these researchers varies, but perhaps was best summed up by Chickering's (1969) seven vectors of psychosocial development: achieving competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, and developing integrity. In general, these vectors represented the psychosocial goals of student development.

An emphasis on life outside the classroom and student development was not new. Looking as far back as the colonial college period, historians have identified the concept of "the collegiate way of life," whereby American colleges were concerned with students' moral and spiritual development as well as their intellectual development (Rudolph, 1962).

With the onset of Jacksonian democracy and the eventual movement from an agricultural to an industrial-based economy, a more egalitarian and utilitarian paradigm began to pervade American society. Existing institutions of higher education were not immune from the impact of these changes. As society became more complex, more egalitarian, and more goal-oriented, so did its institutions of higher education. "The increased complexity in both society and post-secondary education required new and innovative approaches to working with college students, and there was an increasing concern for student's extracurricular life and related experiences" (Miller, 1982, p. 7). As American colleges and universities evolved along with American society, they emphasized and valued growth that went beyond academic success to include:

increased self-understanding; expansion of personal, intellectual, cultural, and social horizons and interests; liberation from dogma, prejudice, and narrow-

mindfulness; development of personal, moral and ethical standards; preparation for useful and productive employment and membership in a democratic society; and the general enhancement of the quality of graduates' post college lives (Pascarella & Terenzini, 1991, p. 162).

The historical evolution and growth of American colleges and universities paired with the increased complexity of American society led to the student personnel movement and the creation of the position of student affairs officer (Miller, 1982). Student affairs divisions were now charged with the psychosocial development of students or, as Miller stated, "The primary responsibility of student affairs professionals is to assist students in their personal growth, development, and education . . . accomplished through means other than instruction in an academic discipline" (1982, p. 10). Student affairs and its developmental mission have been defined by Miller and Prince as "the application of human development concepts in post secondary settings so that everyone involved can master increasingly complex developmental tasks, achieve self-direction, and become interdependent" (1976, p. 3) and by Stanford (1992, p. 17) as "a process by which traditional college-age students (18-24 years of age) mature, grow and develop psychologically and psychosocially."

Although there was general agreement among student affairs professionals and researchers that involvement in co-curricular programs did have a positive impact on student participants and that the level of a student's involvement in the college experience was correlated with a variety of developmental dimensions, (Angelo, 1988; Astin, 1988; Pascarella & Terenzini, 1991), relatively little research measured the qualitative outcomes of participation in co-curricular programs. In addition, as Astin noted (1998), there was a need for additional research that examined the impact of different types of involvement on students.

Those studies that have assessed student development and student involvement have generally focused on a single dependent variable, such as student satisfaction, retention, or grade point average, coupled with a single independent variable, including involvement in one specific type of co-curricular program. Very few notable studies address multiple dependent variables tied to multiple independent variables.

The Study Group on the Conditions of Excellence in American Higher Education (1984), in its influential report entitled “Involvement in Learning” recognized this lack and called for American higher education to begin assessing the effects of co-curricular programs. It recommended specifically that the benefits that accrue to students who are involved in on-campus activities be assessed and measured. The general lack of student development assessment efforts, coupled with research evidence that cognitive and non-cognitive factors interact closely (Pascarella & Terenzini, 1991), underscored the need for more assessment activities in the student affairs area.

Perhaps one of the reasons for this relative dearth of assessment activities in student affairs was the difficulty in measuring student development. Unlike the traditional curricular approach to assessment, which largely measures cognitive growth and development, assessment in student affairs required the measurement of student growth in the affective realm, creating significant complexities in measurement (Mines, 1985). Attitudes, values, self-concepts, aspirations, and personality dispositions were extraordinarily difficult to measure directly. The assessment of psychosocial development relied on constructs created by the researcher. These constructs, which purport to measure developmental objectives, posed additional measurement difficulties beyond those encountered in traditional performance-based assessment.

Added to the methodological difficulties inherent in assessing affective development was the absence of unanimous agreement on the desired outcomes of student development. There was little unanimity across the student affairs profession as to exactly what the specific goals and missions of programs in the student affairs area should be. Student development programs were generally viewed as being co-curricular, or outside the traditional classroom environment (Kuh & Schuh, 1991). Whereas, in a chemistry course, it was relatively easy to agree on and measure desired outcomes, for example through performance on an objective-measure test; however, agreeing on and measuring the desired outcomes and developmental value of participation in student government, leadership development programs, or volunteer services was extremely difficult.

One of the first and perhaps most significant books dealing with the difficulties and complexities of assessing student development was *Assessing Student Learning and Development* (Erwin, 1991). Although primarily a methodological handbook, Erwin did address some of the difficulties inherent in measuring affective growth and development. He noted three dimensions: attitudinal, personal, and social, which he believes educators consider when they discuss “developing the whole student,” and presented a variety of conceptual approaches which might be utilized in such an undertaking. Erwin identified five factors that make the assessment of affective outcomes so difficult:

First, developmental objectives cannot be measured directly, but only indirectly, through behavior that is representative of the attitude or value.

Second, it usually takes longer than one semester to inculcate changes in development.

Third, the terms or constructs in these areas are still vague and imprecise.

Fourth, some people, such as parents, may perceive affective objectives as indoctrination,

not education.

And fifth, concerns of privacy are appropriately raised (1991, p.43).

In summary, despite the widespread consensus that one of the goals of American higher education was the holistic development of college students (Boyer, 1990, Miller, 1982), and that the development and implementation of co-curricular programs by student affairs professionals was designed to foster such development (Ewell, 1991), a gap existed in the knowledge of the impact of co-curricular programs on students. “Most institutions purport to enhance this ‘holistic’ perspective of education; yet many lack the expertise to assess their effectiveness in these difficult-to-define areas” (Erwin, 1991, p. xvi).

The sparsity of assessment efforts in student affairs had proven particularly problematic in light of economic retrenchment in higher education. According to El-Khawas (1994), “nearly every college and university in the country has experienced a period of reductions and downsizing; and, frequently, non-academic components of the institution experience the majority of these cuts, with student affairs staffs and programs constituting frequent targets for disproportional cost cutting” (p. 6) As Chickering and Reisser (1993) noted, “During the 1980s and 1990s, changing demographics and reductions in state, federal, and local funding forced many institutions to reduce or reorganize student development functions” (p. 426).

Student affairs divisions have historically neglected to document the value of developmental programs to both students and the institution. Without the ability to demonstrate the validity and effectiveness of such programs and their value and worth to students, the existence of many of these programs may be endangered (Ewell, 2007).

### *The Impact of Participation in Co-Curricular Programs*

Studies have explored, in a limited fashion, the developmental effects of co-curricular programs. Pascarella and Terenzini (1991) in their summary of the psychosocial affects of college identified involvement in campus life as positively affecting such psychosocial or affective areas as identity and self-esteem (p. 206). Astin (1977, 1984, 1988, 1993) likewise detailed a number of ways in which student involvement enhances psychosocial student growth. In an older study, Winston (1966) concluded that out-of-class experiences were responsible for approximately 70% of what a student learned in college.

The research was also clear that student psychosocial development was a critical component of what American higher education had come to value and strive for: the education of the whole person (Astin, 1985; Boyer, 1987; Kuh et al., 1991; Kuh & Schuh, 1991; Pascarella & Terenzini, 1991; Winston, Barney, Miller, & Dagley, 1988). Astin noted that “affective development was also regarded as important by many institutions. This included emotional maturity, tolerance, empathy, and leadership ability” (1985, p. 67).

### **Statement of the Problem**

Two trends, with occasional dips, have continued to rise over the last 20 years in higher education. One was the growth in diversity brought about by the growing belief that a college education was a necessity; the second was the growing separation between the academic life of the student and his or her extracurricular life (Kuh, 1991). El-Khawas (1996) described the new diversity of the 1990s, including “older and traditional age; Asian American, Hispanic, African American, and Native American; men and women; gay, lesbian, and bisexual; full-time and part-time; commuter and residential” (p. 65). She also predicted the growth of new categories in recent years. These new categories included a growing number of students with less tangible



connection to the bricks-and-mortar campus. They were mobile, part-time, and diverse in all the ways of the 1990s, intermittent, and had differing objectives (p. 66). Many educators thus began to question how the changing student population along with increased distant learning options impacted the traditional post-secondary educational setting and student involvement in co-curricular (extracurricular) activities and programs, which were considered important for student development.

In a 1990 Carnegie Commission report, *Campus Life: In Search of Community*, Boyer (1990) indicated that throughout the history of American higher education, a great deal of attention had been given to the concept of “life outside the classroom” in American higher education. In an earlier work, Boyer (1987) emphasized the importance of out-of-classroom experiences, stating, “The effectiveness of the undergraduate experience relates to the quality of campus life and is directly linked to the time students spend on campus and the quality of their involvement in activities” (p. 180). In another work, Winston and Miller (1994, p. 3) argued that a “quality educational experience for college students includes both formal academic learning and personal development outcomes.”

According to Evans (1998), co-curricular referred to non-academic experiences sponsored, sanctioned, or supported by the college or university. Such experiences included participation in student clubs and organizations, intramural and intercollegiate athletics, student government, leadership programs, community service programs, and so on (Evans, 1998). Co-curricular involvement was particularly significant given the extent of student participation in such activities at most colleges and universities. In a study conducted by the American Association of Community Colleges (2000), 96% of the students surveyed had participated in some type of co-curricular program during the fall 1999 semester. Despite the attention paid to

the co-curricular, however, relatively little research and assessment has been conducted regarding the impact of student involvement and the community college experience.

### **Purpose of the Study**

The purpose of this study was to examine the relationship of participation in formal, college-sponsored, co-curricular programs on the academic success, as measured by grade point average and overall satisfaction with the college experience, and personal development of community college students. Community college students who participated in one of three formal, college-sponsored programs and a comparison group of students not involved in formal, college-sponsored programs of this type were examined on indicators of success and development including: academic achievement as measured by grade point average, satisfaction with the overall college experience, self-confidence, the ability to manage emotions, and emotional independence from parents. The theoretical foundation of the study was grounded in the Involvement Theory of Alexander Astin (1984) and the Student Development Theory of Arthur Chickering (1969).

### **Theoretical Base of the Study**

This study was predicated on the theoretical work of Astin and Chickering. It attempted to establish a relationship between these theories by assessing the impact of involvement on first-year student's growth along the first three of Chickering's developmental vectors: developing competence, managing emotions, and developing autonomy. In addition, it investigated the relationship of student involvement to satisfaction with the overall college experience and academic success.

Astin's "Involvement Theory" (1984) provided a theoretical basis for investigating student involvement in the educational experience. Astin stated that involvement or active

engagement in academic and other activities was positively related to student learning and development. The theory also holds that both the quantity and quality of involvement are important in determining student outcomes and development (Astin, 1985). Quantity refers to the actual amount of time a student invests in the overall academic and co-curricular endeavor; quality refers to the intensity of the commitment the student devotes to the involvement (Astin, 1985). Astin defined a highly involved student as one who “devotes considerable energy to studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students” (p. 297).

The Student Development Theory of Chickering (Chickering, 1969, Chickering & Reisser, 1993) provided a framework from which to examine and assess the psychosocial development of students. Chickering’s theory offered a means of understanding the relationship of involvement in co-curricular activities by providing a detailed view of desirable student development outcomes.

Chickering (1969) theorized that development during adolescence and early adulthood occurred along seven developmental vectors: achieving competence, managing emotions, becoming autonomous, establishing identity, freeing interpersonal relationships, clarifying purposes, and developing integrity. He saw developmental growth as positive movement along these vectors and stated that colleges and universities could devise environmental conditions that either accelerated or retarded such development.

Chickering’s theory indicated that growth along the seven vectors was somewhat sequential, being generally accepted that individuals must have made some progress along the initial vectors before significant movement could occur on the subsequent ones. Consequently, the developmental changes expected of first-year students would generally be along the initial

vectors. Specifically the first two of his developmental vectors and moving into the third, developing competence, managing emotions, and developing autonomy, were held theoretically to preoccupy traditional-age college freshmen and to be necessary precursors to subsequent developmental tasks of early adulthood (Chickering & Reisser, 1993). One way of assessing the effectiveness of developmental, co-curricular programs, therefore, was to attempt to determine if these programs accelerated the accomplishment of these specific outcomes. Chickering's work offered a theoretical base for specifying desirable outcomes of college student development.

Chickering's first vector, developing competence, comprised intellectual, physical, and social competence as well as a general sense of competence, or ability to cope with one's environment (Chickering & Reisser, 1993). It was perhaps, as Chickering indicated the easiest vector to measure.

The second vector, managing emotions, entailed an awareness and understanding of one's emotions and the ability to control these emotions (Chickering, 1969). Winston, et al., (1988) indicated that positive growth along this vector required "controlling emotions so that they are expressed in socially acceptable, nondestructive ways" (p.15).

The third vector was moving through autonomy toward interdependence. At this level, individuals sought to become more self-directed and self-sufficient, thereby, ultimately reaching a moderate level of interdependence with family, friends, and other acquaintances (Chickering & Reisser, 1993). Autonomy was defined as "independence of maturity . . . it requires both emotional and instrumental independence" (Chickering & Reisser, 1993, p. 32).

Since it was not possible to measure these three vectors directly, it was necessary to operationalize them. In this study, the vector of developing competence was operationalized as student self-confidence with self-confidence being measured by the Iowa Developing

Competency Inventory's Self-Confidence Subscale (Hood & Jackson, 1997a). The vector of managing emotions was operationalized as performance on the Iowa Managing Emotions Inventory (Hood & Jackson, 1997b). The vector of developing autonomy was operationalized as performance on the Iowa Developing Autonomy Inventory Emotional Independence - Parents Subscale (Hood & Jackson, 1997c).

The literature indicated that Chickering's developmental vectors have been operationalized by some student affairs divisions through the use of developmental objectives related specifically to particular student affairs departments (Erwin et al., 1988). For example, one student activities office stated its objective as "helping students develop a sense of identity through involvement with organizations and attendance at workshops, lectures, etc." (p. 11), and for the residential life program, "to help students develop autonomy from family and peers" (p. 7). The use of such measures as self-confidence, academic success, and independence were similar ways of operationalizing Chickering's initial vectors.

The researcher included two additional factors that were not directly related to Chickering's vectors in the construct of student success. Those factors included academic success and overall student satisfaction with the college experience. Astin (1987) noted the importance of student satisfaction with the educational experience. He saw the degree of student satisfaction as a prime indicator of the effectiveness of the overall institutional environment. In addition, Astin and others found a correlation between the level of student satisfaction and such factors as academic success and retention (Astin, 1975; Kuh & Schuh, 1991; Light, 1990).

The construct of student success and development in college for this study was therefore composed of five factors: academic success, satisfaction with the overall college experience, self-confidence, the ability to manage emotions, and emotional independence from parents. All

factors encompassed prime components of what Erwin termed the “higher order reasoning and affective developmental outcomes . . . and knowledge outcomes” (1991, p. xvi) or what the National Association of Student Personnel Administrators (2006) characterized as the development of the whole person.

### **Research Questions**

The following overall research question was developed for this study: was there a relationship between participation in co-curricular community college-sponsored activities and student academic success, satisfaction, and development?

The following subsequent research questions were developed in order to guide the study:

1. Was there a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs?
2. Was there a relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs?
3. Was there a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs?
4. Was there a relationship between managing emotions and participation in formal, college-sponsored, co-curricular programs?
5. Was there a relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs?

### **Need for the Study**

A great deal of attention has been paid in recent years to the whole area of assessment in higher education, but the majority of assessment activity focused on student academic outcomes. Although major contemporary theories about student learning and development indicated that

student involvement was a crucial mediating variable in a variety of areas including student retention, academic achievement, and personal growth, little work had been done in the area of assessing student development or the impact of nonacademic experiences on students.

The research that has been done centers around simple, usually singular outcome measures such as student retention, grade point average, or student satisfaction. Many studies have established, for example, correlations between participation in student activities and student retention (Astin, 1975). During the 1980s, researchers began to take a more multi-dimensional approach to looking at outcomes of extracurricular programs, combining such measures as grade point average with self-concept (e.g., Walsh, 1985). Even institutions such as James Madison University that have institutionalized assessment efforts do not necessarily assess “the contributions of specific programs to student development” (RiCharde et al., 1993, p. 189).

In addition, as Astin (1984) noted, few, if any, studies have been conducted that compare different types of student involvement. In his seminal work on student involvement theory, Astin indicated that a needed next step in his theory would be to develop methodologies to compare different types of involvement and the impact on students. The majority of studies to date have investigated the consequences of a single program or co-curricular program, such as participation in student government or participation as an orientation peer advisor. Few studies have compared the relationship between different types of co-curricular involvement and overall developmental impact. Pascarella and Terenzini (1991) referred to the impact that different types of involvement within the same institution had on students as the “within college effect” of student involvement (p. 64). Many of the studies focused on just one or perhaps two dependent variables, for example, self-confidence, satisfaction, or grade point average, and few compared different independent variables or different ways of being involved. As Astin stated, “Clearly, one of the

most important next steps in developing and testing the involvement theory is to explore ways of assessing different forms of involvement” (1984, p. 305).

Furthermore, relatively few studies explored multiple outcomes or compared different types of student involvement, and relatively none explored specifically the impact of involvement on community college students.

Assessment of co-curricular programs was necessary to determine the value to students as well as to determine which type of program was most effective in meeting the developmental goals of the institution. Assessment results can and should guide program planning, personnel, and budget allocations (Erwin, 1991). With fiscal constraints frequently driving decisions in today’s colleges and universities, student affairs administrators must document the developmental impact of the programs they support and share this knowledge with the institutional community in order to gain campus-wide credibility and to compete successfully for declining resources. In addition, as Miller (1982) pointed out, the use of assessment in the student affairs area could prove to be a useful tool for enhancing the self esteem of the student affairs staff and in promoting their own professional development. Lastly, assessment can provide the data needed for program evaluation and subsequent program modification, improvement, or even program dissolution. Consequently, it becomes imperative that student affairs professionals begin assessing the impact of involvement in co-curricular activities on student success and student development outcomes.

### **Overview of the Study**

This research investigated the relationship between formal, college-sponsored, co-curricular involvement and community college student outcomes. The primary intent of the study was to determine if a relationship existed between student involvement in intensive, formally



structured, college-sponsored programs and community college student success and development in college. For this study, success was measured as grade point average and student satisfaction with the overall college experience, and development was measured by progress along Chickering's first three vectors, achieving competence, managing emotions, and developing autonomy. Successful student outcomes were operationalized by student grade point average and overall satisfaction with the college experience. Successful student development was operationalized using Chickering's first three developmental vectors specifically self-confidence, the ability to manage emotions, and emotional independence from parents.

Students involved in one of three distinct and formal, college-sponsored, co-curricular programs as a whole were compared to a comparison group of students not involved in formal, college-sponsored, co-curricular programs. The three co-curricular programs studied included Student Government Association, a service program (Phi Theta Kappa), and an intercollegiate athletic program (men's and women's basketball). All three of these programs can be described as intensive as well as formal; they were sponsored by the institution, required regular attendance and participation, and had certain program-specific expectations for all student participants.

These programs represented three types of common co-curricular programs in which contemporary community college students participate. The programs differed somewhat, however, in content and nature, in students' motivation for participation, in the characteristics of the students who participated, and in the potential impact on students. The use of a comparison group of students who had not been involved in any formal, college-sponsored, co-curricular program allowed the researcher to investigate possible differences between these formally involved students and students without formal co-curricular involvement.

An analysis of the literature revealed that student involvement matters; what it did not reveal very clearly was what kind of involvement mattered and what kind of outcomes resulted from participation in co-curricular programs (Pascarella & Terenzini, 1991). A study such as this could provide community college, college and university administrators with a tool by which to make informed decisions about program design and resource allocation.

The study was conducted with students from three Kansas public two-year community colleges with similar student population demographics and settings, including: Barton County Community College, Cloud County Community College, and Dodge City Community College. The community colleges are all located in rural areas, have student populations between 1,500 and 3,200, are accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools on Accreditation and School Improvement, offer associate's degrees, certificates and transfer programs, have a Carnegie classification of medium two-year, are open admission institutions, are governed by local elected board members, have residential student housing, and participate in the same athletic conference sanctioned by the National Junior College Athletic Association.

The study population consisted of sophomores enrolled at one of the three community colleges who, as first-time, full-time freshmen, participated in one of the three programs during the 2007-2008 academic year. A total of 94 involved students comprised of 27 students from Student Government Association, 34 students from Phi Theta Kappa, and 33 student-athletes were surveyed. In addition, a comparison group of 96 students who did not participate in any formal, college-sponsored, co-curricular programs during their freshman year were surveyed.

The three programs delineated above were selected to represent distinct types of first-year student involvement experiences outside the classroom. In the first instance, Student

Government Association, students were involved in activities specifically designed to enhance student interpersonal and leadership skills. In the second organization, Phi Theta Kappa, students were involved in a community service volunteer component integrated with social activities. In the third, intercollegiate athletics, the principal activity involved team athletic participation and competition under the supervision of coaches.

Student participants in these three community college-sponsored programs as a whole and students in the comparison group were compared on the construct of student success and development in college which was measured in several ways. An instrument was developed to investigate grade point average, student satisfaction with college, student self-confidence, the ability to manage emotions, and emotional independence from parents.

### **Limitations of the Study**

The researcher recognized certain inherent limitations in this study. First, since this was not a longitudinal study, with a pre-test and post-test format, but rather a “snapshot in time,” it was not possible to state unequivocally a cause and effect relationship between involvement in these programs and student success and development. It was theoretically possible that any differences found between students in the two groups (involved students and uninvolved students) on the dependent variables were pre-existing. Students may be attracted to programs of these types for a variety of reasons. Conceivably, students who were predisposed to becoming involved in formally structured, college-sponsored co-curricular programs may differ from their uninvolved peers on Chickering’s first three vectors.

Second, this study focused on students who were involved in formal, college-sponsored co-curricular programs. It did not account for other types of involvement that were not related to the curricular or co-curricular mission of the college. Specifically, part-time employment, either

on or off campus, has been shown to have a positive impact on student outcomes (Ewell, 2007). Student employment is often intertwined with the issue of socio-economic status; whereas, students who need to work while in college may not have the time to participate in co-curricular programs of the type studied here.

Third, as was clearly discussed by Pascarella and Terenzini (1991), it was virtually impossible to separate the effects of the formal involvement in the programs from the informal effects of student interaction with their peers and the program personnel. It was not possible to determine if student success and development could be attributable to the actual curricula and/or activities of the program or were simply a result of frequent and ongoing interaction with similarly-minded peers and mentoring adults. Since the three types of involvement being studied were different, any similarities between the three groups of involved students, as well as dissimilarities with the comparison group could be attributable to factors other than the specific characteristics of any one program.

Fourth, this study may not be generalizable to other institutions and other types of co-curricular programs. Differing institutional environments and differing developmental missions restricted the results of this study to these Kansas community colleges. Nevertheless, the underlying theoretical assumptions and methodology of this study, as well as the findings of this study, could be of assistance to other institutions that want to assess the relationship of co-curricular programs on students.

It was possible to control for some preexisting differences through statistical analysis using the demographic survey data. Some of the factors considered as intervening variables were controlled and included student age, gender, residence status (on- or off-campus), and college attending.

### Definition of Key Terms

The following definitions were used in this study:

*Co-Curricular*: co-curricular programs, sometimes referred to as extracurricular, were defined in this study as formal programs sponsored by the institution that have specific requirements for membership (Kuh, p. 8).

*Involved Student*: an involved student was defined as a student who participated in at least one co-curricular program.

*Uninvolved Student*: an “un-involved” student was defined as student who did not participated in any co-curricular programs.

*Community College*: the community college was defined as a two-year institution of higher education, generally public, offering occupational programs (employment preparation), transfer curriculum (credit toward a bachelor’s degree), and community education programs (American Association of Community Colleges, 2006).

*Open Admission*: open admission was defined as a college admission process in which only a high school diploma or General Education Development (GED) certificate are required for admittance (American Association of Community Colleges, 2006).

*Student Success*: student success in college was defined in this study as academic achievement as measured by grade point average and by student satisfaction with the overall college experience.

*Student Development*: student development in college was defined in this study as growth along the first three of Chickering’s vectors, achieving competence (self-confidence), managing emotions, and achieving autonomy (emotional independence from parents).

*Achieving Competency*: achieving competency was defined as intellectual competence, physical and manual skills, and interpersonal competence (Chickering, 1969).

*Interpersonal Competence*: interpersonal competence was defined as perceived self-confidence in relating to superiors and peers, and perceived self-confidence in understanding non-verbal communications and in conducting smooth communications (Chickering, 1969).

*Self-Confidence*: self-confidence was defined as self-assuredness in one's personal judgment, ability, and power (Chickering, 1969).

*Self-Confidence Subscale*: the Self-Confidence Subscale measured self-confidence in interacting with authority figures and peers and ease of communication with others (Hood & Jackson, 1997a).

*Managing Emotions*: managing emotions was defined as the increased awareness of emotions and the increased ability to manage them effectively (Chickering, 1969).

*Managing Emotions Inventory*: the Managing Emotions Inventory measured the ability to recognize emotions, to explore emotions, and to gain insight into emotions (Hood & Jackson, 1997b)

*Developing Autonomy*: developing autonomy was defined as establishing emotional autonomy, decreasing a need for reassurance and affection, and recognition of one's interdependence (Chickering, 1969).

*Emotional Independence from Parents*: emotional independence from parents was defined as freedom from continual and pressing needs for reassurance, affection, or approval (Chickering, 1969).

*Emotional Independence - Parents Subscale*: the Emotional Independence from Parents Subscale measured ability to make decisions independently from parents and without the need for approval or reassurance from parents (Hood & Jackson, 1997c).

*Student Satisfaction:* student satisfaction was defined in this study as student's reporting "satisfied" or "very satisfied" with their overall college experience using the Noel Levitz Student Satisfaction Inventory (Noel Levitz, 2002).

*Phi Theta Kappa:* Phi Theta Kappa was defined as an international organization for two-year college students that encourages academic achievement and provides opportunities for individual growth and development through participation in volunteer service and fellowship programming (Phi Theta Kappa, 2006).

*Student Government Association:* Student Government Association was defined as a nationally recognized student organization located on college and university campuses to serve as the official voice of the student body and to develop student leaders (American Student Government Association, 2006).

*Intercollegiate Athletics:* Intercollegiate athletics was defined as athletic competition organized and funded by institutions of tertiary education and includes the sports that are sanctioned by one of three collegiate sport governing bodies: the National Collegiate Athletic Association, National Association of Intercollegiate Athletics, and the National Junior College Athletic Association (NCAA, 2006).

### **Significance of the Study**

In summary, the researcher intended to contribute to the literature by studying the relationship of involvement in formal, college-sponsored, co-curricular programs with factors relating to community college student success and development.

In practice and theory, co-curricular experiences at the community college mirrored the traditional university and college experience. However, 87% of community colleges practice open admission, and community college students persist at a lower rate (38%) than those of

students at four-year colleges and universities (65%) (Snyder, Tan & Hoffman, 2006). It has been widely agreed that academically under-prepared students have represented a major population in the American community college for decades (Roueche & Roueche, 1999). The data demonstrated that 40% of first-time students entering the average community college were under-prepared for college-level work (National Center for Educational Statistics, 1996). This figure approached 70% at some community colleges for particular subjects such as English, reading and math (Roueche & Roueche, 1999). Furthermore, studies revealed that remedial student self-regulated learning and development behaviors were lacking (Roueche & Roueche, 1999). In the data from the Learning and Study Strategies Inventory, Ley & Young (1998b) found that remedial students used fewer self-regulation strategies and used them less frequently than non-remedial students. Additionally, remedial students were typically uncertain about their goals and had low self-efficacy toward some academic tasks (Thompson, 1998).

Consequently, movement along Chickering's first three vectors, enabled a student to begin to achieve self-confidence, manage emotions, and develop autonomy, and represent a skill necessary for under-prepared community college students and their development (Roueche & Roueche, 1999). Exploring the ability of co-curricular programs and student involvement in those programs to assist in progress along the first three vectors of Chickering's psychosocial model can provide a framework for understanding the possibilities.



## CHAPTER TWO

### REVIEW OF THE LITERATURE

#### **Introduction**

This study of co-curricular involvement of students was based on the college student development theories of two prominent higher education researchers and theorists, Chickering and Astin. The independent variable in this study, student involvement, related to Astin's work; three dependent variables of development in college were built upon the psychosocial developmental theory of Chickering, and the two additional variables related to the construct of student success, academic success and satisfaction, built upon the theory of Astin. Astin and others have found a correlation between the level of student satisfaction and such factors as academic success and retention (Astin, 1975; Kuh & Schuh, 1991; Light, 1990).

Pertinent literature also included numerous studies that focused on the issue of student involvement and the outcome of that involvement. Most of these studies explored the relationship between a specific type of involvement and a specific student outcome, for example, student satisfaction or student retention. Relatively few studies explored multiple outcomes or compare different types of student involvement, and even fewer explored specifically the relationship of involvement on community college students. Yet, the studies have demonstrated that involvement in co-curricular programs had a positive effect on student success and persistence in college.

#### **Student Development Theories**

##### *Astin's Involvement Theory*

Astin studied and wrote extensively in the area of student involvement in higher education (Astin, 1968, 1975, 1984, 1985, 1987; 1993; Astin, Korn & Green, 1987). Perhaps his

most significant work in this area was his theory of student involvement. This theory defined involvement as “. . . the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1984, p. 297). Astin referred to the academic experience in a broad sense that encompassed both classroom learning and out-of-class experiences.

Astin’s theory was predicated on five basic assumptions:

- 1) Involvement refers to the investment of physical and psychological energy in various objects.
- 2) Involvement occurs along a continuum.
- 3) Involvement has both quantitative and qualitative features.
- 4) The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program.
- 5) The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement (Astin, 1984, p. 298).

Astin’s theory presented a paradigm for viewing student participation in co-curricular activities, stressing the concepts of commitment and time. Commitment referred to the qualitative or content component of involvement, and time referred to the quantitative component. Learning and development were primarily factors of the degree of effort and energy committed by students to a particular learning experience, whether a chemistry course or a student affairs-sponsored developmental program. In Astin’s view, involvement was an active concept that required the student to invest time and energy. In *Achieving Educational Excellence*, Astin (1985) made the point that students were mostly interested in the “existential benefits” of

the college experience, meaning, among other things, the “subjective satisfaction associated with extracurricular and academic involvement, recreational activities” (p 21). This premise supported the significance of co-curricular involvement in higher education.

Astin’s theory served as a connector between pedagogical theory and student outcomes by providing “a link between the variables emphasized in these theories and the learning outcomes desired by the student and the professor” (Astin, 1984, p. 300). Astin stated that any program, whether academic or co-curricular, should provide students with intrinsic motivation to commit both the time and the effort to it. Programs that motivate students to make such a commitment were the most successful. The focus was on the student and her or his reaction to the program, rather than just on the program itself. Even a well-funded, sophisticated, co-curricular program will only meet its stated objectives if students were motivated to commit the time and effort necessary to succeed. Astin’s theory suggested that students need to be active, committed participants in the learning process.

Astin’s other works, particularly his study of college dropouts (1975) and his studies of the impact of college on students (1977, 1993), also related to his formal theory of involvement. In the former work, Astin determined that student involvement was a prime factor in keeping students in school; in the latter study, he determined that a number of factors related to college attendance, including involvement in academic honors programs, student government, and athletic programs, had an overall positive impact on student development. Astin, Korn, and Green (1987) also determined that involvement was directly related to students’ satisfaction with college and with retention. Astin summed it up best, perhaps, when he stated that “A considerable body of higher education research indicates that [these] various forms of involvement can have substantial effects on the student’s development” (1993, p. 71).

### *Chickering's Psychosocial Development Theory*

Perhaps the most widely known and applied theory of student development was Chickering's psychosocial model. Based on Erikson's identity vs. identity confusion stage of development, Chickering proposed seven vectors along which traditionally aged college students develop. The construct of "student success in college" was directly related to the theoretical framework for student development articulated by Chickering in *Education and Identity* (1969). In this work and his later work with Linda Reisser, *Education and Identity - Second Edition* (1993), Chickering established seven vectors of development that characterize the growth of late adolescents and young adults in higher education. These seven major areas of development included: achieving competence (including intellectual, physical, and social), managing emotions, becoming autonomous, establishing identity, freeing interpersonal relationships, clarifying purposes, and developing integrity.

Although Chickering stated that students may experience development along these vectors concurrently, there was an inherent hierarchy to the vectors. "Mastery of the first three vectors prepares the individual for the identity vector, which in turn paves the way for attention to the last three vectors" (Knefelkamp, Widick & Parker, 1978, p. 31). Implicit in his theory was that movement along all seven vectors was desirable and possible, and that one of the goals of the college or university was to foster such growth and development. Likewise, Chickering did not purport the vectors as being a straight line, rather he envisioned them as spirals or steps, and saw movement along the vectors in two dimensions, "direction and magnitude" (Chickering, 1979, p. 8). Movement along these vectors was the result of a constant series of challenges and responses. As Knefelkamp et al., stated, "The role of the environment provides the challenges or

stimulation which encourages new responses and ultimately brings about developmental changes” (1978, p. 21).

Chickering (1979) stated that of the seven vectors, the first three, achieving competence, managing emotions, and becoming autonomous, related directly to the construct of student success in college and represent central and critical developmental tasks that students must cope with during these years. In describing his concept of sense of competence in *Education and Identity*, Chickering noted college students’ increased confidence in themselves and their abilities, as well as “increased trust in their abilities” (Chickering, 1969, p. 34) and referenced the positive impact of satisfaction on the development of competence. Chickering compared competence to a pitchfork, “Competence is a three-tined pitchfork. Intellectual competence, physical and manual skills, and interpersonal competence are the tines. But the handle was most important. Without it, no work could be done, no matter how sharp and sturdy the tines. A sense of competence stemmed from the confidence that one can cope with what comes and achieve goals successfully,” (Chickering & Reisser, 1993, p. 53). Chickering suggested that the development of a sense of competence set the foundation for students to pursue other developmental vectors. Positive movement on this vector led to enhanced self-confidence as well as “increasing readiness to take responsibility and increasing openness, and increasing willingness to take risks with one’s self-esteem” (Chickering, 1969, p. 37).

Managing emotions, like competence, was crucial to student development. According to Chickering, managing emotions related to the acceptance of human emotions and the development of self control (Chickering, 1969). Chickering (1993) focused on four “toxic feelings”, which had implications for student life both inside and outside of the classroom, “(1) fear and anxiety, (2) anger leading to aggression, (3) depression, guilt and shame, and (4)

dysfunctional sexual or romantic attraction” (pp. 90-91). These toxic feelings were linked to many of the dysfunctional student behaviors including sexual assaults, violence, intolerance, and substance abuse.

The management of emotions began first with the actual experiencing of the various emotions associated with adolescence and accepting them as part of the normal psyche (Chickering, 1969). The ability to successfully control emotions such as anger, lust, hate, and love will not develop, Chickering stated, until they have been experienced and then accepted as normal and necessary. A successful integration of the emotional realm with the behavioral realm was the true task of this vector and, as Chickering pointed out, “Only by tentative testing through action or symbolic behavior can integration occur” (1969, p. 46). Referring students who have not yet fully achieved this integration Knelfelkamp, et al. stated, “. . . this limited ability to manage emotions is reflected in the common problems of residence hall damage, roommate conflicts, exploitive sexual encounters, and various forms of chemical dependency” (1978, p. 22), or, as Chickering noted, “When management of emotions is impaired, learning is hampered and achievement falls short of potential” (p. 46).

The third vector of the developmental theory included moving through autonomy toward interdependence (1993, p. 44). Autonomy represented dependence on others, while interdependence represented dependence on one’s self. The transition from autonomy toward interdependence required emotional and instrumental independence. Emotional independence occurred when there was a separation from a support group, such as parents, peers, and teachers. A student achieved instrumental independence once he or she was able to organize activities and learn how to solve problems on his or her own. Thus, thinking up ideas and then putting those ideas into action was instrumental independence (Chickering & Reisser, 1993).

The research on the impact of college life found that students do experience positive growth in college, and that this development occurred as a result of the characteristics and nature of the college experience (Pascarella & Terenzini, 1991). Chickering's theory provided a method for examining the changes and factors that impact student development. Chickering's research provided the framework of what development to anticipate and identified specific behaviors that were indicative of this development. It also helped define, in general terms, some of the conditions that affected development.

Likewise, it was important to note that development along Chickering's vectors was generally a result of some type of environmental stimulation (Knelfelkamp, et al., 1978). Interestingly, Chickering stated quite clearly that participation in athletics provided significant opportunities for positive movement along both the sense of competence vector and the managing of emotions vector (1993).

Chickering proposed six "Conditions for Impact," or ways that colleges and universities could encourage development, stressing that a wide range of developmental opportunities existed within higher education. While he treated these factors as theories and hypotheses, he asserted that "The substantial evidence that has accumulated . . . consistently validates those hypotheses" (Chickering & Reisser, 1993, p. 265). Of these six conditions, five were relevant to co-curricular programs and activities. His first factor, clarity and consistency of objectives, addressed the need for the development of community consensus and echoed the work of Boyer (1991) and Kuh et al. (1991). The second factor, institutional size, addressed the necessity for accessible settings and opportunities for individual participation. His third factor, curriculum and teaching, addressed the need for individualization and flexibility of the learning experience. His fifth factor, faculty and administration, stressed the need for increased interaction between students

and non-parental adult role models. Chickering's last factor, student culture, defined the appropriate response to "institutional authority and the accepted modes of interaction with faculty." (Chickering, 1969, p. 155).

Chickering's work suggested five major methods for promoting developmental growth:

- 1) Engage the student in making choices;
  - 2) Require interaction with diverse individuals and ideas;
  - 3) Involve students in direct and varied experiences;
  - 4) Involve students in solving complex intellectual and social problems;
  - 5) Involve students in receiving feedback and making objective self assumptions
- (Knelfelkamp, et al., 1978, p. 27).

Co-curricular programs possess, to varying degrees, components of the above strategies. Participation in co-curricular programs provided many of the theoretical conditions outlined by Chickering for developmental growth and student success. In sum, Chickering's work offered a road map for the investigation of the concept of success that takes into account student cognitive (grade point average), affective (self-concept, satisfaction), and behavioral (ability to manage emotions and independence) realms.

Additionally, Chickering also addressed the theory of Mattering vs. Marginality that simply put, stated that if students believe, whether right or wrong, that they matter to someone else, that they were the object of someone else's attention, and that others cared about and appreciated them, they were far more likely to persist and succeed. If students did not feel anyone cared about them or their success, if they felt ignored by the mainstream and unaccepted, they would feel marginal, and, therefore, were much less likely to succeed in college (Knelfelkamp, et al., 1978, p. 32).



Chickering's work provided a general framework from which to view student development. As Knelfelkamp, et al. (1978, p. 28) pointed out, "The strength of his work lies in his ability to convey the broad picture; the weaknesses stem from a lack of specificity." This vagueness had been the subject of criticism of researchers (White & Hood, 1989) who found little evidence supporting the theory after completing a factor analysis of scores designed to measure six of Chickering's vectors.

In an early study, Hood (1982) utilized an instrument to measure growth of students between their freshman and senior years on three of Chickering's vectors, developing purposes, freeing interpersonal relationships, and establishing identity. In this study, Hood found no significant change on the developing purposes vector, significant positive change on the freeing interpersonal relationships vector, and negative growth on the establishing identity vector. He suggested that the results of this study indicated that growth on some of the vectors may not take place until after college. The instruments used to measure the vectors in all three of the studies mentioned above were developed as part of the Iowa Student Development Project and were collectively known as the Iowa Student Development Inventories (Hood & Jackson, 1983).

Chickering did little to clarify exactly how growth in developing competence, managing emotions, or any of the other vectors was achieved. As Chickering stated years later after the publication of his first book, ". . . it is not particularly useful to try to move discussions of general theory to detailed levels of applications that might seem to be prescribed or generalizable" (Thomas & Chickering, 1984, p. 394). In addition, Chickering's theory was developed in a setting of predominantly white, traditionally aged college students (18-24). Thus its validity and applicability may be limited in today's environment of older and more diverse learners.

While relatively little research has been conducted on the theory, particularly in light of its widespread acceptance and influence, Chickering's work continues to be one of the most frequently quoted and used psychosocial developmental theories in higher education. This has been true not only in theory but also in practice. This theory, perhaps more than any other, continues to function as a framework for practitioners in the area of student affairs in higher education, perhaps primarily because it easily lends itself to practical application and utilization. This has been especially true of his "Conditions for Impact," which offers practitioners' six suggested areas where colleges and universities could create opportunities that can, in his words, "accelerate or retard development in each vector" (p. 144).

### **Student Involvement Studies**

Numerous researchers have investigated student participation in co-curricular activities and the relationship of such involvement. While the term involvement means many different things to researchers, perhaps the definition offered by Kuh, et al. defines the term most clearly: "... active participation in activities and events that are not part of the curriculum but nevertheless complement the institution's educational purposes" (1991, p. 7). Some have taken a more general approach to the issue of student involvement; others have looked at very specific types of involvement and specific student outcomes.

#### *General Involvement*

A report issued in 1984 by the National Institute of Education (Study Group on the Conditions of Excellence in American Higher Education) stressed as one of its major themes that student involvement was one of the keys to learning.

In his Carnegie Commission report, *Campus Life: In Search of Community*, Boyer (1990) indicated that throughout the history of American higher education, much attention has

been given to the concept of “life outside the classroom” in American colleges and universities. In an earlier work, Boyer (1987) emphasized the importance of out-of-classroom experiences, stating, “The effectiveness of the undergraduate experience relates to the quality of campus life and is directly linked to the time students spend on campus and the quality of their involvement in activities” (p. 180). In another work, Winston and Miller (1994, p. 3) argued that a “quality educational experience for college students includes both formal academic learning and personal development outcomes.”

Pascarella and Terenzini (1991) in their comprehensive review of the literature entitled *How College Affects Students* indicated that the research literature supported the claim that student involvement has a “significant and positive influence on various dimensions of general cognitive development” (p. 147). The literature also clearly indicated that student social and academic self-images were positively related to “involvement in the formal and informal academic and social systems of their institutions” (p. 192). The authors included co-curricular activities in the latter category.

In presenting their findings, the authors conducted a “narrative or explanatory literature review” (Pascarella & Terenzini, 1991, p. 9), utilizing a relatively subjective “weight of evidence” standard to compare the results of various studies. In analyzing their data, the authors chose to organize and structure their work around the different types of outcomes resulting from the college experience rather than around the factors in the college environment that cause or are related to the various outcomes. The outcomes they chose to focus on included: cognitive-psychological, cognitive-behavioral, affective-psychological, and affective-behavioral. They also used six guiding questions to assist in their analysis, questions centering around such issues as: what changes occurred during college, was the change the result of attending college, what was

the differential effects of different kinds of postsecondary institutions, what was the different outcomes within institutions, what was the different outcomes between institutions, and what was the long-term outcomes of college attendance (Pascarella & Terenzini, 1991).

Pascarella and Terenzini attempted to synthesize the recent literature on college impact in this study. For the purposes of the study, the evidence they presented was quite unwieldy and difficult to utilize due to the way the authors chose to organize their data. Nevertheless, this work was a comprehensive effort to summarize and synthesize the available data on college impact and, in general, lent credence to the widely-held belief that college attendance had an overall positive impact on students in a variety of ways. The authors, however, acknowledged certain limitations in their findings resulting from limitations in the literature itself. Most of the studies they reviewed dealt with traditional college students, many of the studies presented data from only one program or one institution that, consequently, may not be generalizable to the student population-at-large.

A review of the general literature in this area would be incomplete without a mention of the Involving Colleges Study (Kuh, Schuh, Whitt & Assoc., 1991). The theme of this qualitative study was the importance of student involvement to the overall educational experience. The primary focus of the study was student involvement in college, both curricular and co-curricular. The authors identified nine guiding questions that they used in their study. These questions focused on such factors as: institutional philosophy, culture, student body demographics, faculty involvement with students, co-curricular resources, institutional support for co-curricular activities, the nature and extent of student involvement, availability of on- and off-campus student employment, and other factors related to student involvement and student development. The authors then assembled a panel of experts to nominate colleges and universities that fit, in

the panel's opinion, the criteria established by the authors for "Involving Colleges," which included institutions that provided "high-quality out-of-class learning and personal development experiences for undergraduate students" (Kuh et al. 1991, p. 25). The list of colleges and universities was narrowed to 14 institutions that the researchers felt were a representative sampling of such institutions and that included large and small, urban and rural, public and private, single sex and coeducational, and church-affiliated and non-sectarian institutions.

Once the institutions were selected, a team of researchers conducted over 1,200 interviews with faculty, staff, and students at these institutions. The final report of the study looked at each of the 14 selected institutions on the basis of the nine guiding questions delineated above, and culminates with a series of conclusions and recommendations.

The primary focus of the study was student involvement in the life of the college, both curricular and co-curricular. In their report, the authors defined a "high quality out-of-class experience" as one that, although not part of the formal curriculum, nevertheless "complements the institution's educational purposes" (Kuh et al., 1990, p. 7). The authors also stated that these experiences contributed to the learning and personal development of students. This study reiterated the importance of student involvement in the educational experience and also stressed the importance that the role of community plays on campus.

By the authors own admissions, the institutions studied did not represent a scientific sample and they acknowledged that the schools studied were not necessarily the most successful nor the "most involving" colleges and universities in the country. Nevertheless, the depth of detail and the objective analysis of each institution, combined with the diversity of the sample of institutions studied, provided practical and valuable insight into student life and campus culture

at these institutions, and provided many examples of practices, programs, policies, and procedures that were easily transferable to other institutions (Kuh et al., 1990).

In another study, Erwin and Love (1989) found that certain environmental factors, such as participation in Greek fraternities and part-time work, were positively correlated with student performance on the Student Development Task Inventory-2 (SDTI-2), an instrument designed to assess three of Chickering's vectors, developing autonomy, developing purpose, and developing mature interpersonal relationships. In this study the authors acknowledged certain limitations including the lack of a longitudinal component, a lack of socio-economic data and parental information, and relatively small sample sizes.

Hood (1984), in a longitudinal study at the University of Iowa, administered an instrument designed to assess growth along three cognitive and three interpersonal dimensions between the freshman and senior years. In this study, approximately 1,000 freshmen completed one of the six instruments during freshman orientation in the summer of 1977; four years later the same students were asked to retake the same instruments as well as complete a demographic questionnaire. The completion rate for the follow-up in 1981 was between 60 and 80%, depending on the specific instrument.

The results of this study indicated positive growth on the cognitive dimensions over the four years. Of particular relevance to this study was the fact that the self-confidence subscale of the Erwin Identity Scale showed a significant positive relationship to active participation in student activities (Hood, 1984). Significant growth was also found on two of the interpersonal dimensions (identity and relationships). The third interpersonal measure, Developing Purposes, was less clear as the instrument used, Barratt's Developing Purposes Inventory, "was found to contain a number of weaknesses" (Hood, 1984, p. 18). Of particular relevance to this study was

the fact that the self-confidence subscale of the Erwin Identity Scale showed a significant positive relationship to active participation in student activities (Hood, 1984).

One of the difficulties with this study lay, once again, in the lack of clear definitions. The author cited evidence supporting a positive relationship between self-confidence and participation in student activities without defining specifically what was meant by participation in student activities. In addition, although the sample size of nearly 1,000 seemed large, it must be pointed out that each member of the sample completed only one of the six instruments in 1977. Consequently, the Developing Purposes Inventory, for example, was completed by approximately 167 freshmen out of a total of nearly 6,000. The study also failed to control for differing entry characteristics among the students or identify possible intervening and/or confounding variables that might have arisen during the four years between pre-test and post-test.

In the late 1980s, Ory and Braskamp (1988) compared 74 students involved in an academic “transition” program and 74 students in an academic “honors program,” with what they termed 77 “regular” students, i.e. students not involved in any particular, formalized, academic program. While most of the study assessed student attitudes toward a variety of academic concerns, the study did find that the students in the two special programs “appeared to get more for their effort than did the regular students” (p. 128) and that “active participation in these program activities led to greater academic and interpersonal gains” (p. 128). One of the research questions asked if students in the special academic programs were more involved in other areas on campus, for example, “art and music activities, clubs and student activities, and utilization of physical and recreational facilities” (p. 134). The study found that the students in the honors program were more involved in these activities than the students in the transitional program and

the transitional students, in turn, were more involved than the regular students. What the study never addressed was the impact that this co-curricular involvement had on the students and whether some of the differences found in the study may have been attributable to this co-curricular involvement.

In another study, Winter, McClelland, and Stewart (1981), conducted research of seven liberal arts colleges. The authors acknowledged that the selection of the sample was neither random nor scientific, but resulted from personal contacts and personal interests. One of their findings was that students who were involved in formal, university-sponsored co-curricular activities were more mature and had “stronger management and career decision-making skills” (p. 23). They also found that student-athletes at these institutions exhibited higher scores on the Test of Thematic Analysis than non-athletes. The Test of Thematic Analysis was an instrument developed by Winter and McClelland designed to assess the critical thinking abilities that were “supposed to be characteristic of the liberally educated person” (Winter, et al., 1981, p. 27).

Walsh (1985) determined that first-year students who participated in a student development group were more satisfied with their college experience, had higher grades, and possessed better self-concept than did a comparison group. In this study, however, only 27 of the 60 students in the experimental group completed the program. This drop-out rate of 55% may have affected the results. It was possible, perhaps even likely, that the 27 students who completed the program were more highly motivated, had more positive self-concepts, and were more skilled at the outset. In addition, the time span over which this change was measured was relatively short.

Williams and Winston (1985) conducted a study of the relationship of employment and participation in organized student activities to developmental task achievement. They found that



involved students reported greater independence and more appropriate educational plans than uninvolved students. They compared differences in developmental task achievement between students who participated in organized student activities and work and found, in general, that students who participated in activities were stronger in areas of interdependence and education, career plans, and lifestyle plans than students who worked but did not participate in student activities. The authors acknowledged that no cause-and-effect relationship was established because all measurement was done *ex post facto* (1985). The differences may have been pre-existing. In this study, the only measure of involvement was “active participation” as reported by the students. There was no attempt to define participation more clearly either quantitatively or qualitatively.

The Harvard Assessment Seminars (Angelo, 1988, Light, 1990) published a number of major findings that were directly related to this study: participation in volunteer work as well as part-time work did not negatively affect grades and has a positive effect on overall student satisfaction; participation in intercollegiate athletics had a somewhat negative effect on academic success, particularly for freshmen and sophomores; participation in athletics was positively related to both academic and social satisfaction; and involvement in other types of co-curricular activities, even among those who invest a great deal of time in these activities, did not have a negative effect on grades. Overall, when combining all co-curricular activities (work, athletics, and extracurricular), no negative effect on academic achievement was determined.

The Harvard study went far beyond issues of student involvement in the co-curricular life of the institution to include other issues such as relationships with significant others, foreign language study, and hobbies. The sample was 388 randomly selected Harvard undergraduates, representing approximately 6% of the total population. Of this total, 365 were interviewed by the

research team during the fall 1987 semester; during the spring 1988 semester, 359 of the original sample participated in follow-up interviews. While this study portrayed a comprehensive view of Harvard students, its generalizability to other colleges and universities was limited due to the academic eliteness of Harvard and the resulting academic and, frequently, economic selectivity of its student body. Nevertheless, the study provided a very valuable, in-depth look at the effects of a number of factors of student life at a major institution.

Stanford (1992) studied presidents of registered student organizations at two major state universities, comparing their performance on Winston and Miller's Student Development Tasks and Lifestyle Inventory (SDTI) to their level of involvement as measured by Winston and Massaro's Extracurricular Involvement Inventory. The results showed a significant, positive relationship between the level of involvement and performance on the "Establishing and Clarifying Purpose" scale of the SDTI. They showed a positive, but somewhat less dramatic, relationship to the other two scales measured by the SDTI, "Developing Mature Interpersonal Relationships" and "Academic Autonomy" (Stanford, 1992).

While this study was an interesting attempt to investigate the relationship between the theoretical constructs of Chickering and Astin, it was flawed by both design and reporting weaknesses. In the latter case, no return rates were given for the study. The article indicated that 81 students from one institution and 148 from another were participants in the study, but no population numbers were provided. Unfortunately, the study did not indicate as to what percent of the entire population these participants reflected. In the former case, no attempt was made at investigating a comparison group of students who were not organizational presidents nor was any attempt made to characterize or classify the types of organizations in which they were involved.

Smith (1993) investigated the relationship between participation in extracurricular activities and student development. Three outcome measures were assessed: academic autonomy, clarification of purpose, and developing mature interpersonal relationships. The study found a positive relationship between the first two outcome measures and student involvement and a mixed relationship between the last measure and involvement. This study focused only on college seniors, a group that has had nearly four years of exposure to the myriad of influences existing in the college environment.

It was clear, from the above studies that a high percentage of students were involved in the co-curricular programs at their college or university and that involvement did have a positive impact. It was equally clear, however, that significant methodological weaknesses in many of the above studies limited their usefulness. Sample sizes were small, definitions were often unclear, few studies looked at more than one institution, and none of the studies focused on community colleges specifically.

#### *Involvement and Academic Success*

A number of studies have focused specifically on the relationship between student involvement and academic success. In many of the studies, the definition of involvement varies. However, in most cases it can be related to the studies generically to mean participation in any variety of campus, or off campus, activity.

Going back to 1947, Stright recognized a positive relationship between involvement in co-curricular activities and academic performance. Hartnett (1965) found, however, no significant relationship between degree of involvement in co-curricular activities and academic performance in a study of over 600 students at a midwestern university. Pike (1991), after an

analysis of the literature investigating the relationship between student involvement and grades, found the results so inconsistent that he assumed the two to be unrelated.

A study by the College Board (2005) directly linked the influences of extracurricular activities on high-stakes tests. This study provided compelling evidence from the SAT, a national high-stakes test, that participation in extracurricular activities gave all students - including students from disadvantaged backgrounds, minorities, and those with otherwise less than distinguished high school academic performance - a measurable and meaningful gain in their college experience (Everson & Millsap, 2005).

Numerous studies have investigated the issue of participation in college athletics and its impact on such issues as academic achievement, student satisfaction, and developmental growth. The relationship between athletic participation, social participation, and grade point average and retention was explored by Hanks and Eckland (1976). While no definitive positive correlation was found between participation in college athletic programs and academic performance, there was a positive effect on educational attainment. Social participation in college (defined in this study as participation in the extracurricular program of the college, not including athletics), however, had direct, positive effects on both grades and academic attainment.

Ballantine (1981), in his review of the literature on athletic participation and academic achievement, found, in general, a positive correlation between athletic participation and academic achievement. He also found that participation in athletics was associated positively with the participant's aspirations and income and that a greater percentage of high school athletes versus non-athletes attend college. While an overall positive effect was shown to exist, Ballantine stated that further research needed to be done to clarify these points.

Hood, Craig, and Ferguson (1992) conducted a detailed study of the academic achievement of freshman student-athletes at the University of Iowa between 1980 and 1986. Their methodology was that each freshman athlete in their sample was matched with a non-athlete by ACT score or composite SAT score, gender, ethnicity, year of entrance to the university, and resident/nonresident status. The results of this study indicated that when entering characteristics are controlled, there was no significant difference in academic achievement during the freshman year for athletes and non-athletes. The researchers determined, however, that the average grade point average for athletes was significantly below that of the typical university student. This study purported that the reason for this was not participation in athletics per se, but the significantly lower entering academic characteristics of the athlete population.

Ryan (1989), utilizing data from the 1985 Cooperative Institutional Research Project Follow Up Survey, investigated the relationship between participation in intercollegiate athletics and satisfaction with the overall college experience, motivation to earn a college degree, increased interpersonal skills, and leadership abilities. The results of the study indicated that participation in intercollegiate athletics was positively associated with all four of these dependent variables, but most strongly with increased leadership abilities and satisfaction. No distinction was made in this study as to the particular sport, size of the athletic program, or scholarship status.

Sowa and Gressard (1983) administered the Student Development Task Inventory (SDTI) to 48 athletes and 43 non-athletes at the University of Virginia. They found no significant, overall differences between the two groups on achieving three developmental tasks measured by this instrument: developing autonomy, developing purpose, and developing mature interpersonal relationships. They did find some differences on some of the subscales of the instrument, for

example, mature relationships with peers in which the athletes scored significantly lower than the non-athletes. This study neglected to collect and consequently take into account demographic data and academic achievement.

In another study of student-athletes, Pascarella and Smart (1991) utilized Cooperative Institutional Research Project (CIRP) freshman data from 1971 and the CIRP Follow Up Study from 1980 to analyze 10 dependent variables including college academic achievement, satisfaction with college, and intellectual and social self-esteem. The results of this study indicated that “net of other factors, intercollegiate athletic participation has a positive impact on social involvement during college, satisfaction with college, interpersonal and leadership skills, and motivation to complete one’s degree” (p. 127). In addition, participation in intercollegiate athletics was found to have a modest positive effect on academic achievement.

While broad, this study does have some limitations which the authors admitted. First, the study only looked at male student-athletes, ignoring nearly 50% of the total student-athlete population. Second, this study, as those above, did not take into account the differences that may be associated with different types of sports (revenue-producing versus non-revenue-producing, for example), and the differences that may exist between highly recruited scholarship athletes and non-scholarship athletes. Lastly, there was no attempt made in this study to match or control for entering student characteristics, such as high school rank, SAT scores, or socioeconomic level.

The relationship between involvement and academic performance appears to be positive. Once again, however, the studies presented certain limitations that imputed either their credibility or their generalizability. Definitions remained unclear, sample sizes were often small, and student entry characteristics were often not taken into consideration.

*Involvement and Satisfaction*

A number of studies have focused specifically on the relationship between student involvement and student satisfaction. Like the studies on involvement and academic success, in many of the studies, the definition of involvement varies. However, in most cases it can be related to the studies generically to mean participation in any variety of campus, or off campus, activity.

Holland and Huba (1991) found that students who served as volunteer advisors exhibited greater satisfaction with the overall campus environment than a comparison group of non-participants. In this particular study, the experimental group was comprised of students who applied and were accepted to be orientation leaders; the comparison group was comprised of students who applied but were not accepted. Consequently, the experimental and comparison groups both exhibited motivation to become involved in the program. In addition, although the two groups were assumed to be similar, assignment to the two groups was not random, but the result of a subjective interview process. Thus, the results of this study would not be generalizable to the student body at large.

Cosgrove (1986), in an experimental study of student participants in a mentoring-transcript program for freshmen, found that the members of the experimental group (those who participated in the program) exhibited a higher level of satisfaction with the overall university environment. Cosgrove also cited less conclusive evidence that the members of the experimental group had exhibited greater movement along the first of Chickering's vectors, developing competence.

Pascarella, Terenzini, and Wolfle (1986), demonstrated that a higher level of satisfaction was found among freshmen who participated in freshman seminar programs. In a study of social

isolation of college students, Keegan (1978) found a positive correlation between participation in extracurricular activities and student satisfaction with social life, living environment, and undergraduate major. This study, conducted at Hampshire College in Amherst, Massachusetts, was designed to explore the reason for the high attrition rate (nearly 40%) at this innovative, small college. While the study focused on the 407 students who withdrew from Hampshire between 1973 and 1975, only 31 students were interviewed by telephone, resulting in a small sample size.

Astin (1985) found that students who participated in co-curricular activities of virtually any type were more likely to be satisfied with their overall college experience than students who were uninvolved. In his 1977 study, he found that members of Greek social fraternities and sororities were more satisfied with their college experience than non-members. In a later work, Astin (1993) concluded that involvement was associated with satisfaction with the college experience.

The Institute for Research on Higher Education (1994) found in a study of over 6,000 graduating seniors at 20 private colleges and universities that “Satisfaction does matter: in general, a greater level of senior satisfaction is associated with a higher persistence for students after their first year” (p. 31). While this study did not investigate the relationship between involvement and satisfaction, it did support the notion that satisfaction is important and was related to student academic success.

In the area of student satisfaction, the evidence seemed to be most compelling. Involvement did appear to be positively related to satisfaction. Virtually every type of involvement studied (athletics, student government, co-curricular activities, work, and volunteerism) positively correlated with student satisfaction.



*Other Studies*

In a study of student participants in voluntary community service programs, Fitch (1991) found significant differences between students involved in some type of volunteer work and both uninvolved students and students who participated in other types of extracurricular activities, on three subscales of the Survey of Interpersonal Values. Specifically, volunteer students scored higher on the conformity and benevolence scale and lower on the independence scale than the other two groups. He attributed the higher score on conformity, and their lower score on independence to the volunteer students' sense of social responsibility and doing what is right. Their higher score on benevolence was attributed to their concern for the human condition as evidenced by their willingness to perform community service. Astin (1993) similarly found that participation in volunteer work had strong, positive correlations with growth in leadership abilities, degree aspirations, public speaking skills, and interpersonal skills.

Finkenbergl (1990) conducted a study of the effect on college women's self-concept and participation in a Taekwondo program. The overall result of participating in the martial arts training program showed a significant positive difference on a total self-concept score and on subscale scores measuring their perception of physical self, personal self, social self, identity, and self-satisfaction.

Macy (1994) suggested a model for the development of a service-learning program on a college campus. He postulated that, based upon his and others previous research, such a program would have a positive effect on students' values development.

Marcy (1986), in an article on the development of African-American students, indicated that all of the research evidence pointed to the fact that black students are less satisfied with their college experience than their white peers. She indicated that, based on the psychosocial Student

Development Theory of Arthur Chickering and the Student Involvement Theory of Alexander Astin, one way to increase the level of satisfaction for black students would be through more co-curricular activities targeted specifically at black students through “organizations and activities that exist for the express purpose of representing black interests and culture . . .” (p. 36).

Bryant, Banta, and Bradley (1995), in a pilot study, administered a newly developed Quality and Importance of Recreational Services (QIRS) survey to over 2,500 students at six colleges and universities. The results indicated that over 95% of the respondents participated in some type of campus recreational activity on a weekly basis and that they reported a variety of benefits, ranging from increased self-confidence and respect for others to physical fitness from such participation.

In a review of student development studies from 1973-1987, Thrasher and Bloland (1989) concluded that “intentional inventions,” i.e., programs specifically designed to aid student’s development, resulted in, among other things, higher self concept and satisfaction as well as higher scores on autonomy, mature lifestyle plans, and interdependence subtasks of the SDTI. They also concluded that “incidental interventions,” including participation in student activities, led to “higher levels of interdependence, appropriate educational plans, mature career plans, and mature lifestyle plans,” and that “Interaction with faculty and fellow students led to higher levels of personal and intellectual development” (p. 553).

### **Summary**

In looking at the relevant literature as a whole, it is clear that certain conclusions can be drawn. It is apparent that involvement matters. Involvement has been demonstrated generally to have a positive relationship on developmental growth, academic achievement, grade point average, self-confidence, interdependence, and satisfaction with the overall college experience.

As Kuh and Schuh (1991) stated, “The evidence seems clear: students benefit significantly from being involved in the educational process” (p. 5). Participation in leadership development programs, athletics, and volunteer community service programs are all types of such involvement.

Table 1, below, summarizes the student involvement literature that is of relevance to this study. Most of the studies listed, unless otherwise specified, compared the involved group to students not involved in the specified activity or program listed in column two.

*Table 1*

*Summary of Student Involvement Research Relevant to Study*

<b>Study</b>	<b>Nature of Involvement</b>	<b>Outcome Measure</b>	<b>Relationship</b>
Erwin & Love (1989)	Fraternity	Student Development Task Inventory	Positive
	Part-time work	Student Development Task Inventory	Positive
Hood (1984)	Co-curricular Activities	Interpersonal Growth	Positive
Ory & Braskamp (1988)	Academic Transition Program	Academic & Personal Growth	Positive
	Academic Honors Program	Academic & Personal Growth	Positive
	Uninvolved Students	Academic & Personal Growth	No Relationship
Winter, McClelland & Stewart (1981)	Co-curricular Activities	Maturity	Positive
		Management Skills	Positive
Walsh (1985)	Student Development Program	Satisfaction	Positive
		Grades	Positive
		Self Concept	Positive
William & Winston (1985)	Active Participation in Organized Student Activities	Independence	Positive
		Developmental Tasks	Positive
Angelo (1988)	Part-time Work	Academic Performance	No Relationship
Light (1990)	Part-time Work	Satisfaction	Positive
	Co-curricular Activities	Academic Performance	No Relationship
	Volunteer Work	Academic Performance	No Relationship
		Satisfaction	Positive
	Varsity Athletics	Academic Performance	Slightly Negative
		Satisfaction	Positive

Study	Nature of Involvement	Outcome Measure	Relationship
Pace (1987)	Student Involvement	Social and Intellectual Development	Positive
		General Student Outcomes	Positive
Stright (1947)	Co-curricular Activities	Academic Performance	Positive
Hartnett (1965)	Co-curricular Activities	Academic Performance	No Relationship
Stanford (1992)	Student Organization Presidents	Student Development Task Inventory	Positive
Smith (1993)	Co-curricular Activities	Psychosocial Development	Positive
Macy (1994)	Service-Learning	Values Development	Positive
Hood, Craig, & Ferguson (1992)	Athletics	Academic Achievement	No Relationship
Hanks & Eckland (1976)	Athletics	Academic Performance	No Relationship
		Educational Attainment	Positive
	Co-curricular Activities	Academic Performance	Positive
		Educational Attainment	Positive
Ballantine (1981)	Athletics	Academic Achievement	Positive
Ryan (1989)	Athletics	Satisfaction	Positive
		Leadership Abilities	Positive
		Interpersonal Skills	Positive
Sowa & Gressard (1983)	Athletics	Student Development Task Inventory	No Relationship
Pascarella & Smart (1991)	Athletics	Social Involvement	Positive
		Satisfaction	Positive
		Degree Completion	Positive
		Academic Achievement	Positive
Holland & Huba (1991)	Volunteer Orientation Advisors	Satisfaction	Positive
	Control Group	Satisfaction	No Relationship
Keegan (1978)	Co-curricular Activities	Satisfaction	Positive
Pascarella, Terenzini & Wolfle (1986)	Freshman Seminar	Satisfaction	Positive
Cosgrove (1986)	Mentoring Program	Satisfaction	Positive
		Developing Competence	Positive
	Control Group	Satisfaction	No Relationship
		Developing Competence	No Relationship
Astin (1977, 1985)	Co-curricular Activities	Satisfaction	Positive
	Fraternities	Satisfaction	Positive
Fitch (1991)	Volunteer Work	Conformity Scale	Positive
		Benevolence Scale	Positive
		Independence Scale	Negative
	Co-curricular Activities	Conformity Scale	Positive
		Benevolence Scale	Positive
		Independence Scale	Negative

Study	Nature of Involvement	Outcome Measure	Relationship
Astin (1993)	Volunteer Work	Leadership Abilities	Positive
		Interpersonal Skills	Positive
Bryant, Banta & Bradley (1995)	Campus Recreation	Self-Confidence	Positive
		Respect for Others	Positive
		Physical Fitness	Positive
Finkenberg (1990)	Taekwando Program	Self-Concept	Positive

There were, however, some gaps in these studies. Most investigated just one type of involvement on a campus. The question, “Does the type of involvement make a difference?” was rarely addressed. In addition, a number of the studies used the term “active participation” without further definition as to the nature of the involvement or the amount of time committed.

Involvement may have meant participation in a formal, co-curricular program, or it may have meant attending a lecture. Many of the studies were based upon students’ self reporting of co-curricular participation, without a clear explanation of the exact nature of the involvement. In addition, many of the studies suffered from either small sample sizes or poor response rates. Few of the studies controlled for entry characteristics of the students being studied, and most of the studies took place at just one institution, which limited their generalizability. Furthermore, relatively few studies explored multiple outcomes or compared different types of student involvement, and relatively none explored specifically the impact of involvement on community college students.

Many of the studies focused on just one or perhaps two dependent variables, for example, self-confidence, satisfaction, or grade point average, and few compared different independent variables or different ways of being involved. As Astin stated, “Clearly, one of the most important next steps in developing and testing the involvement theory is to explore ways of assessing different forms of involvement” (1984, p. 305).

This study addressed some of these concerns by comparing involved community college students with students not involved in formal, college-sponsored, co-curricular programs on five variables that constitute student success and development.

## CHAPTER THREE

### METHODOLOGY

#### **Purpose of the Study**

This research explored the relationship between participation in formal, college-sponsored, co-curricular programs and student success and development. The goal of the study was to determine if involvement in college-sponsored programs related to community college student success and development. Community college students who participated as first-time, full-time college freshmen in at least one formal, college-sponsored, co-curricular program as a whole were compared to a comparison group of students not involved in formal, college-sponsored, co-curricular programs of this type on a number of indicators of success and development including: 1) academic achievement (grade point average), 2) overall satisfaction with the college experience, 3) self-confidence, 4) the ability to manage emotions, and 5) emotional independence from parents. The theoretical foundation of the study was based upon the Involvement Theory of Astin (1984) and the Student Development Theory of Chickering (1969).

The research hypothesis stated that students who participated in formal, college-sponsored, co-curricular programs will exhibit greater success and development than students not involved in these types of programs. The construct of student success in college was defined in this study as academic achievement as measured by grade point average and by student satisfaction with the overall college experience. Previous studies showed that students who were satisfied with their college experience were more likely to be retained and graduate than students who were unsatisfied with their college experience (Kuh, 2006). Kuh (2006) argued that institutions should focus on efforts to provide a connection between student expectations and

institutional performance in order to improve student satisfaction. The construct of student development was measured in this study by growth along the first three of Chickering's vectors, achieving competence (self-confidence), managing emotions, and developing autonomy (emotional independence from parents). One hundred forty-five community college students in one of the three co-curricular programs, as well as a comparison group of 180 uninvolved students were sent an instrument designed to assess student success as measured by grade point average, satisfaction, self-confidence, the ability to manage emotions, and emotional independence from parents. The term uninvolved students for the purpose of this study referred to students not involved in formal, college-sponsored, co-curricular programs.

### **Location of the Study**

The study was conducted with students from three Kansas public two-year community colleges with similar student demographics and settings, including: Barton County Community College, Cloud County Community College, and Dodge City Community College. The community colleges were all located in rural areas, had student populations between 1,500 and 3,200, were accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools on Accreditation and School Improvement (NCA), offered associate's degrees, certificates, and transfer programs, had a Carnegie classification of medium two-year, were open admission institutions, were governed by local elected board members, had residential student housing, and participated in the same athletic conference sanctioned by the National Junior College Athletic Association.

Barton County Community College was founded in 1965 and is situated outside the city limits near Great Bend, Kansas, a rural community of 8,325 residents located in the central part of Kansas. The college awards certificates and four associate degrees: Associate in General



Studies, Associate in Applied Science, Associate in Science, and Associate in Arts in 49 program areas (IPEDS, 2008). The undergraduate population of the college is 3,197 students of whom 52% are female (IPEDS, 2008). The average age of first-time, full-time freshmen is 19 (IPEDS, 2008). The average age of the overall student body is 26, and approximately 34% of the full-time freshman student body lives in on-campus housing (IPEDS, 2008). Since the college has open admission, ACT scores are not required for admittance, but ACT and ASSET (a standardized ACT placement test) scores are used for course placement, specifically to identify students needing remediation (Barton County Community College, 2008). The institution reported that 62% of entering freshmen need some type of remedial courses (IPEDS, 2008). The institution offers 20 co-curricular clubs and organizations for student participation and has 17 intercollegiate sports programs (Barton County Community College, 2008). The mission of the institution is “to deliver educational opportunities that improve the lives of students, meet the workforce needs of the region and strengthen its communities” (Barton County Community College, 2008).

Cloud County Community College was founded in 1965 and is located in Concordia, Kansas, a rural community of 6,579 residents located in the north central part of Kansas. Cloud County Community College awards certificates and four associate degrees: Associate in General Studies, Associate in Applied Science, Associate in Science, and Associate in Arts in 42 program areas (IPEDS, 2008). The undergraduate population of the college is 2,728 students of whom 53% are female (IPEDS, 2008). The average age of first-time, full-time freshmen is 19 (IPEDS, 2008). The average age of the overall student body is 28, and approximately 37% of the full-time freshman student body lives in on-campus housing (IPEDS, 2008). Since the college has open admission, ACT scores are not required for admittance, but ACT and COMPASS (a standardized

ACT computerized placement test) scores are used for course placement, specifically to identify students needing remediation (Cloud County Community College, 2008). The institution reported that 66% of entering freshmen need some type of remedial courses (Cloud County Community College, 2008). The institution offers 18 co-curricular clubs and organizations for student participation and has 13 intercollegiate sports programs (Cloud County Community College, 2008). The mission of the institution is “to be responsive to the educational, social, economic, and cultural needs of all the people of north central Kansas, by providing lifelong educational and learning opportunities, whose quality is established by rigorous and ongoing assessment” (Cloud County Community College, 2008).

Dodge City Community College was founded in 1966 and is located in Dodge City, Kansas, a rural community of 28,456 residents located in the southwest central part of Kansas. Dodge City Community College awards certificates and four associate degrees: Associate in General Studies, Associate in Applied Science, Associate in Science, and Associate in Arts in 38 program areas (IPEDS, 2008). The undergraduate population of the college is 1,812 students of whom 56% are female (IPEDS, 2008). The average age of first-time, full-time freshmen is 19 (IPEDS, 2008). The average age of the overall student body is 28, and approximately 33% of the full-time freshman student body lives in on-campus housing (IPEDS, 2008). Since the college has open admission, ACT scores are not required for admittance, but ACT and ASSET scores are used for course placement, specifically to identify students needing remediation (Dodge City Community College, 2008). The institution reported that 64% of entering freshmen need some type of remedial courses (Dodge City Community College, 2008). The institution offers 17 co-curricular clubs and organizations for student participation and has 13 intercollegiate sports programs (Dodge City Community College, 2008). The mission of the institution is “to provide

challenging and diverse opportunities for the pursuit of learning and to enhance personal and community development in a responsible, accessible, learner-centered environment” (Dodge City Community College, 2008).

Table 2 summarizes the characteristics of the community colleges used in this study.

*Table 2*

*Summary of Community Colleges Used in the Study*

<b>Characteristics</b>	<b>Barton</b>	<b>Cloud</b>	<b>Dodge</b>
Enrollment	3,197	2,728	1, 812
Percent FTE (full time equivalent)	52%	51%	41%
Number of academic programs	48	42	38
Average student age	26	28	28
Average freshman (full-time) age	19	19	19
Percent female	52%	53%	56%
Percent full-time freshmen living on-campus	34%	37%	33%
Percent freshmen needing remediation	62%	66%	64%
Number of co-curricular clubs and organizations	20	18	17
Number of intercollegiate athletic teams	17	13	13

### **Population and Sample**

The target population for this study consisted of community college sophomores (32 or more credit hours earned) enrolled at the institutions during the fall 2007 semester as first-time and full-time freshmen. The total population consisted of 2,065 students who were sophomores enrolled at one of the three community colleges used in this study during the 2008-2009 academic year. From the overall population, two separate groups were studied. One group consisted of sophomores who participated in Student Government Association, Phi Theta Kappa or an intercollegiate sport (men’s and women’s basketball) during their freshman year. Men’s and women’s basketball were chosen because all three colleges have both sports and compete in

the same conference. The other group consisted of a random sample of sophomores who did not participate in any formal, college-sponsored, co-curricular programs during their freshman year.

The study had a total sample size of 325 community college sophomores and consisted of 145 involved students and 180 uninvolved students. The involved student group was selected from 2007-2008 membership rosters for each of the co-curricular programs provided to the researcher by the advisors and coaches for those programs and consisted of 145 students. The 145 involved students included 30 Student Government Association members, 40 Phi Theta Kappa members, and 75 student-athletes. Membership rosters for Student Government Association revealed that ten students participated in the association at each college; consequently, all 30 Student Government Association members were included in the study. Membership rosters for Phi Theta Kappa revealed that 15, 13, and 12 students participated in the organization at the three colleges; consequently, all 40 Phi Theta Kappa members were included in the study. Membership rosters for men's and women's basketball from each college revealed that collectively 75 students participated in this intercollegiate athletic program. All students on the membership rosters for each of the co-curricular programs were included in the sample.

The uninvolved student group consisted of 180 students who did not participate in any formal, college-sponsored, co-curricular programs during their freshman year. Each institution in the study provided the researcher with a list of first-time, full-time freshmen enrolled at their institution during the 2007-2008 academic year along with membership rosters for all college-sponsored, co-curricular programs. Students who were selected as the involved student group were removed from the list. Additionally, any student listed on a membership roster as a member in any other co-curricular program was removed from the uninvolved student list. Of the final list, the researcher randomly selected 60 students from each of the three institutions to be

included in the sample of uninvolved students. The uninvolved student sample size was increased to allow for the fact that some students in this group might be ineligible to be considered uninvolved due to formal involvement in other campus programs or activities. This allowed the comparison group sample size to roughly equal the total involved student sample size. Comparisons were made between the involved student sample and the uninvolved student sample.

### **Research Procedures**

This study utilized an ex post facto research design whereas there was a control or comparison group, intact groups were used, and the treatment was not manipulated because it had already occurred (Gall, Borg, & Gall, 2003).

All of the students who participated during their freshman year as first-time, full-time students (2007-2008) in one of the three co-curricular programs were surveyed during the fall semester of their sophomore year. The web-based survey included a demographic section, a question about grade point average, a series of items addressing involvement, a series of items on satisfaction, a series of items addressing student self-confidence, a series of items dealing with student ability to manage emotions, and a series of items regarding emotional independence from parents. A cover letter explaining the nature of the study (Appendix C), requesting the students' cooperation, and assuring confidentiality accompanied the survey. A follow up correspondence to those who did not respond to the first request was sent. In addition, a sample, comparison group of students was also sent the survey.

Analyses of the results included descriptive statistics and multiple analyses of variance to determine if any significant differences existed among the five dependent variables (grade point average, student satisfaction, self-confidence, ability to manage emotions, and emotional

independence from parents) across the two independent variables (involved and uninvolved students). The data were analyzed to determine whether a statistically significant difference existed between the students who participated in one of the three selected programs as a whole and the uninvolved students on the variables of grade point average, overall satisfaction with college, self-confidence, ability to manage emotions, and emotional independence from parents.

### *Co-curricular Programs*

Student involvement in formally structured, college-sponsored, co-curricular programs was the independent variable in this study. Astin's Theory of Student Involvement (1985) was predicated on the belief that the amount and the intensity of the involvement is the critical element in student development. The three co-curricular programs in this research were selected on the basis of their formal structure, national association affiliation, intensity of the program, and the level of involvement required for membership and participation.

### *Student Government Association*

Student Government Association (SGA) represents a formal, college-sponsored student organization that serves as the representative governing body of the student population. It is composed of elected officials and selected representatives. The main purpose of the Student Government Association is to provide a voice for the student population on a college campus, provide oversight for other student organizations, allocated funds to student organizations, and to plan and deliver student activities (American Student Government Association, 2008). The goal of the association was to provide leadership learning and development opportunities for students. Any student interested in serving must campaign, run for a seat, and be selected to membership by a general student body election. Typically, Student Government Association membership at the community college includes anywhere from 12 to 15 representatives comprising the

following: freshmen class representatives, sophomore class representatives, and other members at-large representing various interest groups such as other officially recognized organizations and clubs on campus.

Student Government Associations operate from nationally approved and standardized constitutions and by-laws. The election of membership is conducted in the fall of each academic year. Students, who are elected to serve, must attend Student Government Association meetings and serve on various committees. According to standardized language consistent in Student Government Association constitutions and by-laws, members who fail to attend meetings and contribute to the association can be removed from membership by the executive committee members (American Student Government Association, 2008).

The responsibilities of Student Government Association members include attending monthly association meetings; attending weekly committee meetings; planning activities including dances, speakers, and other events for the entire student body; understanding and using parliamentary procedure; and voting on institutional policy that impacts student life. Typically students involved in Student Government Association devote between 10 to 15 hours a week to the association.

### *Phi Theta Kappa*

Phi Theta Kappa is the only nationally recognized social and service organization for two-year colleges. The purpose of Phi Theta Kappa is to encourage scholarship, fellowship, and service among students. It also provides opportunities for the development of leadership, community service, the intellectual exchange of roles, and continued academic excellence. To be considered for membership in Phi Theta Kappa, a student must be enrolled full-time (12 or more hours) at the institution. Students must apply to membership and secure the recommendation of a

faculty member from their institution. Typically, membership in Phi Theta Kappa is limited to no more than 3% of the full-time student enrollment at a member institution (Phi Theta Kappa, 2008).

Phi Theta Kappa chapters on two-year college campuses must operate from nationally approved and standardized constitutions and by-laws. The application and selection of members occur each fall, and students, who are selected to membership, must attend Phi Theta Kappa meetings and complete a designated number of volunteer hours within the community. According to the language stated in the national Phi Theta Kappa constitution and by-laws, members who fail to uphold the standards and requirements of the chapter can be removed from membership by the chapter advisor (Phi Theta Kappa, 2008).

The responsibilities of Phi Theta Kappa members include attending monthly chapter meetings, participating in chapter social service projects, completing independent volunteer service within the community, and remaining in good standing with the institution. Typically students involved in Phi Theta Kappa devote between 15 and 20 hours a week to the requirements of membership.

### *Intercollegiate Athletics*

Organized student athletics involves active participation in team sports under the supervision of a qualified coach. According to the National Junior College Athletic Association (2008), the purpose of intercollegiate athletics at the two-year college level is “to provide quality athletic opportunities to enhance the entire collegiate learning experience of its students” (pg. 1).

To be considered for inclusion on a National Junior College Athletic Association (NJCAA) intercollegiate athletic team, students are either recruited to the team by the coach or try out for the team. In either case, membership is awarded via a letter of intent or a scholarship



agreement signed by both the coach and the student-athlete. Students must be enrolled full-time at the institution and meet various other eligibility requirements set forth by the National Junior College Athletic Association.

Intercollegiate athletics on two-year college campuses must operate according to the rules and regulations of the National Junior College Athletic Association and the regional conference. Most student-athletes are selected for membership prior to the fall semester.

The responsibilities of a student-athlete include participating in daily practices, participating in college-sponsored athletic events, attending mandatory study sessions, maintaining a minimum required grade point average and course load, and remaining in good standing with the institution. Typically students involved in intercollegiate athletics devote between 20 and 25 hours per week to their sport during the season, and approximately 10 to 15 hours during the off season.

In addition to the three formal, college-sponsored, co-curricular programs detailed above, a comparison group, comprised of students who reported no involvement in any formal, college-sponsored, co-curricular programs, was studied. By collectively studying participation in one of these programs, the researcher was able to investigate the relationship of involvement to that of non involvement for community college students.

### **Instrumentation**

The independent variable, involvement, is defined specifically as either participation in one of the three co-curricular programs selected or nonparticipation in one of the co-curricular programs selected.

The construct of student success and development in college were the dependent variables. The construct of success was operationalized through two measures: grade point

average and satisfaction with the overall college experience. The construct of development was operationalized through three measures: self-confidence, ability to manage emotions, and emotional independence from parents. These variables assess three domains: cognitive (grade point average and satisfaction), affective (self-confidence), and behavioral (ability to manage emotions and emotional independence from parents). Analyses investigated how these measures related student participation in formally structured co-curricular programs.

All of these measures, grade point average, satisfaction with college, self-confidence, managing emotions, and emotional independence from parents, were assessed through a survey questionnaire (Appendix A) constructed by the researcher based on the research and theoretical literature and drawing from existing, normed instruments. The survey questionnaire also included a demographic section designed to permit some control of student entry characteristics.

The demographic section constituted the first part of the survey, and included: program participation category, age, grade point average, gender, living status (on-campus or off-campus), and college attending. The second section consisted of a series of questions exploring involvement in co-curricular activities and student satisfaction. The last section consisted of a series of questions exploring self-confidence, the ability to manage emotions, and emotional independence from parents.

The measurement of grade point average was self-reported on the survey. In order to verify that the responses to these items were accurate, a random sample of 25 responses on that item was compared to existing institutional records provided to the researcher. The survey item asked students to self-report a range for their grade point average. All 25 of the randomly selected responses were accurate.

The involvement section was adapted from the Extracurricular Involvement Inventory, developed by Winston and Massaro (1987). In addition to providing the researcher with information about the nature of involvement, this section also provided the researcher with the information necessary to validate the comparison group of students who were not involved in any type of formal, college-sponsored, co-curricular program.

The measurement of satisfaction with the overall college experience was assessed by the students' response to survey items asking them to rate their satisfaction with their community college academic experience, their community college social experience, and their overall community college experience, as well as asking them if they would choose the same community college if they had the opportunity to do it all again using the Noel Levitz Student Satisfaction Inventory (Noel Levitz, 2002).

The measurement of self-confidence was assessed by the Iowa Developing Competency Inventory's Self-Confidence Subscale (Hood & Jackson, 1997a). This Likert scale inventory was developed by Hood and Jackson, who administered a 200 item survey, based on Chickering's (1969) Vector of Developing Competency, to students at the University of Iowa and Pennsylvania State University. After a factor analysis, the resulting inventory was reduced to thirty items dealing with self-confidence in interacting with authority figures. Of the 30 items, 10 of the items dealt with self-confidence in interacting with authority figures, 10 items dealt with interaction with peers (friends and classmates), and 10 dealt with ease of communication with others. This inventory yielded an overall score of student self-confidence and has a reliability (alpha) coefficient of .92 (Hood & Jackson, 1997a).

The measurement of managing emotions was assessed by the Iowa Managing Emotions Inventory developed by Hood and Jackson (1997b). This Likert scale inventory was developed in

a similar fashion to the self-confidence inventory described above. A 120-item inventory based on Chickering's (1969) Vector of Managing Emotions was administered to students at the University of Iowa and Pennsylvania State University. After a factor analysis of all the items, the resulting inventory contained 60 items; 12 items addressing the following emotions: depression, anger, frustration, happiness, and attraction. The inventory yielded one overall score for managing emotions and has a reliability (alpha) coefficient of .95 (Hood & Jackson, 1997b).

The measurement of emotional independence from parents was assessed by the Iowa Developing Autonomy Inventory developed by Hood and Jackson (1997c). The variable of emotional independence from parents was assessed by the Iowa Developing Autonomy Inventory's Emotional Independence - Parents Subscale (Hood & Jackson, 1997c). This Likert scale inventory was developed by Hood and Jackson, who administered a 200 item survey, based on Chickering's (1969) Vector of Developing Autonomy, to students at the University of Iowa and Pennsylvania State University. After a factor analysis, the resulting inventory was reduced to 15 items dealing with disengagement from parents. Of the 15 items, seven of the items dealt with parental approval and eight items dealt with dependence upon parents in decision making. This inventory yielded on overall score of student emotional independence from parents and has a reliability (alpha) coefficient of .88 (Hood & Jackson, 1997a).

Table 3 summarizes the variables and the measurements used to determine student success and development in college.

*Table 3**Construct of Student Success and Development in College*

<b>Variables</b>	<b>Operationalization</b>	<b>Measurement</b>
Success	Academic Achievement	Grade point average after 2 semesters; self-report
	Satisfaction with College	Response to items concerning academic, social, and overall satisfaction
Development	Self-Confidence Score on Iowa Developing Competence Inventory (Self-Confidence Subscale)	Response to items concerning self-confidence
	Managing Emotions Score on Iowa Managing Emotions Inventory	Response to items concerning the ability to manage emotions
	Emotional Independence from Parents Score on the Iowa Developing Autonomy (Emotional Independence – Parents Subscale)	Response to items concerning independence from parents

In addition to the variables designed to operationalize the construct of student success and development, five control variables were collected: gender, age, living status during freshman year (on-campus or off-campus), other involvement, and college attending. These variables were used to control for pre-existing differences among the study sample.

### **Data Collection and Analysis**

The researcher conducted a pilot study of the web-based instrument with a group of 15 students from a community college not used in the study during the spring 2008 semester. Of the participants in the pilot study, seven of the students reported involvement in one or more of the three co-curricular programs described in the study; the other eight students reported no formal co-curricular involvement. Upon completion of the pilot, participants provided solicited feedback to the researcher regarding the instrument in the following areas: content, appearance, length,

appropriateness to the study, and ease or difficulty in completing the survey. Based on the results of the pilot study and the feedback comments, several amendments and modifications were made, including expanding the explanation of the study and the significance, shortening the number of questions viewed at one time on the screen, combining like questions into an item series format, amending the wording of several questions, and the removal of redundant or insignificant questions (Appendix E).

In fall 2008, the web-based instrument was distributed to 325 students in the sample via electronic mail. The instrument was accompanied by a cover letter that explained the purpose of the study, stressed the importance of full and accurate completion of the survey, and assured confidentiality of the respondents.

Participation in the survey was voluntary, and participants had the option to withdraw at any time without penalty. As an incentive to increase responses, participants were eligible to receive a \$100 visa gift card if they completed the online survey and provided their email address. Respondents choosing to participate in the survey were re-directed to an online web-based survey instrument hosted by Survey Monkey, a secure third party. The web-based survey link provided by Survey Monkey professional edition ensured all respondent data was collected via two-way secure socket layer (SSL3) security protocols. At no time did the researcher or Survey Monkey have access to any identifying highly sensitive respondent information in conjunction with the survey instrument.

Participants in the study were asked to complete and submit the web-based survey within a one-week period. A reminder message (Appendix C) was sent to all participants asking them to complete and submit the survey within the next week if they had not already completed and submitted the survey. At the mid-point of the fall semester, the researcher sent another reminder

and a new cover letter (Appendix C) asking once again for cooperation and stressing the importance of the study. In order to increase the response rate among the Student Government Association members, Phi Theta Kappa members, and student-athletes, the researcher contacted the advisors, sponsors, and coaches for these groups asking them to encourage their students to complete the survey.

Of the 325 students sent the web-based instrument, 203 survey questionnaires were started and 194 were actually completed. Nine respondents started the instrument, but did not complete the survey. Consequently, these nine responses were eliminated from the study.

The study sample was divided into two groups: involved students, those students who were involved in one of three selected formal, college-sponsored, co-curricular programs, and uninvolved students, those who were not involved in any formal, college-sponsored, co-curricular program. The involved group consisted of 145 community college sophomores: 30 members from Student Government Association, 40 members from Phi Theta Kappa, 75 student-athletes. The uninvolved group consisted of 180 community college sophomores. In the latter case, the uninvolved student sample size was increased to allow for the fact that some of the students in this group might be ineligible to be considered uninvolved due to formal involvement in other programs. This allowed the comparison group sample size to roughly equal the total involved student sample.

Of the completed surveys, 94 students from the involved group responded: 27 members from Student Government Association, 34 members from Phi Theta Kappa, and 33 student-athletes. Of the completed surveys, 100 students from the uninvolved group responded as shown in Table 4.

*Table 4**Study Response Rate*

<b>Group</b>	<b>N Sampled</b>	<b>Responses</b>	<b>Response Rate</b>
Uninvolved	180	100	55%
Involved	145	94	65%
<b>Total</b>	<b>325</b>	<b>194</b>	<b>60%</b>

*Table 5**Response Rate: Breakdown of involved students by co-curricular activity*

<b>Involved Group</b>	<b>N Sampled</b>	<b>Responses</b>	<b>Response Rate</b>
Student Government	30	27	90%
Phi Theta Kappa	40	34	85%
Athletes	75	33	44%
<b>Total</b>	<b>145</b>	<b>94</b>	<b>65%</b>

Once all of the survey questionnaires were collected, the researcher downloaded the data from the Survey Monkey server. Prior to submitting the data to the University of Nebraska Evaluation and Research Center for analysis, the researcher removed from the data any surveys that were incomplete.

Additionally, it was determined previously that students in the comparison group who indicated involvement in a formal, college-sponsored, co-curricular activity would be eliminated from the comparison group, as this group was designed to consist of students who reported no formal involvement. The criteria used to determine whether an activity reported by the student constituted formal involvement, for the purposes of this study were:

1. The student must have been required to engage in some type of application process to become involved in the particular activity. This may have ranged from a "try out" for an athletic team or a musical group to a written application for a leadership program.



2. The program must have been in some way funded, supported, and/or recognized by the institution.
3. A member of the community college's faculty or staff must have provided supervision or advice to the participants and have had regular contact with them.
4. The participants in the program must have attended meetings or were actively involved in the program, on a regular, on-going basis at appropriate times of the year.

The basis for these four criteria stem to a large degree from the theoretical work of Astin and Chickering as well as from the researcher's initial intent to study the impact of programs that meet these criteria. All three of the programs studied met these criteria, as did other community college co-curricular programs.

Students from the comparison group, who reported involvement that fit all four requirements, were eliminated from the comparison group. A total of four of the completed comparison group surveys fit the above criteria and were thus eliminated from the sample. This left a group of 96 uninvolved students.

Once the above adjustments were made, the completed, eligible surveys were delivered to the Nebraska Evaluation and Research Center for data. The final sample consisted of 190 students: 94 students from the involved group and 96 from the comparison group of uninvolved students as outlined in Table 6.

*Table 6*

*Final Study Sample*

<b>Group</b>	<b>N Sampled</b>	<b>Final Study Sample</b>
Involved	145	94
Uninvolved	180	96
<b>Total</b>	<b>325</b>	<b>190</b>

### **Research Questions and Hypothesis**

The following research overall research question was developed for this study: is there a relationship between student success and development and participation in formal, college-sponsored, co-curricular programs?

The following subsequent research questions were developed in order to guide the study:

1. Was there a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs?
2. Was there a relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs?
3. Was there a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs?
4. Was there a relationship between managing emotions and participation in formal, college-sponsored, co-curricular programs?
5. Was there a relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs?

The five research questions were converted to research hypotheses and then into a null hypotheses to be tested with inferential statistical treatment. Results will be presented in chapter four.

#### *Research Question 1*

Was there a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs?

### *Research Hypothesis 1*

There was a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs.

### *Null Hypothesis 1*

There was no relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs.

Null Hypothesis 1 was tested by using Chi-square. The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent variable was grade point average as measured by five grade point average categories:

Less than 2.0;  
2.0 – 2.49;  
2.5 – 2.99;  
3.0 – 3.49;  
3.5 – 4.0

### *Research Question 2*

Was there a relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs?

### *Research Hypothesis 2*

There was a relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs.

### *Null Hypothesis 2*

There was no relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs.

Null hypothesis 2 was tested by using Chi-square. The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent

variable was satisfaction as measured by overall college experience satisfaction using four satisfaction categories: very satisfied, satisfied, somewhat satisfied, and not satisfied.

#### *Research Question 3*

Was there a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs?

#### *Research Hypothesis 3*

There was a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs.

#### *Null Hypothesis 3*

There was no relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs?

Null hypothesis 3 was tested by using a multivariate analysis of variance (MANOVA) with follow up analysis using analysis of variance (ANOVA). The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent variable was self-confidence as measured by the Iowa Developing Competence Inventory Self-Confidence Subscale (Hood & Jackson, 1997a).

#### *Research Question 4*

Was there a relationship between managing emotions and participation in formal, college-sponsored, co-curricular programs?

#### *Research Hypothesis 4*

There was a relationship between managing emotions and participation in formal, college-sponsored, co-curricular programs.

*Null Hypothesis 4*

There was no relationship between managing emotions and participation in formal, college-sponsored, co-curricular programs.

Null hypothesis 4 was tested by using a multivariate analysis of variance (MANOVA) with follow up analysis using analysis of variance (ANOVA). The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent variable was ability to manage emotions as measured by the Iowa Managing Emotions Inventory (Hood & Jackson, 1997b).

*Research Question 5*

Was there a relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs?

*Research Hypothesis 5*

There was a relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs.

*Null Hypothesis 5*

There was no relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs.

Null hypothesis 5 was tested by using a multivariate analysis of variance (MANOVA) with follow up analysis using analysis of variance (ANOVA). The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent variable was emotional independence from parents as measured by the Iowa Developing Autonomy Inventory Interdependence – Parents Subscale (Hood & Jackson, 1997c).

### **Study Hypothesis**

The hypothesis for this study was that there would be a difference in student success and development among the two groups being studied (involved students and uninvolved students). This hypothesis therefore stated that the means of the five dependent variables (grade point average, satisfaction, self-confidence, managing emotions, and emotional independence from parents) would not be equal for each of the independent variables (involved and uninvolved students).

Analysis of the results included descriptive statistics, chi-square distributions, multiple analyses of variance and analysis of variances to determine if any significant difference existed between the independent variable of involvement and the dependent variables. The data, including means, standard deviations, and medians, were analyzed to determine whether a statistically significant difference existed between the involved and uninvolved students and grade point average, satisfaction with the college experience, self-confidence, the ability to manage emotions, and emotional independence from parents. In an attempt to determine pre-existing differences among the sample groups, a series of cross tabulations were run to ascertain whether the two groups being studied differed significantly on the control variables.

Through the use of these statistical analyses, the researcher attempted to substantiate the study hypothesis that a difference did exist on the construct of student success and development at the community college between involved and uninvolved students.

## CHAPTER FOUR

### RESULTS OF THE STUDY

#### **Review of Research Design**

This research was designed to assess the relationship between student outcomes and student involvement in formal, college-sponsored, co-curricular programs. The study consisted of community college sophomores who as freshmen were involved in a leadership, a service, or athletic program during the 2007-2008 academic year.

The study used a researcher-designed survey and college records to investigate the relationship of involvement to noninvolvement on five dependent variables: grade point average, satisfaction with the overall college experience, self-confidence, the ability to manage emotions, and emotional independence from parents.

This chapter reports the results of the study related to the research questions.

#### **Population and Sample**

The total population consisted of 2,065 students who were sophomores enrolled at one of the three community colleges used in this study during the 2008-2009 academic year.

The study population consisted of 325 students who were selected and divided into two groups: involved students, those students who were involved in one of three selected formal, college-sponsored, co-curricular programs, and uninvolved students, those who were not involved in any formal, college-sponsored, co-curricular program. The involved group consisted of 145 community college sophomores: 30 members from Student Government Association, 40 members from Phi Theta Kappa, 75 student-athletes. Ninety-four students from the involved group completed the web-based survey.

The uninvolved group consisted of 180 students who did not participate in any formal, college-sponsored, co-curricular programs during their freshman year. In the latter case, the uninvolved student sample size was increased to allow for the fact that some of the students in this group might be ineligible to be considered uninvolved due to formal involvement in other programs. This allowed the comparison group sample size to roughly equal the total involved student sample. One hundred students from the uninvolved group completed the web-based survey, and four subjects were eliminated from the uninvolved group due to their reported involvement in other types of formalized, college-sponsored, co-curricular programs (see Chapter 3 for definitions of involvement and criteria for sample). This left a group of 96 uninvolved students.

The final sample consisted of 190 students: 94 students from the involved group and 96 from the comparison group of uninvolved students (Table 7).

*Table 7*

*Final Study Sample*

<b>Group</b>	<b>N Sampled</b>	<b>Final Study Sample</b>
Involved		
Student Government	30	27
Phi Theta Kappa	40	34
Athletes	75	33
Involved Total	145	94
Uninvolved Total	180	96
<b>Total</b>	<b>325</b>	<b>190</b>

### **Demographic Data Analysis**

Analysis began with an examination of the relationship between formally involved and uninvolved groups on the demographic characteristics of age, gender, living status (on-campus or



off-campus) and college attending. A chi-square test was conducted comparing involved students to the uninvolved group these four demographic characteristics.

Chi-square tests were used in the analysis due to the categorical nature of the data. The chi-square is the most commonly used non-parametric test of independence to compare expected frequencies with observed frequencies (Hinkle, Wiersma, & Jurs, 1982). This statistic compares the observed frequencies and indicates whether the observed distribution of cases occurred by chance or indicates an underlying relationship. The level of significance used in all of these tests was .05.

#### *Age, Gender, Living Status, and College Attending*

Respondents were fairly representative of the collective demographics of the community colleges used in this study. The community colleges in the study all reported that the average age for full-time, first time freshmen was 19. Additionally, each institution reported slightly more females than males in the overall student body. Collectively, females represented 53.6% of the overall student body at the three community colleges. On average, slightly more than 30% of full-time freshmen student population lived in on-campus housing at the community colleges used in this study.

Table 8 details the sample demographic characteristics by gender, age, college attending, and living status. A total of 190 community college sophomores participated in the study. Ninety-one percent of the respondents reported an age range of between 19 and 22, which was within the range of the average age for full time freshmen at the community colleges used in the study. The percentage of female respondents was slightly higher in the sample at 55% as compared to 53.6% in the collective general student population of the three community colleges. There were, no statistically significant differences with respect to college attending when

comparing the study groups. The number of study participants who reported living on-campus was significantly higher (52.6%) than the average (30%) number reported by the community colleges for full-time freshmen. However, there were only slight differences with respect to involved and uninvolved students who reported living on-campus versus off-campus, and the Chi-square test revealed that the difference was not considered statistically significant.

*Table 8*

*Sample Gender and Age*

Characteristic	Student Government	Phi Theta Kappa	Group Members			Total
			Athletes	Involved Total	Uninvolved	
Gender:						
Male	11	16	15	42	43	85
Female	16	18	18	52	53	105
Total	27	34	33	94	96	190
Age:						
19-22	26	29	33	88	84	172
23-28	1	4	0	5	11	16
29 or older	0	1	0	1	1	2
Total	27	34	33	94	96	190
College						
Attending	11	12	12	35	33	68
Barton	8	12	10	30	35	65
Cloud	8	10	11	29	28	57
Dodge	27	34	33	94	96	190
Total						
Living Status						
On-Campus	16	18	19	53	47	100
Off-Campus	11	16	14	41	49	90
Total	27	34	33	94	96	190

Given the similar student body composition at all three the community colleges used in the study, it is not surprising that the two study groups were similar in the demographic categories of age, gender, and living status. Additionally, the responses from the students were evenly distributed among the three co-curricular program areas used in the study and the three

community colleges. Of the characteristics, there were not any significant differences between the two groups. Table 9 provides a summary of the demographic characteristics.

*Table 9*

*Summary of Demographic Characteristics by Group*

Demographic Characteristic	Involved	Uninvolved	Group Differences
Gender:			
Male	44.6%	44.7%	No significant differences
Female	56.3%	55.2%	
Age:			
19-22	93.6%	87.5%	No significant differences
23-28	5%	11%	
College Attending:			
Barton	37.2%	34.3%	No significant differences
Cloud	31.9%	36.4%	
Dodge	30.9%	29.1%	
Living Status:			
On Campus	56.3%	48.9%	No significant differences
Off Campus	43.6%	51.0%	

Using the chi-square test with a level of significance of .05, no significant differences were found between the formally involved students and the comparison group with respect to the demographic characteristics of age, gender, college attending, or living status.

### **Hypothesis Results**

The research hypothesis stated that community college students who participated in formal, college-sponsored, co-curricular programs would exhibit greater success and development in college than uninvolved students. The construct of student success in college was defined in this study as grade point average and satisfaction with the overall college experience. The construct of student development was defined as growth along the first three of Chickering's developmental vectors: achieving competence, managing emotions, and developing autonomy.

The variable of student success was measured by student self-reported grade point average and satisfaction with the overall college experience using a survey item from the Noel Levitz Student Satisfaction Inventory. The variable of student development was measured by Chickering's vectors of developing competence (self-confidence), managing emotions, and developing autonomy, and was operationalized using the Iowa Student Development Inventories. Self-confidence was measured by the Iowa Developing Competency Inventory's Self-Confidence Subscale (Hood & Jackson, 1997a). Chickering's second vector, managing emotions, was measured by the Iowa Managing Emotions Inventory (Hood & Jackson, 1997b). Chickering's third vector, developing autonomy, was measured by the Iowa Developing Autonomy Emotional Independence – Parents Subscale (Hood & Jackson, 1997c).

#### *Research Question 1*

Was there a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs?

#### *Research Hypothesis 1*

There was a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs.

#### *Null Hypothesis 1*

There was no relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs

Null Hypothesis 1 was tested by using Chi-square. The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent variable was grade point average as measured by five categories: Less than 2.0, 2.0 – 2.49, 2.5 – 2.99, 3.0 – 3.49, and 3.5 – 4.0.

Table 10

*Mean Grade Point Average: Involved Group and Comparison Group*

Grade Point Average	Midpoint	Involved Group		Uninvolved Group	
		Frequency	Total	Frequency	Total
Less 2.0	1.00	1	1	8	8
2.00-2.49	2.24	6	13.44	28	62.72
2.5-2.99	2.74	11	30.14	25	68.5
3.0-3.49	3.24	26	84.24	24	77.76
3.5-4.0	3.75	50	187.5	11	41.25
		94	316.32	96	258.23
Mean GPA			3.37		2.69

The Chi-square test found that there was a statistically significant relationship between the two groups (chi-square=50.123; df=4;  $p<.001$ ). The mean grade point average for involved students was 3.37 as compared to 2.69 for the uninvolved students (Table 10). Those who were involved had higher grade point averages than those who were not involved.

Eighty-seven of the involved students had a 2.5 or higher grade point average as compared to 60 of the uninvolved students. Although the involved and uninvolved students had virtually the same percentage within the 3.00 to 3.49 grade point average range with 28% of the involved students in this range and 25% of the uninvolved students in this range, there was a significant difference between the groups in the 3.5 to 4.00 grade point average range with 53% of the involved students in this range and only 11% of the uninvolved students in this range. Table 11 summarizes the grade point average relationship.

Table 11

*Grade Point Average: Involved Group and Comparison Group*

Grade Point Average	Involved Group		Uninvolved Group	
	N	%	N	%
Less than 2.0	1	1%	8	8%
2.0 – 2.49	6	6%	28	29%
2.5 – 2.99	11	12%	25	26%
3.0 – 3.49	26	28%	24	25%
3.5 – 4.0	50	53%	11	11%
Total	94	100%	96	100%

In summary, when the involved group was compared to the uninvolved group, statistically significant differences were uncovered in the relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs.

*Research Question 2*

Was there a relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs?

*Research Hypothesis 2*

There was a relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs.

*Null Hypothesis 2*

There was no relationship between student satisfaction and participation in formal, college-sponsored, co-curricular programs.

Null hypothesis 2 was tested by using Chi-square. The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent

variable was satisfaction as measured by overall college experience satisfaction using four categories: very satisfied, satisfied, somewhat satisfied, and not satisfied.

*Table 12*

*Mean Overall Satisfaction: involved group and comparison group*

Satisfaction	Likert Scale Value	Involved Group		Uninvolved Group	
		Frequency	Total	Frequency	Total
Not Satisfied	1	0	0	8	8
Somewhat Satisfied	2	4	8	15	30
Satisfied	3	46	138	56	168
Very Satisfied	4	44	176	17	68
		94	322	96	274
Mean Satisfaction			3.43		2.85

The Chi-square test found that there was a statistically significant relationship between the two groups (chi-square=27.282; df=3;  $p<.001$ ). The mean level of satisfaction using a Likert Scale, with 4 representing very satisfied and 1 representing not satisfied, was 3.43 for involved students as compared to 2.85 for the uninvolved students (Table 12). Those who were involved had higher levels of satisfaction than those who were not involved.

Forty-four of the involved students reported “very satisfied” with their overall college experience as compared to 17 of the uninvolved students. Although the involved and uninvolved students had a relatively close percentage of students reporting “satisfied,” with 49% of the involved students in this range and 58% of the uninvolved students in this range, there was a significant difference between the groups in the “somewhat satisfied” and “not satisfied” range with 24% of the uninvolved students in this range and only 4% of the involved students in this range. Table 13 summarizes the relationship in overall satisfaction.

*Table 13**Overall College Experience Satisfaction: involved group and comparison group*

Overall Satisfaction	Involved Group		Uninvolved Group	
	N	%	N	%
Not Satisfied	0	0%	8	8%
Somewhat Satisfied	4	4%	15	16%
Satisfied	46	49%	56	58%
Very Satisfied	44	47%	17	18%
Total	94	100%	96	100%

In summary, when the involved group was compared to the uninvolved group, significant differences were uncovered in the relationship between overall college experience satisfaction and participation in formal, college-sponsored, co-curricular programs.

*Research Question 3*

Was there a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs?

*Research Hypothesis 3*

There was a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs.

*Null Hypothesis 3*

There was no relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs?

Null hypothesis 3 was tested by using a multivariate analysis of variance (MANOVA) with follow up analysis using analysis of variance (ANOVA). The independent variable was involvement, as measured by two groups: those involved and those not involved. The dependent variable was self-confidence as measured by the Iowa Developing Competence Inventory Self-Confidence Subscale (Hood & Jackson, 1997a).



Table 14

*ANOVA for Self-Confidence: Involved Group and Comparison Group*

Source	SS	df	MS	F	Sig.	<i>p</i>
Between	97277.02	1	97277.02	174.56	.000	.481
Within	104769.55	188	557.29			

*P*<.001

Table 15

*Isolated Means for Self-Confidence: Involved Group and Comparison Group*

Variable	Involvement	Mean	SD	N
Self-Confidence	Uninvolved	68.6	29.6	96
	Involved	113.8	15.2	94

The MANOVA test found there was a statistically significant relationship between the two groups and the dependent variable. The Wilks' Lambda criteria indicated significant group difference among the involved and uninvolved students on the dependent variable, Wilks'  $\Lambda=.494$ ,  $F(3, 186)=63.61$ ,  $p<.001$ , multivariate  $\eta^2=.494$ . Analysis of variance (ANOVA) was conducted on the dependent variable of self-confidence as a follow up test to MANOVA. ANOVA results indicated that there was a statistically significant difference between the involved students and the uninvolved students in self-confidence,  $F(1, 188)=174.56$ ,  $p<.001$ , partial  $\eta^2=.481$  (Table 14). After the ANOVA test was run to determine significance for involvement and noninvolvement, a post-hoc test was conducted to isolate mean scores (Table 15). The analysis revealed that there is a statistically significant positive relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs. Those who were involved had higher self-confidence than those who were not involved.

The scores on the Iowa Developing Competence Self-Confidence subscale range from 30 to 150, with higher scores indicating a higher level of self-confidence. The national mean for this



Table 17

*Isolated Means for Managing Emotions: Involved Group and Comparison Group*

Variable	Involvement	Mean	SD	N
Managing Emotions	Uninvolved	89.3	40.2	96
	Involved	151.4	20.0	94

The MANOVA test found there was a statistically significant relationship between the two groups and the dependent variable. The Wilks' Lambda criteria indicated significant group difference among the involved and uninvolved students on the dependent variable, Wilks'  $\Lambda=.494$ ,  $F(3, 186)=63.61$ ,  $p<.001$ , multivariate  $\eta^2=.494$ . Analysis of variance (ANOVA) was conducted on the dependent variable of ability to manage emotions as a follow up test to MANOVA. ANOVA results indicated that there was a statistically significant difference between the involved students and the uninvolved students in the ability to manage emotions,  $F(1, 188)=180.84$ ,  $p<.001$ , partial  $\eta^2=.490$  (Table 16). After the ANOVA test was run to determine significance for involvement and noninvolvement, a post-hoc test was conducted to isolate mean scores (Table 17). The analysis revealed that there was a statistically significant positive relationship between the ability to manage emotions and participation in formal, college-sponsored, co-curricular programs. Those who were involved had a higher ability to manage emotions than those who were not involved.

The scores on the Iowa Managing Emotions inventory range from a low of 60 to a high of 180, with higher scores indicating greater ability to manage emotions. The national mean for this inventory is 134.6 (Hood & Jackson, 1997b). The involved group tested significantly higher on the managing emotions inventory ( $t=13.44$ ,  $p<.05$ ) than the uninvolved group. Likewise, the involved group tested significantly higher on the managing emotions inventory than the national mean, while the students in the uninvolved group tested significantly lower than the national



*Table 19**Isolated Means for Emotional Independence: Involved Group and Comparison Group*

Variable	Involvement	Mean	SD	N
Emotional Independence	Uninvolved	39.9	18.4	96
	Involved	64.9	8.9	94

The MANOVA test found there was a statistically significant relationship between the two groups and the dependent variable. The Wilks' Lambda criteria indicated significant group difference among the involved and uninvolved students on the dependent variable, Wilks'  $\Lambda=.494$ ,  $F(3, 186)=63.61$ ,  $p<.001$ , multivariate  $\eta^2=.494$ . Analysis of variance (ANOVA) was conducted on the dependent variable of emotional independence from parents as a follow up test to MANOVA. ANOVA results indicated that there was a statistically significant difference between the involved students and the uninvolved students in emotional independence from parents,  $F(1,188)=141.06$ ,  $p<.001$ , partial  $\eta^2=.429$  (Table 18). After the ANOVA test was run to determine significance for involvement and noninvolvement, a post-hoc test was conducted to isolate mean scores (Table 19). The analysis revealed that there was a statistically significant positive relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs. Those who were involved had a higher emotional independence from parents than those who were not involved.

The scores on the Iowa Developing Autonomy Emotional Independence - Parents Subscale range from a low of 22 to a high of 67 with higher scores indicating greater ability to be emotionally independent from parents. The national mean for this inventory is 47.53 (Hood & Jackson, 1997b). The involved group tested significantly higher on the emotional independence from parents subscale ( $t=11.88$ ,  $p<.05$ ) than the uninvolved group. The mean score for the involved group was 64.9 while the mean for the uninvolved group was 39.9.

### **Summary**

When the involved group was compared to the uninvolved group, significant differences were uncovered in the relationship between student success and development and participation in formal, college-sponsored, co-curricular programs. The involved group had statistically significantly higher grade point averages and satisfaction with the overall college experience than the uninvolved group. Additionally, when comparing the involved group to the uninvolved group, significant differences were uncovered in the area of self-confidence, ability to manage emotions, and emotional independence from parents and participation in formal, college-sponsored, co-curricular programs. The involved group had significantly higher self-confidence, ability to manage emotions, and emotional independence from parents.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### **Summary**

This research sought to determine if involvement in formal, college-sponsored, co-curricular programs during the first year of community college was related to positive student outcomes as measured by grade point average, student satisfaction, self-confidence, ability to manage emotions, and emotional independence from parents. The study consisted of students from three community colleges located in Kansas.

Three co-curricular activities were studied: a leadership program, a service program, and an intercollegiate athletic program. A comparison group of students not involved in formal, college-sponsored, co-curricular activities was also examined. In this sample of 190 community college students, involvement in one of the three co-curricular activities studied proved to be positively related to students' academic success as measured by grade point average, satisfaction with the overall college experience, self-confidence, ability to manage emotions, and emotional independence from parents.

#### *Hypothesis 1*

There was a relationship between academic success as measured by grade point average and participation in formal, college-sponsored, co-curricular programs. The Chi Square test found there was a statistically significant relationship between the two groups ( $\chi^2=50.123$ ;  $df=4$ ;  $p<.001$ ). Those who were involved had higher grade point averages than those who were not involved.

### *Hypothesis 2*

There was a relationship between satisfaction with the overall college experience and participation in formal, college-sponsored, co-curricular programs. The Chi Square test found there was a statistically significant relationship between the two groups ( $\chi^2=27.282$ ;  $df=3$ ;  $p<.001$ ). Those who were involved were more satisfied with the overall college experience than those who were not involved.

### *Hypothesis 3*

There was a relationship between self-confidence and participation in formal, college-sponsored, co-curricular programs. The ANOVA test found there was a statistically significant relationship between the two groups, involved and uninvolved, and self-confidence, ( $F(1, 188)=174.56$ ,  $p<.001$ , partial  $\eta^2=.481$ ). Those who were involved had higher self-confidence than those who were not involved.

### *Hypothesis 4*

There was a relationship between ability to manage emotions and participation in formal, college-sponsored, co-curricular programs. The ANOVA test found there was a statistically significant relationship between the two groups, involved and uninvolved, and the ability to manage emotions, ( $F(1, 188)=180.84$ ,  $p<.001$ , partial  $\eta^2=.490$ ). Those who were involved had a higher ability to manage emotions than those who were not involved.

### *Hypothesis 5*

There was a relationship between emotional independence from parents and participation in formal, college-sponsored, co-curricular programs. The ANOVA test found there was a statistically significant relationship between the two groups, involved and uninvolved, and emotional independence from parents, ( $F(1,188)=141.06$ ,  $p<.001$ , partial  $\eta^2=.429$ ). Those who



were involved had a higher emotional independence from parents than those who were not involved.

### **Conclusions**

New knowledge was obtained from the findings in this study. This new knowledge affords the ability to suggest the following conclusions.

First, involvement in formal, college-sponsored, co-curricular programs at the community college can contribute to students' academic success. The involved students in this study demonstrated higher grade point averages than the uninvolved students. Previous studies by Angelo (1988), Astin (1985), Hanks and Eckland (1976), Light (1990), Ory and Braskamp (1980), and Walsh (1985), also determined that involvement in different forms was positively related to academic performance

Second, involvement in formal, college-sponsored, co-curricular programs at the community college can positively influence student satisfaction with the overall college experience. The involved students in this study had higher satisfaction with their college experience than the uninvolved students. A plethora of studies, including Astin (1977, 1985, 1993), Angelo (1988), Cosgrove (1986), Holland and Huba (1991), Keegan (1987), Light (1990), Pascarella et al. (1986), Pascarella and Smart (1991), Ryan (1989), and Walsh (1985) also found that involved students were more satisfied than uninvolved students.

Third, involvement in formal, college-sponsored, co-curricular programs at the community college can positively influence student development. Involved students in this study possessed greater self-confidence, higher ability to manage emotions, and higher emotional independence from parents than the uninvolved students. Finkenber (1990), Fitch (1991), Pace

(1987), Walsh (1985), and Williams and Winston (1985) also came to similar conclusions about the benefits of formal co-curricular activities.

### **Recommendations**

The findings support the contention that involvement in intentional, formal, college-sponsored, co-curricular programs contribute to student success and development. The term uninvolved students, as used in this study, referred to students who did not participate in any type of formal, college-sponsored, co-curricular activity or program during their first year at the community college. In fact, 15% of the comparison group of uninvolved students reported participating in some type of college-sponsored activity. This participation, however, was not in a formal program, but consisted of activities such as attending a lecture or a social event on campus. What differentiated the two groups was the type of involvement: time-intensive, formal, college-sponsored programs as opposed to informal, less structured participation in general student activities.

The relationship between positive outcomes and participation in formal, college-sponsored, co-curricular programs is somewhat mitigated by the wealth of other experiences a first-year college students undergo. As Terenzini and Pascarella (1994) concluded, “a majority of the important changes that occur during college are probably the cumulative result of a set of interrelated and mutually supporting experiences, in class and out, sustained over an extended period of time” (p. 31). It has been determined that peer group and family relationships, non-college-related activities, residence environment, travel opportunities, academic programs, and work denote experiences that impact a student’s intellectual and psychosocial development.

At many community colleges, formal, college-sponsored, co-curricular programs are a valuable and worthwhile component of the overall academic enterprise. Given the fact that significant, positive outcomes were associated with participation in formal, college-sponsored, co-curricular programs, it is important to ask what practical implications these findings hold for community colleges. What lessons can be learned from this research, what modifications, additions, and/or deletions should be made to the existing academic and co-curricular environment of the community college are critical questions. The implications of these findings can be grouped into two areas: implications for student affairs and for academic affairs.

#### *Recommendations for Student Affairs*

The findings suggest a number of ways that the student affairs programs at the community college could better serve the developmental needs of the student population.

The study determined that participation in formalized, college-sponsored, co-curricular programs was more developmentally beneficial than participation in informal campus activities. The members of the comparison group were deliberately defined as those who had not participated in formal, college-sponsored, co-curricular programs. A portion of the comparison group indicated that they had participated in informal campus activities during their freshman year.

The nature of involvement in formalized programs differed significantly from involvement in informal student activities. Formally involved students committed both time and effort or, as Astin (1984, p. 297) stated, “physical and psychological energy” to participation. These programs provided a locus for students’ out-of-class lives, where they develop a sense of identity with, and loyalty to, the program, their peers, and the institution. These programs have been designed and supervised by professionals who set clear standards for students’

participation. The professional staff who oversaw these programs delineated clear expectations for students' commitment of both time and energy. Consequently, programs that do not currently have clearly defined expectations and/or professional staff involvement should develop such roles.

It was not clear from this study what specific aspects of formal involvement made the difference. It was clear, however, that participation in these programs proved to be positively related to student success as defined in this study.

The findings of this study also point to the importance of involving first-year students in the full fabric of life at the community college. Participation in co-curricular activities, particularly of the type described in this study, led to students who were generally more satisfied, more academically successful, more self-confident, and more socially in control than their uninvolved peers. The key for professionals in the field is to develop a format through which more students can become involved in these types of formal co-curricular activities. One example would include requiring participating in a co-curricular program as part of freshmen seminar or orientation course. Another recommendation for student affairs programs would include developing more formal programs to reach a wider population of students.

The use of general outcome measures such as self-confidence, ability to manage emotions, and emotional independence from parents to assess the impact and effectiveness of specific co-curricular programs proved to be difficult and inexact. Many extraneous factors affect the development of self-confidence, the ability to manage emotions, and emotional independence from parents. It was virtually impossible to control for all of them. In addition, there was little consensus as to how to actually operationalize self-confidence, management of emotions, and independence from parents into a co-curricular program.

A more effective way to assess such programs may be to look at the specific goals of each program and to measure achievement of those goals. Linking specific learning outcomes for co-curricular activities to student development can provide an effective measurement tool. Years of research on college students has shown that students learn more when they engage in educationally purposeful activities, including the opportunity to make connections between classroom learning and co-curricular activities (Pascarella & Terenzini, 1991). The approach of developing specific outcome measures for co-curricular programs has been advocated by RiCharde, Olney and Erwin (1993) and Winston and Miller (1994) stressed the importance of establishing specific expected student outcomes.

Utilizing program-specific assessment methods would respond to the need for program evaluation and assessment in the student affairs area. Rather than attempting to determine the value and worth of co-curricular programs by evaluating macro issues, student affairs professionals could look more closely at the specific goals of each program and assess accordingly. The development of specific, measurable program goals and objectives and assessment based upon the achievement of those goals and objectives would be manageable and quantifiable.

The research is clear about the benefits of involvement in formal, college-sponsored, co-curricular activities, consequently, student affairs professionals should employ methods to involve as many students as possible in some type of formal, college-sponsored, co-curricular experience. One such opportunity could include creating opportunities for student leaders to reach out to freshmen, or having residence life staff conduct hall or floor challenges with each other based on the number of students in their hall or on their floor who participate in a co-curricular programs.

*Recommendations for Academic Affairs*

Two factors stood out when this study was viewed from the perspective of academic affairs: academic success and student satisfaction with the college experience. These factors have implications for the academic area.

The formally involved students in this study achieved greater academic success than their uninvolved peers in general. These results were in accord with findings by other researchers, including Angelo (1988), Astin (1984), Hanks and Eckland (1976), Light (1990), Ory and Braskamp (1980), and Walsh (1980), who also determined that co-curricular involvement was positively related to academic success.

In addition to academic success, involvement in college-sponsored outside-the-classroom experiences had been demonstrated by a number of researchers to enhance student satisfaction with the overall college experience [cf. Astin (1977, 1985, 1993), Cosgrove (1986), Holland and Huba (1991), Keegan (1987), Light (1990), Pascarella et al. (1986), Pascarella and Smart (1991), Ryan (1989), and Walsh (1985)]. This study supported this conclusion as well. Given such overwhelmingly positive evidence, it should be incumbent upon community college faculty to not only encourage such involvement, but assist in providing opportunities for formalized involvement. Additionally, faculty should consider including participation in a co-curricular program as part of their course. For example, incorporating a service learning or volunteer component in the course curriculum and in conjunction with a co-curricular program could increase student participation in such experiences.

In the final analysis, these factors all point to an increased need for collaboration between student and academic affairs at the community college.

### **Suggestions for Further Study**

While this study answered some questions with respect to student involvement in formal, community college-sponsored, co-curricular activities, it raised even more questions. Based on the findings and conclusion made in this study, the following recommendations are offered for further study:

1. Given the restriction of the study sample to three rural community colleges with a rather homogeneous student body, replication of this study should be extended to determine to what extent the study results generalize to other types of institutions.
2. Further study with sufficient sample sizes should be extended to determine the differing effects of various types of involvement and what specific types of involvement are the most beneficial to students.
3. Further study should be extended to determine the impact of the amount of time that students commit to a co-curricular program has on student outcomes.
4. Further study should be extended to determine what aspect of involvement in co-curricular programs matters, i.e., time involved, peer group relationships, development of relationships with faculty and staff, or the cognitive learning that takes place.

Additional research can answer many of these questions and also provide practitioners with clearly defined methods and strategies to assess the impact and effectiveness of co-curricular programs.

## References

- American Association of Community Colleges (2000). Community college student involvement in extracurricular activities. Washington, DC: American Association of Community Colleges, 2000.
- American Association of Community Colleges (2006). Retrieved May 6, 2006, from <http://www.aacc.nche.edu/Template.cfm?section=AboutCommunityColleges>
- American College Testing. (1990). ACT student opinion survey, Iowa City: College Level Assessment and Survey Services.
- Angelo, T. (1988). *Assessing what matters: How participation in work, athletics and extra curricular activities relates to academic success and personal satisfaction*. Harvard Seminars on Assessment, Cambridge, MA: Harvard Graduate School of Education.
- Astin, A. (1968). *The college environment*. Washington, DC: American Council on Education.
- Astin, A. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. (1977). *Four critical years: Effects of college on beliefs, attitudes, and knowledge*. San Francisco: Jossey-Bass.
- Astin, A. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*. July, pp. 297-308.
- Astin, A. (1985). *Achieving educational excellence: A critical assessment of priorities and practices in higher education*. San Francisco: Jossey-Bass.
- Astin, A. (1985 July-August). The cornerstone of excellence. *Change Magazine*, 17, pp. 35-39.
- Astin, A. (1987). Assessment, value-added, and educational excellence. In D. Halpern (Ed.), *Student outcomes assessment: What institutions have to gain* (pp. 89-107). San Francisco: Jossey-Bass.



- Astin, A. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. American Council on Education, Toronto: Macmillan.
- Astin, A. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Astin, A. W. (1998). The Changing American College Student: Thirty-Year Trends, 1966-1996. *The Review of Higher Education*, 21(2), 115-135.
- Astin, A.W. (1993). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Phoenix, AZ: Oryx.
- Astin, A.W., Banta, T.W. *et al.* (2003). 9 principles of good practice for assessing student Learning.
- Astin, A., Korn, W., & Green, K. (1987) Retaining and satisfying students. *Educational Record*, Winter, 36-42.
- Ballantine, R. (1981). What research says about the correlation between athletic participation and academic achievement. Champagne-Urbana, IL: University of Illinois. (ERIC Document Reproduction Service No. ED 233 994).
- Banta, T. W. (2005, September/October). How much have we learned? *BizEd*. 35-38. Retrieved February 16, 2006, from <http://www.aacsb.edu/publications/Archives/SepOct05/p34-39.pdf>
- Banta, T. & Assoc. (1993). *Making a difference: Outcomes of a decade of assessment in higher education*. San Francisco: Jossey-Bass.
- Barr, M. J., Desler, M. K., & Associates. (2000). *The handbook of student affairs administration* (2<sup>nd</sup> ed.). San Francisco: Jossey-Bass.

- Barton County Community College (2008). Institutional profile report. Retrieved October 12, 2008, from <http://www.bartonccc.edu/aqip/>
- Boyer, E.L. (1987). *College: The undergraduate experience in America*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Boyer, E. (1990). *In search of community*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Bryant, J.A., Banta, T.W., & Bradley, J.L. (1995). Assessment provides insight into the impact and effectiveness of campus recreation programs. *NASPA Journal*, 32 (2), 153-160.
- Camp W.G. (1990). Participation in student activities and achievement: A covariance structural analysis. *Journal of Educational Research*, 83 (5), 272-278.
- Chickering, A. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Chickering, A. & Reisser, L. (1993). *Education and identity*, 2nd ed. San Francisco: Jossey-Bass.
- Cloud County Community College (2008). Institutional profile report. Retrieved October 15, 2008, from <http://www.cloud.edu/about/accreditation.aspx>
- Cosgrove, T. (1986). The Effects of participation in a mentoring-transcript program on freshmen. *Journal of College Student Personnel*, 27, 119-124.
- Dodge City Community College (2008). Institutional profile report. Retrieved October 15, 2008, from <http://dc3.edu/aqip>
- El-Khawas, E. (1994). *Campus trends, 1994*. Washington, DC: America Council on Higher Education.
- El-Khawas, E. (1994). *Restructuring initiatives in public higher education: Institutional responses to financial constraints*. (Vol. 5). Washington, DC: American Council on Education.

- El-Khawas, E. (1996). Student diversity on today's campuses. In S. R. Komives & D. B. Woodard, Jr. (Eds.), *Student services: A handbook for the profession* (3<sup>rd</sup> ed., pp. 64-80). San Francisco: Jossey-Bass.
- Erikson, E. H. (1968). *Identity: Youth in crisis*. New York: Norton.
- Erwin, T. D. (1991). *Assessing student learning and development*. San Francisco: Jossey-Bass.
- Evans, N.J. (1998). *Student development in college: Theory, research, and practice*. San Francisco: Wiley and Sons, Inc.
- Everson, H. & Millsap, R. (2005). Everyone gains: Extracurricular activities and high school higher ACT scores. College Entrance Examination Board, New York, 2005.
- Ewell, P.T. (1985). Assessment: What's it all about? *Change Magazine*, 17(6), pp. 32-36.
- Ewell, P.T. (1991 November-December). Back to the future. *Change Magazine*, 23(6), pp. 12-17.
- Ewell, P.T. (1993 September). *A preliminary study of the feasibility and utility for national policy of instructional 'good practice' indicators in undergraduate education*. Boulder, CO: National Center for Education Management Systems.
- Ewell, P.T. (1994). *A policy guide for assessment: Making good use of tasks of critical thinking*. Educational Testing Service.
- Ewell, P.T. (2007, January-February). From the states: Accreditation in the hot seat. *Assessment Update*, 19(1), 11.
- Everson, H.T. & Millsap, R.E. (2005). *Everyone gains: Extracurricular activities in high school and higher SAT scores*. New York: College Board.
- Finkenberg, M.E. (1990). The effect of participation in Taekwondo on college women's self-concept. *Perceptual and Motor Skills*, 71, 891-894.

- Fitch, T. (1991). Difference among community service volunteers, extracurricular volunteers, & nonvolunteers on the college campus. *Journal of College Student Development*, 32, 534-540.
- Gall, M.D., Borg, W.R., Gall, J. P. (2003). *Educational research: An introduction* (7<sup>th</sup> Ed.). White Plains, NY: Longman.
- Hanks, M. & Eckland, B. (1976). Athletics and social participation in the educational attainment process. *Sociology of Education*, 49, 271-294.
- Hanson, G. (1982). Critical issues in the assessment of student development. In G. Hanson (Ed.), *Measuring student development* (pp. 47-64). San Francisco: Jossey-Bass.
- Hanson, G (Ed.) (1982). *Measuring student development*. San Francisco: Jossey-Bass.
- Hartnett, R. T. (1965). Involvement in extracurricular activities as a factor in academic performance. *Journal of College Student Personnel*, 6, 272-274.
- Holland, A. & Huba, M. (1991). Satisfaction with college among participants in a campus service program. *NASPA Journal*, 28(4), 342-347.
- Hood, A. (1982, March). Student development on three vectors over four years. Paper presented at the annual convention of the American Personnel and Guidance Association, Detroit, MI.
- Hood, A. (1984). Student development: Does participation affect growth? *ACUI Bulletin*, 52, 16-19.
- Hood, A., Craig, A. F., & Ferguson, B. W. (1992). The impact of athletics, part-time employment and other activities on academic achievement. *Journal of College Student Personnel*, 33, 447-453.

- Hood, A. & Jackson, L. (1997a). Iowa developing competency inventory. Iowa City, IA: HITECH Press.
- Hood, A. & Jackson, L. (1997b). Iowa managing emotions inventory. Iowa City, IA: HITECH Press.
- Hood, A. & Jackson, L. (1997b). Iowa developing autonomy. Iowa City, IA: HITECH Press.
- Hutchings, P. & Marchese, T. (1990, September-October). Watching assessment: Questions, stories, prospects. *Change Magazine*, pp. 13-38.
- Integrated Postsecondary Education Data System (2008). Data tools, 2006-2007 reports. Retrieved February 15, 2007, from <http://nces.ed.gov/ipeds/#>
- Knefelkamp, L., Widick, C., and Parker, C. (Eds.) (1978). *New directions for student services: Applying new developmental findings*. No. 4. San Francisco: Jossey-Bass.
- Kohlberg, L. & Wasserman, E. R. (1980). The cognitive-developmental approach and the practicing counselor: An opportunity for counselors to rethink their roles. *Personnel and Guidance Journal*, 58, 559-567.
- Kuh, G.D. (1984). A framework for understanding student affairs work. *Journal of College Student Personnel*, 25, 25-31.
- Kuh, G.D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education*, 66, 123-155.
- Kuh, G. D. (1996). The student learning imperative: Implications for student affairs. *Journal of College Student Development*, 37(2), 118-122.
- Kuh, G. D. (2006). Making students matter. In J.C. Burke (Ed.), *Fixing the fragmented university: Decentralization with Direction*. (pp. 235-264). Bolton, MA: Jossey-Bass.

- Kuh, G.D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Kuh, G.D., Cruce, T., Shoup, R., Kinzie, J., & Gonyea, R.M. (2008). Unmasking the effects of student engagement on college grades and persistence. *Journal of Higher Education*.
- Kuh, G. D. & Schuh, J. (Eds.). (1991). *The role and contribution of student affairs in involving colleges*. Washington, DC: National Association of Student Personnel Administrators.
- Kuh, G., Schuh, J., Whitt, E., & Assoc. (1991). *Involving colleges*. San Francisco: Jossey-Bass.
- Ley, K., & Young, D.B. (1998b). Self-regulation behaviors in underprepared (developmental) and regular admission college students. *Contemporary Educational Psychology*, 23, 42-64.
- Light, R. (1990). *The Harvard assessment seminars: Explorations with students and faculty about teaching, learning, and student life* (First Report). Cambridge, MA: Harvard University Graduate School of Education.
- Macy, J.E. (1994). A model for service-learning: Values development for higher education. *Campus Activities Programming*, 27 (4), 64-69.
- Marcy, M. (1986). Involvement and development of the black student: The role of the cocurricular. *Campus Activities Programming*, 19, 34-38.
- McCabe, R.H., & Day, P.R., Jr. (Eds.). (1998). *Developmental education: A twenty-first century social and economic imperative*. Mission Viejo, CA: League for Innovation in the Community College, The College Board.
- McCluskey-Titus, Phyllis. (2003). Assessing what students learn from involvement in campus activities. *Campus Activities Programming*, March, 49-52

- Miller, T. K. (1982). Student development assessment: A rationale. In G. Hanson (Ed.), *Measuring student development* (pp. 5-16). San Francisco: Jossey-Bass.
- Miller, T.K. & Prince, J. A. (1976). *The future of student affairs: A guide to student development for tomorrow's higher education*. San Francisco: Jossey Bass.
- Mines, R. A. (1982). Student development assessment techniques. In G. Hanson (Ed.), *Measuring student development* (pp. 65-92). San Francisco: Jossey-Bass
- Mines, R. A. (1985). Measurement issues in evaluating student development programs. *Journal of College Student Personnel*, 26, 101-106.
- Noel Levitz. (2002). Student satisfaction inventory. Iowa City, IA: USA group Noel-Levitz, Inc.
- National Association of Student Personnel Administrators (1987). *A perspective on student affairs*. Washington, DC: Author.
- National Center for Educational Statistics. (1996). *Remedial education at higher education institutions in fall 1995* (Report No. NCES 97-584). Washington, DC.
- Ory, J. & Braskamp, L. (1988). Involvement and growth of students in three academic programs. *Research in Higher Education*, 28, 116-129.
- Pascarella, E.T., Ethington, C., & Smart, J.C. (1988). The influence of college on humanitarian/civic involvement values. *Journal of Higher Education*, 59, 412-437.
- Pascarella, E. T. & Smart, J. C. (1991). Impact of intercollegiate athletic participation for African-American and Caucasian men: Some further evidence. *Journal of College Student Development*, 32, 123-130.
- Pascarella, E. & Terenzini, P. (1991). *How college affects students: findings and insights from 20 years of research*. San Francisco: Jossey-Bass.

- Pascarella, E. & Terenzini, P. (1994, January-February). Living with myths: Undergraduate education in America. *Change Magazine*, pp. 28-32.
- Pascarella, E., Terenzini, P. & Wolfle, L. (1986). Orientation to college and freshman year persistence and withdrawal decisions. *Journal of Higher Education*, 57, 155-175.
- Peters, R. (1994, November-December). Accountability and the ends of higher education. *Change Magazine*, pp. 16-23.
- Pike, G. R. (1991). The effects of background, coursework and involvement on students' grades and satisfaction. *Research in Higher Education*, 32 15-30.
- Power-Ross, S. K. (1980). Co-curricular activities validated through research. *Student Activities Programming*, 13, 46-48.
- Phi Theta Kappa (2006). Mission and vision. Retrieved December 3, 2006, from <http://www.ptk.org/>
- RiCharde, R.S., Olney, C.A., & Erwin, T.D. (1993). Cognitive and affective measures of student development. In T. Banta and Assoc. (Eds.), *Making a difference: Outcomes of a decade of assessment in higher education* (pp. 179-195). San Francisco: Jossey-Bass.
- Rudolph, F. (1962). *The American college and university*. New York: Vintage Books.
- Roueche, J. E., & Roueche, S. D. (1999). *High stakes, high performance: Making remedial education work*. Washington, DC: Community College Press.
- Ryan, F. (1989). Participation in intercollegiate athletics: Affective outcomes. *Journal of College Student Development*, 30, 122-28.
- Smith, J.S. (1993). The relationship between involvement in extracurricular activities and the psychosocial development of university students. *College Student Affairs Journal*, 13(1), 79-84.



- Sowa, C. & Gressard, G. (1983). Athletic participation: Its relationship to student development. *Journal of College Student Personnel*, 24, 236-239.
- Snyder, T.D., Tan, A.G., and Hoffman, C.M. (2006). *Digest of Education Statistics 2005* (NCES 2006-030). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Stanford, S.U. (1992). Extracurricular involvement and development among undergraduate student leaders. *College Student Affairs Journal*, 12(1), 17-23.
- Stright, I. L. (1947). Some factors affecting academic success. *Journal of Educational Psychology*, 38, 232-240.
- Study Group on the Conditions of Excellence in American Higher Education. (1984). *Involvement in learning: Realizing the potential of American higher education*. Washington, DC: National Institute of Education.
- Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development*, 37, 149-162.
- Thomas, R. & Chickering, A. W. (1984). Education and identity revisited. *Journal of College Student Personnel*, 25, 392-399.
- Thompson, J. M. (1998). Developmental students in higher education: Path analysis of a national sample. *College Student Journal*, 32(4), 499-510.
- Thrasher, F. & Bloland, P. (1989). Student development studies: A review of published empirical research, 1973-87. *Journal of Counseling and Development*, 67, 547-554.
- Tinto, V. (1986). Theories of student departure revisited. In J. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 2, pp. 359-384) New York: Agathon Press.

- Walsh, R. (1985). Changes in college freshmen after participation in a student development program. *Journal of College Student Personnel*, 26, 310-314.
- White, D. & Hood, A. (1989). An assessment of the validity of Chickering's theory of student development. *Journal of College Student Development*, 30, 354-361.
- Williams, M. & Winston, R. B. Jr. (1985). Participation in organized student activities and work: Differences in development task achievement. *NASPA Journal*, 22 (3), 52-59.
- Winston, R. (1990). The student development task and lifestyle inventory: An approach to measuring students' psychosociological development. *Journal of College Student Development*, 31, 108-120.
- Winston, B., Bonney, W., Miller, T., & Dagley, J. (1988). *Promoting student development through intentionally structured groups*. San Francisco: Jossey-Bass.
- Winston, M. & Massaro, A. (1987). Extracurricular involvement inventory: An instrument for assessing the intensity of student involvement. *Journal of College Student Personnel*, 28, 169-175.
- Winston, R. B. & Miller, T. K., (1994). A model for assessing developmental outcomes related to student affairs programs and services. *NASPA Journal*, 32, (Fall), 2-19.
- Winter, D. G., McClelland, D. C. & Stewart, A. J. (1981). *A new case for the liberal arts: Assessing institutional goals and student development*. San Francisco: Jossey-Bass.
- Woodward, D., Hyman, R., Distinon, M., & Jamison, P. (1991). Student affairs and outcomes assessment: A national survey. *NASPA Journal*, 29, 17-23.

## Appendix A Instrument

### Introduction

I am currently conducting a study of community college students to help determine the impact that being involved in an co-curricular activity has on student academic success, self confidence, satisfaction, ability to manage emotions, and emotional independence from parents. Please take a few minutes to complete the survey. Your assistance is very much appreciated, so thank you for taking the time to complete this survey.

Of course, all of your information and responses to the questions will remain strictly confidential and will be used only for the purposes of this research. If you are interested in receiving a report on the findings of this research, just include your email address at the end of the survey, and I will be glad to send you a summary report when it is ready.

At the end of the survey, there will also be an opportunity for you to include your email address for a chance to win a \$100 Visa gift card as a token of appreciation for your time. Your email address will not be connected to your questionnaire, as email addresses are automatically separated. Likewise, your email address will not be shared with a third party.

### Consent

**1. Identification of Project: The Relationship of Involvement in Co-Curricular Activities on Community College Student Academic Success, Satisfaction and Development.**

**IRB Approval: 2008069014 EX.**

**Purpose of the Research:** This study involves research concerning community college student success and to determine the relationship of involvement in a co-curricular activity has on student academic success, satisfaction, self confidence, ability to manage emotions, and emotional independence from parents. Your participation in the research is voluntary and will take roughly twenty (20) minutes to complete. The survey is an on line survey. You are free to decide not to participate in this study at any time. In order to participate in the study you must be recently or currently enrolled at a community college. You must be 19 years old to participate without parental consent.

**Procedures:** You will be asked to electronically sign a release. Once you click that you agree, you will be asked to complete the survey. All data will be reported in aggregate form and no individual information will be reported.

**Risks and/or Discomforts:** There are no known risks to you as a participant.

**Benefits:** Results from the survey will be used to help community college administrators determine appropriate programs that enhance and support student success. The literature indicates that student involvement matters; what it does not reveal is what kind of involvement matters and what kind of outcomes result from participation in co-curricular activities. By understanding what type of involvement has an impact on student success and personal development, community college leaders can ensure that appropriate resources are provided to those co-curricular

experiences that improve student academic and social success.

**Confidentiality:** Your name and other personal identifying information is not collected, and all individual results will be reported as group results. There is a low risk of breach of confidentiality as the identity of participants will not be known to the principal investigator.

**Compensation:** There will be no compensation for participating in this research; However, at the end of the survey, there is an opportunity for participants to include their email address for a chance to win a \$100 Visa gift card as a token of appreciation. The odds of winning a Visa gift card are 1 in 160. Email addresses will not be shared with a third party.

**Opportunity to Ask Questions:** Participants have the right to ask questions at any point throughout the study and the right to have those questions answered. If there are questions/concerns about the research, the participant may contact the primary researcher, Jacquelyn Elliott at (660) 582-4048 or Dr. Ron Joekel at (402)472-3726. If you have any questions about your rights as a research participant that have not been answered by the researcher or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965 or your institution.

**Freedom to Withdraw:** You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the researcher or the University of Nebraska-Lincoln. Your decision will not result in any loss of benefits to which you are otherwise entitled.

**Consent, Right to Receive a Copy:** You are voluntarily making a decision whether or not to participate in this research study. Your signature certifies that you have decided to participate having read and understood the information presented. You should print a copy of the informed consent for your records.

**\*By checking the box, you agree to complete the survey. This is your digital acceptance to the informed consent. Thank you.**

☐ I agree

**Demographic****2. During my first/freshman year, I participated in (mark all that apply):**

- ☐ Intercollegiate Athletics
- ☐ Student Government (Student Senate)
- ☐ Phi Theta Kappa
- ☐ None of the above

**3. During my freshman year I lived:**

- ☐ on campus
- ☐ off campus

**4. What is your age category?**

- ☐ 19-22
- ☐ 23-28
- ☐ 28-33
- ☐ older than 33

**5. What is your gender?**

- ☐ Male
- ☐ Female

**6. What was your cumulative grade point average (GPA) at the end of your first/freshman year?**

- ☐ Less than 2.0
- ☐ 2.0 - 2.49
- ☐ 2.5 - 2.99
- ☐ 3.0 - 3.49
- ☐ 3.5 - 4.0

**7. Which college are you attending?**

- ☐ Barton County Community College
- ☐ Cloud County Community College
- ☐ Dodge City Community College

### Involvement

**8. During your first/freshman year, were you actively involved in any student organizations such as: musical groups, drama groups, clubs, student government (senate), service organizations, athletic teams, religious groups, leadership programs, peer education programs, etc....?**

- ☐ Yes  
☐ No

### List of Organizations

**9. Please list those organizations of which you were a participating member.**

**10. Did you hold any leadership positions (i.e. club officer, chairperson, team captain, etc...) in any of these organizations?**

- ☐ Yes  
☐ No

### Satisfaction

**11. How would you rate your satisfaction with your college in the following categories?**

	Very Satisfied	Satisfied	Somewhat Satisfied	Not Satisfied
Academic Experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall Experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**12. If you could start over again, would you attend your current college?**

- ☐ Yes  
☐ No

## Self Confidence

**13. This section is designed to study attitudes and behavior of college students in developing self confidence. You are asked to judge a number of statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below.**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. I am not intimidated by administrative officials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I find it difficult to ask for help from my instructors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I don't understand something, I'm not afraid to ask fellow students for clarification.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My communication skills need improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I can readily introduce people at social functions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I think of ways to get out of giving oral presentations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I find it difficult to participate in classroom discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am more self-confident than most of my classmates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I'm not confident talking to my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I am firm in speaking with disrespectful people, even those in positions of authority.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**14. This section is designed to study attitudes and behavior of college students in developing self confidence. You are asked to judge a number of statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below.**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. I find it especially difficult to talk with students of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I can converse easily with people in positions of authority.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I lack the self-confidence necessary to seek leadership positions in representing fellow classmates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I feel comfortable thanking teachers or supervisors who publicly recognize my accomplishments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I would like to participate in a speech shyness class in order to overcome my own shyness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I prefer to sit quietly in class than answer a teacher's complicated question.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I speak in a clear and even manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I basically lack self-confidence even when speaking in a group of friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I am not intimidated by disagreements with persons in positions of authority.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I am not a soothing speaker.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Self Confidence

**15. This section is designed to study attitudes and behavior of college students in developing self confidence. You are asked to judge a number of statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. I am able to disagree gracefully with my teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I talk effectively with important people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I would not seek a job where public speaking was important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I am self-confident that I communicate well with fellow classmates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I do not have a smooth persuasive speaking style.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I communicate in a comfortable way with new acquaintances.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I can manage to get rid of difficulties through smooth talking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Managing Emotions

**16. The items included in this question are statements that describe students attitudes and behaviors in managing emotions. Please judge the statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below.**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. Anger can motivate me to stand up for someone who is being treated unfairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I show people that they are special to me by giving them gifts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I have trouble figuring out what would make me happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I find the best way to handle sadness is not to think about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When feeling frustrated, I find a solution and move on to other tasks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I recognize my anger as a first step toward handling it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I really don't know what it feels like to be attracted to someone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. If I'm feeling happy, I tend to spend all my money and regret it later.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. When I'm sad, I explore ways to overcome it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I use my feelings of frustration to motivate myself to work harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I rarely look beyond my feelings of anger for causes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Managing Emotions

**17. The items included in this question are statements that describe students attitudes and behaviors in managing emotions. Please judge the statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below.**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. I try to ignore the fact that I am attracted to certain people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I like sorting out, in mind, the things that make me happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I can tell when a sad mood is affecting me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I do not really know what could make me feel frustrated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When someone is mean to me, I don't pay attention to how I feel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I can distinguish between sexual desire and really caring for another person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am conscious of what makes me happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. When I feel sad, I don't usually know the reason.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I don't think very much about how I feel and act when I'm frustrated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Looking at what makes me angry helps me to do something constructive about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. If I feel attracted to someone, I try to form a relationship with them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I haven't figured out what things would really make me happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I find I lack the insight into my own moods of sadness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**18. The items included in this question are statements that describe students attitudes and behaviors in managing emotions. Please judge the statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below.**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. I think it is important to explore my feelings of frustration in order to understand myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I try to understand my own anger.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I feel attracted to someone, I tend to stay away from them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I do not examine what makes me feel happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I feel sad, I know how to make myself more cheerful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. When I'm frustrated, I try to pinpoint what caused it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I rarely think about feeling angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I don't know what personality types I find attractive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Exploring what makes me happy leads me to get the most pleasure out of my free time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. At times, I explore how I respond to sadness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I do not think about what things makes me feel frustrated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Emotional Independence

**19. The items included in this question are statements that describe students abilities to gain emotional independence from parents. Please judge the statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement using the scale below.**

	Never characteristic of me	Seldom characteristic of me	Sometimes characteristic of me	Often characteristic of me	Almost always characteristic of me
1. I would go against my parents' wishes if the issue was very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I get upset if I don't get a letter or phone call from my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My opinions are quite independent from those of my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I need to contact my parents when I feel discouraged.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I solve most of my problems on my own without family help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I get upset if my parents don't approve of my leisure activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I don't feel like I need to call my parents before making a financial investment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I look to my parents for solutions to personal problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I can reject my parent's advice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I would prefer to compromise myself than go against my parents' wishes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I do not feel the need for family reassurance when I embark on a new venture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I would not feel upset when entering a place that lacked my parents' approval.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I don't need my parents' approval of the people I date.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I feel emotionally independent of my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. It is very important to me that my parents accept what I'm doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Conclusion

**20. Congratulations, this is the last question. If you were actively involved in co-curricular activities during your first/freshman year, what do you think were the top two or three benefits you received from your involvement?**

☐ I was not actively involved

☐ I was actively involved

Benefits (please list the top 2 or 3 benefits)

**21. Please enter your email address if you would like to be eligible for the \$100 Visa card drawing as a token of appreciation.**

**22. Please enter your email address below if you would like a copy of the results of this research. Thank you.**

Thank you for taking the time to complete this survey.

Appendix B  
Statement of Informed Consent

Copied from: [www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ_3d_3d).

Thank you for participating in this study of community college students to help determine the impact that being involved in an co-curricular activity has on student academic success, self-confidence, satisfaction, ability to manage emotions, and emotional independence from parents. This study is being conducted as a doctoral dissertation and results may be published in the future. I am using this survey to determine if there is a relationship between being involved in formal, college-sponsored, co-curricular programs and student success and development. Please take a few minutes to complete the survey. Your assistance is very much appreciated, so thank you for taking the time to complete this survey.

Of course, all of your information and responses to the questions will remain strictly confidential and will be used only for the purposes of this research. If you are interested in receiving a report on the findings of this research, just include your email address at the end of the survey, and I will be glad to send you a summary report when it is ready.

1. Identification of Project: The Relationship of Involvement in Co-Curricular Activities on Community College Student Academic Success, Satisfaction and Development.

IRB Approval: 2008069014 EX.

**Purpose of the Research:** This study involves research concerning community college student success and to determine the relationship of involvement in a co-curricular activity has on student academic success, satisfaction, self confidence, ability to manage emotions, and emotional independence from parents. Your participation in the research is voluntary and will take roughly twenty (20) minutes to complete. The survey is an on line survey. You are free to decide not to participate in this study at any time. In order to participate in the study you must be recently or currently enrolled at a community college. You must be 19 years old to participate without parental consent.

**Procedures:** You will be asked to electronically sign a release. Once you click that you agree, you will be asked to complete the survey. All data will be reported in aggregate form and no individual information will be reported.

**Risks and/or Discomforts:** There are no known risks to you as a participant.

**Benefits:** Results from the survey will be used to help community college administrators determine appropriate programs that enhance and support student success. The literature indicates that student involvement matters; what it does not reveal is what kind of involvement matters and what kind of outcomes result from participation in co-curricular activities. By understanding what type of involvement has an impact on student success and personal development, community college leaders can ensure that appropriate resources are provided to those co-curricular experiences that improve student academic and social success.

**Confidentiality:** Your name and other personal identifying information is not collected, and all individual results will be reported as group results. There is a low risk of breach of confidentiality as the identity of participants will not be known to the principal investigator.

**Compensation:** There will be no compensation for participating in this research; However, at the end of the survey, there is an opportunity for participants to include their email address for a chance to win a \$100 Visa gift card as a token of appreciation. The odds of winning a Visa gift card are 1 in 160. Email addresses will not be shared with a third party.

**Opportunity to Ask Questions:** Participants have the right to ask questions at any point throughout the study and the right to have those questions answered. If there are questions/concerns about the research, the participant may contact the primary researcher, Jacquelyn Elliott at (660) 582-4048 or Dr. Ron Joekel at (402)472-3726. If you have any questions about your rights as a research participant that have not been answered by the researcher or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965 or your institution.

**Freedom to Withdraw:** You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the researcher or the University of Nebraska-Lincoln. Your decision will not result in any loss of benefits to which you are otherwise entitled.

**Consent, Right to Receive a Copy:** You are voluntarily making a decision whether or not to participate in this research study. Your signature certifies that you have decided to participate having read and understood the information presented. You should print a copy of the informed consent for your records.

\*By checking the box, you agree to complete the survey. This is your digital acceptance to the informed consent. Thank you.

☐ I agree

Appendix C  
Correspondence with Subjects, Advisors, and Coaches

Sent September 8, 2008

## Your Participation Would be Greatly Appreciated

---

Dear Student,

You have been identified as an individual who would meet the criteria for my research. I would be grateful if you would agree to participate in my study. Results from the questionnaire will be used to help community college administrators determine appropriate programs that enhance and support student success.

Please be assured that your responses will remain *strictly confidential*.

At the end of the questionnaire, there will be an opportunity for a chance to win a \$100 Visa gift card as a token of appreciation for your time.

Within the next few weeks, you will receive an email invitation letter with a link to the online survey which will take approximately 20 minutes to complete. If you have any questions about the survey, please contact me at 660-582-4048 or Dr. Ron Joekel at (402) 472-3726. **Thank you.**

Jackie Elliott  
27229 Rolling Hills Drive  
Maryville, MO 64468

Phone: 660-582-4048

E-mail: [jackiee@nwmissouri.edu](mailto:jackiee@nwmissouri.edu)

IRB Approval Number: 2008069014EX

UNIVERSITY OF  
**Nebraska**  
Lincoln

**Sent September 22, 2008**

Dear Student,

My name is Jacquelyn Elliott, and I am a graduate student at University of Nebraska, Lincoln. I am doing research on the effects of participation in three different types of co-curricular programs on the success as measured by grade point average, self-confidence, ability to manage emotions, and emotional independence from parents of college students at the community college level.

You have been identified as an individual who would meet the criteria for my research. I would be grateful if you would agree to participate in my study by taking a few minutes to complete the survey questionnaire.

Results from the survey will be used to help community college administrators determine appropriate programs that enhance and support student success. The literature indicates that student involvement matters; what it does not reveal is what kind of involvement matters and what kind of outcomes result from participation in co-curricular programs. By understanding what type of involvement has an impact on student success and personal development, community college leaders can ensure that appropriate resources are provided to those co-curricular experiences that improve student success and development.

Please be assured that your responses will remain *strictly confidential*. All data will be reported in aggregate and no individual information will be reported.

The survey questionnaire is located online at Survey Monkey.com:

[http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ_3d_3d).

The data will be downloaded from their server and analyzed by myself. The survey questionnaire will take approximately 20 minutes to complete. If there are questions/concerns about the research, the participant may contact the primary researcher, Jacquelyn Elliott at (660) 582-4048 or Dr. Ron Joekel at (402)472-3726. If you have any questions about your rights as a research participant that have not been answered by the researcher or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965 or your institution.

Thank you again for your time.

Jacquelyn Elliott

UNL IRB Approval # 2008069014 EX

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

[http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ\\_3d\\_3d](http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ_3d_3d)

**Sent September 30, 2008**

Dear Student,

Recently you were emailed a letter asking you to complete an online survey questionnaire regarding the effects of participation in three different types of co-curricular programs on the success as measured by grade point average, self-confidence, ability to manage emotions, and emotional independence from parents of college students at the community college level.

I would be grateful if you would take the time to complete the survey questionnaire if you have not already done so. If you have already completed the questionnaire, thank you very much for your participation.

Please be assured that your responses will remain *strictly confidential*. All data will be reported in aggregate and no individual information will be reported.

The survey questionnaire is located online at Survey Monkey.com. You can click directly on this link to access the questionnaire:

[http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ_3d_3d).

The data will be downloaded from their server and analyzed by myself. The questionnaire will take approximately 20 minutes to complete. If you have any questions or concerns about this study, please contact me at 660-582-4048 or Dr. Ron Joekel at (402) 472-3726.

Thank you again for your time.

Jacquelyn Elliott

UNL IRB Approval # 2008069014 EX

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

[http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ\\_3d\\_3d](http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ_3d_3d)



**Sent October 13, 2008**

Dear Student,

A few weeks ago I emailed you asking for your assistance by completing an online questionnaire regarding the effects of participation in three different types of co-curricular programs on the success as measured by grade point average, self-confidence, ability to manage emotions, and emotional independence from parents of college students at the community college level.

If you have not already done so, I would be grateful if you would take the time to complete the questionnaire. If you have already completed the questionnaire, thank you very much for your participation.

Please be assured that your responses will remain *strictly confidential*. All data will be reported in aggregate and no individual information will be reported.

The questionnaire is located online at Survey Monkey.com. You can click directly on this link to access the questionnaire:

[http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ_3d_3d).

The data will be downloaded from their server and analyzed by myself. The questionnaire will take approximately 20 minutes to complete. If you have any questions or concerns about this study, please contact me at 660-582-4048 or Dr. Ron Joekel at (402) 472-3726.

Thank you again for your time.

Jacquelyn Elliott

UNL IRB Approval # 2008069014 EX

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

[http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ\\_3d\\_3d](http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ_3d_3d)

**Sent November 10, 2008 to advisors and coaches of programs used in the study**

Dear Colleague,

I hope your semester is going well. As we move into the holiday season, we would like to ask for your assistance. I am conducting a study on student involvement in co-curricular activities to determine the impact involvement has on student success and development. As you know, this data can be incredibly powerful when used as a method for encouraging students to engage in their collegiate live.

I humbly ask your assistance with this data collection by encouraging the students in your program to complete the survey sent to them several weeks ago. The survey (see link below) is be administered online and will be available for students to complete until December 30<sup>th</sup>, 2008. The survey should take approximately 20 minutes to complete.

Please feel free to contact me if you have questions. Thank you so much for your anticipated assistance.

Jacquelyn Elliott  
Vice President for Student Affairs  
Northwest Missouri State University  
[jackiee@nwmissouri.edu](mailto:jackiee@nwmissouri.edu)  
660.582.4048

**Sent December 8, 2008**

Dear Student,

I realize that this is a busy time of year. Before you leave for the holiday break, could you please take a moment to complete the questionnaire if you have not already done so. If you have already completed the questionnaire, thank you very much for your participation.

The questionnaire is located online at Survey Monkey.com. You can click directly on this link to access the questionnaire:

[http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=j9X6QVp7jWgwuaTNRrGEPQ_3d_3d).

Please let me know if you have any questions. Thank you again for your time.

Jacquelyn Elliott

UNL IRB Approval # 2008069014 EX

**Sent February 2, 2009**

Dear Student,

Thank you for taking the time to assist me with my research regarding the effects of participation in three different types of co-curricular programs on the success as measured by grade point average, self-confidence, ability to manage emotions, and emotional independence from parents of college students at the community college level. I greatly appreciate your assistance.

The data is currently being analyzed, and results should be completed and compiled within the next few weeks. If you would like a copy of the results, please contact me at 660-582-4048 or at [jackiee@nwmissouri.edu](mailto:jackiee@nwmissouri.edu) or Dr. Ron Joekel at (402) 472-3726. I will be happy to send a copy of the final report to you.

Again, thank you for your time and assistance.

Sincerely,

Jacquelyn Elliott

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

[http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ\\_3d\\_3d](http://www.surveymonkey.com/optout.aspx?sm=aAOphidDSkcHvXAU37txmQ_3d_3d)

Appendix D  
Support Letter

February 6, 2008

Jackie Elliott  
27229 Rolling Hills Drive  
Maryville, MO 64468


Dear Jackie,


Please accept this letter of support and access to our students for your research project. As requested, you may have access to our general student population, student-athletes, student government association members, and Phi Theta Kappa members as well as their respective coach and/or sponsor.

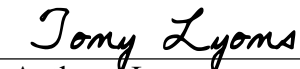
We will provide you with email addresses and/or campus portal groups for your web based survey instrument.

It is our understanding that no personal data will be collected on our students and their confidentiality will be protected.

Sincerely,

  
\_\_\_\_\_  
Angela Maddy  
Dean of Student Development  
Barton County Community College

  
\_\_\_\_\_  
Jackie Barton  
Dean of Students  
Cloud County Community College

  
\_\_\_\_\_  
Anthony Lyons  
Dean of Student Services  
Dodge City Community College

## Appendix E

### Pilot Study Results

During the spring 2008, the researcher conducted a pilot study of the web-based instrument with a group of fifteen first-time, full-time freshmen from Hutchinson Community College in Hutchinson, Kansas. Fifteen students responded to the survey. Of the participants in the pilot study, seven of the students reported involvement in one or more of the three co-curricular programs described in the study; the other eight students reported no formal co-curricular involvement. Upon completion of the pilot, participants provided solicited feedback to the researcher regarding the instrument in the following areas: content, appearance, length, appropriateness to the study, and ease or difficulty in completing the survey. Below is a summary of the feedback and the subsequent amendments and modifications made.

#### **Content**

Six respondents expressed some concern about the wording of the questions and the flow. The survey was divided into three parts: demographic, involvement, satisfaction, self-confidence, management of emotions, and emotional independence from parents. One respondent had a valid suggestion of combining three questions into an item series format for flow. Additionally, two respondents provided the suggestion of rewording portions of the survey that were not clear or that produced an “unsure” response.

#### **Appearance**

Twelve respondents felt that the appearance of the survey was appealing since contrasting colors were used. As a web instrument, they reported that they liked not having to scroll down the page to read all the questions.

#### **Length**

All of the respondents stated that the survey was too long. Because it was comprised of six different instruments, and the two main sections had more than 20 questions each, it was very lengthy. Almost all of the respondents suggested shortening the survey.

#### **Appropriateness to Study**

One concern that was pointed out included the demographics section. Nine respondents questioned why there were questions about parent’s educational background, size of high graduating class, and ethnicity and the relevance of these questions to the study. The researcher concluded that these respondents were correct in their observation, and these questions were removed. Two respondents noted that they wondered about the questions relating to student involvement. It was clear that the opening explanation of the survey needed to include the fact that the study was to determine if student involvement enabled students to manage their emotions better, develop independence from parents, and achieve self-confidence. The study was not only about involvement, but the opening explanation as it was written did lead respondents to believe the purpose was focused on student involvement.

**Ease or Difficulty in Completing**

The majority of the respondents (11 respondents) felt that the survey was relatively easy to complete and navigate. Two respondents questioned the wording of the questions and felt the “double negative” questions were confusing, but since the survey was compiled of already established instruments, this was not something the researcher wanted to change because of the established reliability and validity of the tests.

In conclusion, it was clear from the pilot that several amendments needed to be made in order to make the instrument clearer to the end user. One challenge included a concern over the wording and placement of certain questions. In these cases, the questions came directly from Albert Hood’s Iowa Student Development Inventories and to change the wording or order would have jeopardized the proven reliability of these instruments.