



Assessing peer influence in residence halls using the Cooperative Institutional Research Program
by Nancy Ann Krogh

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education
Montana State University

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Abstract:

The purpose of this study was to investigate the influence of peers within a residence hall floor community on selected student outcomes. These outcomes included measures of behaviors; university involvement; personality and self-concept; attitudes, beliefs, and values; academic and cognitive development; degree and life goals; and satisfaction with college. The influence of the resident advisor was also investigated.

The data for this study were collected using the Cooperative Institutional Research Program Freshmen Survey during orientation sessions before the fall semester of 1992, and a follow-up survey at the end of spring semester in 1993.

The data were examined using a five step process including descriptive analysis, paired sample t-tests, correlational analysis, factor analysis, and stepwise linear regression. The results of the regression analyses were compared with separate analyses for students according to the amount of time they had spent with other floor residents or in the residence hall.

A total of 125 variables were examined with t-tests. There were increases in the results of 60 of the variables, decreases in the results of 38, and no change from the pretest to the posttest in 27 of the variables. The floor community was a predictor of the student's score in every regression model.- The resident advisor's score entered the regression model in only one of the original analyses, Social Self-Concept.

This study concludes that peer influence within the residence hall floor community is clearly a factor in student development. The resident advisor's personal influence is limited. Colleges and universities should be intentional about studying smaller peer cultures on campus and in setting up positive environments. Further research on the effects of peer influence within the residence hall community should be conducted. How resident advisors influence their residents should also be further investigated.

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Nancy Ann Krogh

A thesis submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Education

MONTANA STATE UNIVERSITY-BOZEMAN
Bozeman, Montana

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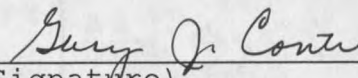
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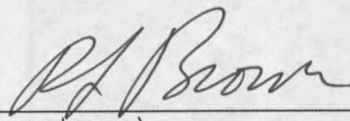
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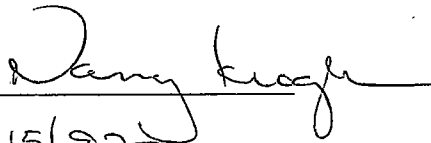
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ABSTRACT

The purpose of this study was to investigate the influence of peers within a residence hall floor community on selected student outcomes. These outcomes included measures of behaviors; university involvement; personality and self-concept; attitudes, beliefs, and values; academic and cognitive development; degree and life goals; and satisfaction with college. The influence of the resident advisor was also investigated.

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The data were examined using a five step process including descriptive analysis, paired sample t-tests, correlational analysis, factor analysis, and stepwise linear regression. The results of the regression analyses were compared with separate analyses for students according to the amount of time they had spent with other floor residents or in the residence hall.

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This study concludes that peer influence within the residence hall floor community is clearly a factor in student development. The resident advisor's personal influence is limited. Colleges and universities should be intentional about studying smaller peer cultures on campus and in setting up positive environments. Further research on the effects of peer influence within the residence hall community should be conducted. How resident advisors influence their residents should also be further investigated.

CHAPTER 1

INTRODUCTION

Framework

The study of college outcomes has been receiving increasing attention in higher education. Regional accrediting associations are requiring assessment programs in their member institutions, while state legislatures and the public are demanding greater accountability from colleges and universities. Although this impetus for assessment often looks at explicit signs of student achievement such as graduation rates or attrition, higher education research has increasingly focused on the factors that influence student development. The aim of assessment is to recommend practices which an institution can implement to enhance student growth. Amid concerns of academic achievement and real benefits in exchange for the continued investment in higher education and because of internal and external demands for greater accountability, colleges and universities are increasing their assessment activities.

Assessment of the college experience is not new. In 1936, Stephen Corey published one of the first summaries of research which reviewed twenty years of previous college

studies (Pascarella & Terenzini, 1991, p. xi). Since that time a cumulative base of knowledge has been built by researchers whose works have become standard texts and classics in the field (Astin, 1977, 1991a, 1991b, 1993; Feldman & Newcomb, 1969; Jacob, 1957; Lenning, Lee, Micek, & Service, 1977; Pascarella & Terenzini, 1991). Research on the impact of the college experience on students is extensive and has provided a fundamental framework for what is productive. How this information can be practically used to enhance student learning and development on college campuses is of interest to the faculty and to student development professionals as they strive for a greater understanding of their effectiveness.

Background of the Study

Important Factors

In reviewing the higher education research, a few factors consistently stand out as consequential for student development and success. Extensive research has pointed to peer influence as one of the most influential factors on student development (Astin, 1993, pp. 398-410) while on-campus living is consistently identified as one of the factors leading to involvement and integration into the institution (Pascarella & Terenzini, 1991 pp. 611-613). An earlier review of 50 years of research reveals that college

is a place where students are socialized and where they adopt attitude and value norms from other students and the faculty. Student interaction is especially influential in social and interpersonal development (Feldman & Newcomb, 1969). Other researchers have confirmed the impact of student peers on student development and learning (Astin, 1977; Pace, 1979; Pascarella & Terenzini, 1991). In his extensive study, What Matters in College, Astin (1993) concludes that "viewed as a whole, the many empirical findings from this study seem to warrant the following general conclusion: the student's peer group is the single most potent source of influence on growth and development during the undergraduate years" (p. 398).

Living in a residence hall is another factor that can have a beneficial impact on college outcomes. Living on campus has proved to have positive effects on college persistence, involvement, and integration with the institution (Alfert, 1966; Astin, 1975; Pascarella & Terenzini, 1991). In their meta-analysis of higher education research Pascarella and Terenzini (1991) concluded that "living on campus (versus commuting to college) is perhaps the single most consistent within-college determinant of impact" (p. 611). Residence hall living provides an environment where students can interact closely with their peers and also offers college administrators a

way to access students.

A less studied factor in the impact of residence hall life is the effect of the floor community on student development. Few other experiences in college offer as intense an interaction with peers as living within a residence hall floor community. Commonly, students in the residence halls are assigned to a room on a floor community, and these communities are managed as separate living units within the hall. Each floor community is assigned a resident advisor (RA), who is responsible for developing a healthy living environment that is conducive to successful college attendance. The resident advisors do this by offering activities and educational programming, by acting as a resource for the residents, and by enforcing residence hall regulations. The floor communities have their own student governments, which are part of the larger hall and inter-hall residence hall associations. These floor communities act as a home to the residents. Students often spend more time with their roommates and floormates than with anyone else during their college stay. The close association with the roommates and other floor residents can determine group formation, and student interactions are often concentrated with roommates and those living in close physical proximity in the hall (DeCoster & Mable, 1974, p. 30). The close living arrangements often naturally lead to

friendships and relationships that can last a lifetime. Although there has been much research on peer influence and benefits of on-campus living, little is known about specific influences of floor communities and how students change in this smaller and more personal environment.

Alexander Astin and the Cooperative
Institutional Research Program

One of the most prominent researchers in the field of higher education is Alexander Astin. Astin, a professor of higher education at the University of California, Los Angeles (UCLA), is also the director of the Higher Education Research Institute (HERI), and is the founding director of the Cooperative Institutional Research Program (CIRP) (Astin, 1993, p. xxi). The author of 18 books and over 200 articles in the field of higher education, Astin's major fields of inquiry include "outcomes of higher education, institutional quality, equality of opportunity and access, assessment and research methodology, and the interface between research and policy" (Higher Education Research Institute [HERI], August 1996, p. 226). Identified as the most frequently cited author in the field of higher education, Astin's influence on current research has grown in the last ten years (Budd, 1990, pp. 92-94).

In 1966 Astin established the Cooperative Institutional

Research Program (CIRP) at the American Council of Education. Moved to the Graduate School of Education at UCLA in 1973, the CIRP is now the largest and longest empirical study of higher education in the United States. CIRP combines data from approximately 1,400 institutions, over 8 million students, and more than 200,000 faculty. The student data for the CIRP is obtained by administration of the Freshmen Survey of entering college students at approximately 1,400 different higher education institutions. The College Student Survey (CSS) is used as an exit survey of college seniors, and is linked to the Freshmen Survey. The annual CIRP Freshmen Survey and College Student Survey are now administered by HERI under the continuing sponsorship of the American Council of Education. (Sax, Astin, Korn, & Mahoney, 1996, pp. ii-1).

Statement of the Problem

The impact of residential life on new students is well documented (Astin, 1977; Chickering, 1974; Pascarella & Terenzini, 1991; Upcraft & Pilato, 1982). Typical first-year students spend more time in their residence hall than any other place on campus. Despite the studies on the impact of both peer influence and residence hall living on students, there has been little research about how residence hall communities influence students and what role the

resident advisor plays in this process. Gaining preliminary understanding of the smaller communities within the residence hall will be important for further research.

The CIRP Freshmen Survey is administered to over 550 colleges and universities annually (Terrell, 1992, p. 222). Despite its widespread use, Terrell reported that many institutions underutilized the Freshmen Survey as a source of research data for campus assessments, and she recommended that the institutions should take advantage of "this informational gold mine to affect academic and nonacademic strategies and policies" (p. 228). Montana State University-Bozeman (MSU-Bozeman) has administered the CIRP Freshmen Survey every other year since 1966. However, the university has not commonly used the data for further research. More extensively using the data for research at MSU-Bozeman can help the university in decision-making and planning. Understanding the students the university serves is also important to student affairs staff and the faculty as they design and implement programs to benefit student's academic and personal development. A description of the characteristics of students as they enter the university and the change in these characteristics after one year will be beneficial to both staff and faculty at MSU-Bozeman.

Purpose of the Study

This study was an exploratory examination of the changes in attitudes, goals, involvement, and behaviors of the students who live in residence hall floor communities and the influence of these communities on these changes. The purpose of this study was to investigate the influence of peers within a floor community on selected student outcomes. These outcomes included measures of (a) behaviors; (b) university involvement; (c) personality and self-concept; (d) attitudes, beliefs, and values; (e) academic and cognitive development; (f) degree and life goals; and (g) satisfaction with college. It also investigated the influence of the resident advisor of the floor on these student outcomes.

Research Questions

In order to analyze the influence of peers and of the resident advisor on floor communities on student outcomes the following questions were investigated:

1. Do residence hall students' behaviors; university involvement; personality and self-concept; attitudes, beliefs, and values; academic and cognitive development; degree and life goals; and satisfaction with college change during their

first year at Montana State University.

2. Is the amount of student involvement with the university influenced by the amount of involvement of the other residents on the floor community?
3. Are students' personality and self-concept influenced by the residence hall floor community?
4. Are student beliefs, attitudes, and values influenced by the beliefs, attitudes, and values of others in the community?
5. Do the behaviors of the other students on the floor in the residence hall influence individual student behaviors?
6. Is students' academic and cognitive development influenced by the residence hall floor community?
7. Are individual student's academic, degree, and life goals affected by the floor community's academic, life, and degree goals?
8. Is satisfaction with different aspects of the college environment affected by the satisfaction of the floor community?
9. How does the resident advisor influence the

behaviors; university involvement; personality and self-concept; attitudes, beliefs, and values; academic and cognitive development; degree and life goals; and satisfaction with college of the floor residents?

Limitations

This study had several limitations. Since the CIRP Freshmen Survey is administered during the student orientation sessions prior to the beginning of the academic year, only those students who attended the orientation were included in the study. In addition, the study was limited to those students who lived within the residence life program established at MSU-Bozeman. In addition, separate analyses were not done by gender, ethnicity, socioeconomic status, or other crucial student characteristics.

A student satisfaction survey was administered randomly to 25% of the residence hall population approximately one month prior to the posttest administration date, and this satisfaction survey was met with some resistance by the students. This may indicate that there was some opposition to or impatience with surveys. In addition, many of the questions on this study's survey were of a personal nature,

and there may have been some apprehension by survey respondents that the information would not be held confidential or might be identified.

Resident advisors were also asked to fill out the follow-up survey to compare their answers to their floor residents' responses. The RA's may have been apprehensive about how their survey answers would be used in connection with their job. Because much of the information is personal, the RA's may have feared that the answers they provided or comparisons by their residents would affect their evaluations by the residence life senior staff in the coming year. They were reassured that no identifying information would be used or released, and that the information would not be used in any job performance assessment.

Definition of Terms

Assessment

The collection of information about students, staff, and institutions of higher education and the evaluation of these data for the purpose of correcting problems and enhancing the educational experience. Assessment can be described as measurement or the gathering of information and evaluation or the use of the information for institutional improvement. The assessment practices of an institution

reflect its values (Astin, 1991a, p.5).

CIRP

The Cooperative Institutional Research Program (CIRP), directed by Alexander Astin at the Higher Education Research Institute at the University of California, Los Angeles, is a longitudinal study of the American higher education system. CIRP has collected data about students, faculty, and institutional characteristics since 1966 from approximately 1400 higher education institutions. The main data collection tools are surveys administered to freshman and upperclass students (Dey, Astin, Korn, & Riggs, 1992).

College Environment

College environment refers to the student's experiences while attending college. These include classes; interactions with peers, staff, and faculty; extra-curricular activities; place of residence; and any other variable that may have an effect on the student.

"Environmental variables might also be referred to as treatments, means, or educational experiences, practices, programs, or interventions" (Astin, 1991a, p. 18).

College Outcomes

The variables of student development that the college or university influences or attempts to influence through its programs and practices. These outcomes include cognitive and affective measures. College outcomes are also

known as the dependent variables, criterion variable, aims, goals, or objectives (Astin, 1993).

Floor Communities

A space in a residence hall staffed by a resident advisor and distinguished as a smaller living unit within the residence hall. Residents within a floor community generally have common living areas and a floor government, which interacts with the hall and inter-hall governments. The resident advisor and the floor residents often plan activities and functions in order for floor members to interact.

Resident advisors (RA's)

Students who live in the residence halls and function as paraprofessional residence life staff members. Their job includes conducting administrative duties such as record keeping of floor furnishings and repair; providing educational programming for floor residents; acting as a resource person for students; maintaining discipline; and acting as a positive role-model.

Student Inputs

Any characteristics that the student brings to the college experience (Astin, 1991a).

CHAPTER 2

REVIEW OF THE LITERATURE

College Outcomes Assessment

Student outcome assessment is not new to American education. Calls for increased assessment followed the expansionary periods in higher education of 1918-1928 and 1952-1975 (Erwin, 1991). In 1936 Stephen Corey reviewed seventeen studies published between 1925 and 1935 (cited in Pascarella & Terenzini, 1991, p.xi). Corey's article entitled "Attitude Differences Between College Classes: a Summary and Criticism" published in the Journal of Educational Psychology found that upper-level students tended to be more socially, politically, or religiously liberal than lower-level students. In this early literature review of college impact, Corey made the important point that the studies reviewed were based on cross-sectional rather than longitudinal data and as such that the changes could not necessarily be attributed to college impact, but were perhaps simply a result of differences between the upper and lower level classes.

Jacob (1957) provided one of the first comprehensive reviews of college impact (cited in Erwin, 1991; Feldman &

Newcomb, 1969; Pascarella & Terenzini, 1991). Jacob reported that "more homogeneity and greater consistency of values" (Erwin, 1991, p. 12) were found in seniors as compared to freshman. He attributed these changes to socialization of the student to college life, and not to the impact of the curriculum.

Katz and associates (1968) conducted an important longitudinal study on the classes that entered Berkeley and Stanford in 1961. The students were given inventories that collected data on many areas including personality, social maturity, attitudes toward authoritarianism and ethnocentrism, and attitudes toward drinking. These inventories were again administered to the students in 1965 during their senior year. This study was different because in addition to the freshman inventories, in-depth interviews were conducted with randomly selected students in the sample. The focus of the study was personality development in traditional college students. In the senior year, along with the personality inventories, a 19-page questionnaire based on these in-depth interviews was administered. One of the findings that surprised the researchers was the passivity with which students viewed their college lives. For many, the choice to attend college was a foregone conclusion and heavily influenced by their parents and society. The researchers noted that students came to

college for a variety of reasons. These included developing their identity or learning social or occupational skills to attending college because there was nothing else to do or because they felt pressured to attend. While students had many different reasons for attending college, Katz also noted that undergraduate education had many functions:

It is a further step in the socialization process; it provides channels for upward mobility; it provides some occupational preparation; and it gives professors a place to pursue their specialized investigations and to obtain some recruits for them. While serving these purposes, it also creates a learning environment in which, for many students, coercion predominates over curiosity and initiative." (p. 417)

In recommendations for changes Katz continued on to say:

The answer lies in providing environmental conditions and experiences that are conducive to psychological development; that is, any experiences, academic or otherwise, that further a student's sense of competence, enhance his self-esteem, and affect his readiness for genuine self-awareness and self-criticism as well as his resistance to improper external pressures....The starting point would be to make the student, not the course, the primary interest of the professor, the department, or the graduate or professional school; to make the student the 'unit of education'. (p.424)

Information about the impact of college expanded rapidly and Feldman and Newcomb (1969) published a comprehensive review of studies that has come to be considered a classic. Feldman and Newcomb noted that "every student who ever attends any college undergoes some impact

from the experience -- even if he withdraws at the end of one 'horrible week'" (p.325). Beyond this general observation, they laid the foundation for theories and framework for studying college impact. They noted that students had changed with substantial uniformity in American colleges, and though this did not necessarily reflect the impact of college, some of these changes were most likely attributable to exposure to college. They continued their argument that the question to be answered is one of what kinds of conditions generate change in students. Feldman and Newcomb also proved visionary about the challenges for higher education. They saw that American education had changed from small, intimate institutions to large urban universities, and they stated that maximizing impacts on students would need to utilize the internal organization of an institution and create horizontal structure to assure positive impact.

Pascarella and Terenzini (1991) published an exhaustive review of the literature on college impact that is sure to become another classic in the field of higher education. They noted that in the twenty years since the publication of Impact of College on Students (Feldman & Newcomb, 1969) the number of empirical studies and the areas of inquiry had more than doubled. Pascarella and Terenzini noted that

three major developments had affected this research. These were (a) the significant development of theoretical constructs to lead further study, (b) the development of sophisticated and powerful software statistical packages, and (c) the development of complex analytical and research designs (pp. 203).

The organization of Pascarella and Terenzini's work (1991) provides a good overview of the state of current knowledge about the impact of college. They note that there are now over twenty theories designed to direct research into college change or to guide policy. The authors divide current theory into four categories: "(1) psychosocial theories, (2) cognitive-structural theories, (3) typological models, and (4) person-environment interaction models" (p. 18). They segment the examination of research about change during college into several categories including development of learning; verbal, quantitative skills and subject matter competence; cognitive skills; psychosocial changes such as self-concept and relationships; attitudes, values, and moral development; and educational, social, and economic benefits of college attendance. In reviewing these areas they asked six questions: do students change, are these changes attributable to college, are these changes related to differences between institutions, are they related to

differences in experiences within the institution, are these changes related to student characteristics, and is the change long-term? They found that college students do change in a broad and substantial manner across cognitive, attitudinal, value, and psychosocial areas. In assessing the net effects of college there exists moderate to strong positive effects on learning and cognitive development, a moderate effect on attitude and values, and mixed net effects on psychosocial outcomes. However, they note that in the psychosocial area college impact is reliably and positively related to changes in students' self-concepts of academic and social abilities as well as self-esteem.

Assessment will continue to be a factor in shaping and revising higher education practices in the future. All six of the regional accrediting associations have adopted requirements relating to a formal program of outcome assessment. The Northwest Association of Schools and Colleges, which is the regional accrediting agency for Montana State University, has adopted an educational assessment policy which states:

The Commission on Colleges expects each institution and program to adopt an assessment scheme responsive to its mission and its needs. In so doing, the Commission urges the necessity of a continuing process of academic planning, the carrying out of those plans, the assessment of the outcomes, and the influencing of the planning process by the assessment activities.
(Accreditation Handbook, 1994, p. 57)

The Commission goes on to state:

The intent of Commission policy is to stress outcome assessment as an essential part of the ongoing institutional self-study and accreditation processes, to underline the necessity for each institution to formulate a plan which provides for a series of outcome measures that are internally consistent and in accord with its mission and structure, and finally to provide some examples of a variety of successful schemes for assessing educational outcomes. (p 58)

Alexander Astin and the Cooperative
Institutional Research Program

Alexander Astin has spent much of his life's work in assessing college student outcomes. The Cooperative Institutional Research Program (CIRP) now administered by the Higher Education Research Institute at UCLA and directed by Astin until this year has collected information on students attending American colleges and universities since 1966. Astin and his associates have used this information to do normative and methodological research about what effects students in college (Dey, Astin, Korn, & Riggs, 1992). Astin (1977, 1993) states that many of the problems in early research are due to lack of multi-institutional and longitudinal data. The CIRP Freshman Survey has tried to meet these needs by having entering freshman at participating institutions answer questions about themselves and their predictions of college outcomes. These

researchers have also used a follow-up survey, which is administered to college sophomores, juniors, or seniors at participating institutions.

Astin (1991a) considers "assessment to include the gathering of information concerning the functioning of students, staff and institutions of higher education" (p.2). He states that "an institution's assessment practices are a reflection of its values" and that "assessment practices should further the basic aims and purposes of our higher education institutions" (p.3). Astin asserts that higher education must define quality or excellence before it can be assessed. Good assessment is good research, and the goal is to make better educational decisions.

Astin (1982) presented five traditional approaches to gauging quality in higher education: (a) The nihilist view that the quality of undergraduate education is too complex to measure; (b) the reputational measure that quality is measured by consensus of opinion or how people perceive an institution; (c) the resource measure that equates quality with an institution's ability to attract money, prestigious faculty, and bright students; (d) the outcome measure which grades quality by the institution's products such as persistence rates or the number of students listed in *Who's Who*; and (e) the value-added measure which examines the

institution's ability to make a favorable impact in the development of students. Astin (1991b) further developed the value-added measure and suggested that a preferred method of measuring excellence is the talent development model. This approach defines excellence as the ability to develop the talents and aptitudes of students to their fullest. The reputational and resource model are the most common in higher education and in fact reinforce each other. The institution that can enhance its reputation has the best chance of attracting well-known faculty and those students with high SAT or ACT test scores. In turn, having a prestigious faculty and beautiful facilities can benefit an institution's reputation. However, the ability of an institution to develop a favorable reputation or attract significant resources tells nothing about its effectiveness or its ability to sufficiently develop the talents of students.

A model that Astin (1991a) has developed for assessment involves what he terms input-environment-output, or I-E-O. In this model, inputs are the characteristics of the students as they enter college; environment refers to the programs, people, and experiences the students encounter in college; and outcomes are the students' characteristics after exposure to college. "The real issue in research on college impact is to determine what difference college

attendance makes in the development of the individual" (Astin, 1993, p.5). Student outcomes cannot be attributed to environment without taking into account student inputs. Students who achieve after college may have entered with those talents and changes may instead be due to maturation or social change.

Astin (1973) organized student outcomes into categories of type of outcome, type of data, and time. The type of outcome can be either cognitive outcomes such as knowledge acquisition, critical thinking or reasoning skills and affective outcomes such as attitudes, values, self-concepts, aspirations or other everyday behaviors. These two types of outcomes are organized along two types of data: psychological or behavioral. Psychological data pertains to internal disposition or traits of the individual, and behavioral data concerns observable behavior. Time is considered from both the short-term aspect and longer-term perspective, and is applied to both the outcomes and the two types of data.

In his latest study, What Matters in College, Astin (1993) followed college students and their development from 1985 to 1989. Input data were collected on students from the 1985 CIRP freshman survey and from SAT or ACT scores from the Educational Testing Service and the American College Testing Program. Outcome measures were collected

from a follow-up mail survey sent to a random sample of students from four-year colleges who completed the 1985 freshman survey. Outcome data were also collected from the registrars of the institutions and from scores on the Graduate Record Exam, the Law School Admission Test, the Medical College Admission Test, and the National Teacher Examination. Environmental measures used included 16 measures of institutional characteristics, 35 measures of student peer group characteristics, 34 measures of faculty characteristics, 15 measures of the type of curriculum offered, 15 measures of financial aid, 16 measures of major field choice, 4 measures of type of residence, and 57 different measures of student involvement. Thus, Astin considered a total of 146 input measures, 192 environment measures, and 82 measures of student outcomes.

The findings for this study were intriguing and complex. However, certain themes run throughout the analysis. Astin concluded that the student's peer group is the most influential factor on growth and development. Next to the peer group, characteristics of the faculty exert the most influence on a student's development. Two measures of faculty orientation within an institution, Research Orientation or Student Orientation, had consistently opposite effects on student outcomes supporting the belief that the split between research and teaching priorities in

American institutions is real. The research also supports Astin's theory of student involvement (1984) that states that student's learn by becoming involved. A problem that exists in higher education is that policy makers are guided more by economic considerations than educational considerations (Astin, 1977, 1993). This is a matter of values and that higher education should value the talent development of students more than the acquisition of resources or reputation.

Astin (1993) studied students' satisfaction with their college education and noted that satisfaction and retention in college are directly related. He classified satisfaction responses in two ways: Satisfaction with the environment and ratings of the college experience. In this study, the environmental variable with the strongest negative effect on student satisfaction was lack of student community. The strongest positive effect was the environmental measure of the student orientation of the faculty.

Peer Influence

Socialization into the college culture has been noted as an important factor in student lives. Many students feel peer pressure to minimize their interest in academic pursuits (Katz, 1968). Because of fear of competition or fear of unfamiliar intellectual activities, freshman

students pressure each other to minimize their interest in academics. This peer pressure is obviously counterproductive to what the university would like to instill in freshman students.

Another model of student integration views attrition as a process by which students bring to college characteristics such as ability, background, and intentions which interact with the structures, sub-groups, and members of the institution, leading to varying degrees of integration into the college community (Tinto, 1975, 1993). Tinto views integration as the extent to which the student shares the normative feelings and beliefs and the extent to which the student accepts the formal and informal rules and structures of both the members of the whole institution and the sub-groups to which the student belongs. Although Tinto's theory concentrates on student attrition, Pascarella and Terenzini (1991, pp. 51-53) note that this model has been successfully used in researching other student outcomes such as academic skill acquisition, personal change, and academic major change.

Feldman and Newcomb (1969) noted that the campus-wide culture is mediated by a variety of sub-groups in which students are involved; each of these has a culture of its own. Student peer groups serve a variety of functions, including to ease the transition of students from parents

and home to college, to support academic growth, to offer emotional support, to provide growth in social interaction skills, to provide support in both unchanging and changing values, and to form social ties that keep students from leaving college and provide social networks that may continue in careers after college. Faculty were more influential on intellectual development and occupational and career choice, but student peers were more influential in social, interpersonal and personality development. They noted students were also more likely to turn to other students for advice and help than they were to seek out faculty.

Bank, Slavings, and Biddle (1990) examined the social influences on students' decisions to remain at college or to leave. Social influence is a substantial factor in decisions to leave or persist at college, and the identity of the influential person is a key factor. Peers, followed by parents, are most influential in these decisions. Faculty is less influential, but this may be because the faculty is less important to the respondents. The authors further made a distinction between normative and modeling influences and found each type to have independent effects on persistence. Normative influence had stronger effects in their study, but that this finding contradicts results in other studies.

Hallinan and Williams (1990) state that the most commonly used theories of peer influence are normative and comparative reference-group theory and role theory. Normative reference groups set norms for behavior, comparative reference groups provide a standard by which students evaluate their behavior, and role theory states that students imitate the behavior of an individual or group that they respect. These theories are criticized on the grounds that they fail to define the mechanisms that control the influence process. An alternate method for understanding peer influence is by using Parsons' theory of influence. "According to Parsons, influence is any factor that affects the formation of a person's attitudes and opinions by acting directly on his or her beliefs." (pp. 122-123). Parsons says that people can be influenced when there is a need for information, and their willingness to be influenced is affected by their trust in the source of influence. Hallinan and Williams used Parsons' theory to examine the influence of friends on students' aspirations to go to college and on actual college attendance. They found Parsons' framework to be useful in their study and that perceived trust of friends increased these peers influences, particularly for college expectations. They concluded that Parsons' theory has heuristic value in researching the influence process.

Unlike previous studies, in his latest study Astin (1993) "has been able to compare and contrast peer group effects with effects of faculty, curriculum, and institutional type, and to pinpoint how particular outcomes are affected by specific characteristics of the peer groups" (p. 398). It is clear that student's values and beliefs tend to change in the direction of the peer group. As a result, Astin has proposed a theory of peer group effects. The effects of peer groups on learning and development are subtle and complex and merit much more study. Peer groups can be viewed from two perspectives: the individual or psychological point of view and the group or sociological point of view. A peer group from the individual point of view is a unit of people with which the individual identifies and from whom the individual seeks acceptance and approval. A peer group from the sociological perspective is a group whose members identify with and seek approval and acceptance from each other. "The key to understanding this process may well lie in the norms and expectations of the group members" (p. 401).

Astin's (1993) theory suggests that beyond this basic prediction there are several other testable hypotheses:

- The peer groups having the greatest impact will be those with whom the individual most strongly identifies (this is an especially important issue, given the very large number

of possible peer groups that one finds in a single institution).

- The impact of the peer group will be proportional to the extent to which the individual seeks acceptance and approval from that group.
- The magnitude of any peer group effect will be proportional to the individual's frequency and intensity of affiliation or interaction with that group.

Some other possible corollaries that could be tested would include the following:

- Individual members of a peer group who exhibit beliefs and behaviors that are at variance with peer group norms will be more likely to leave that peer group than will students whose beliefs and behavior are consistent with peer groups norms.
- Individual peer group members with deviant beliefs or behavior will be less likely to leave the peer group if they change their beliefs and/or behavior in the direction of group norms. (p. 402)

Student to student interaction tends to facilitate learning and growth because interaction signifies affiliation and reinforces student values and behaviors that are associated with the student role such as studying and pursuit undergraduate and graduate degrees.

⁴ In a study to examine out of class experiences effect on learning and personal development, Kuh (1995) found that peer interactions and leadership experiences were among the most mentioned by students as being related to positive growth in college. In this study 149 seniors from 12 institutions were interviewed. From the interview data five outcome factors were constructed and used as dependent

variables, and eight types of experiences used as independent variables. Peers were the single most important influence on the variables of Humanitarianism, Interpersonal Competence, and Cognitive Complexity, especially for traditional-age students who live in the residence halls (p. 146).

Pascarella, Edison, Nora, Hagedorn, and Terenzini (1996) reiterated that previous research has consistently found that students' interactions with peers and faculty have the greatest impact on value, attitudinal, and psychosocial change during college. A study to understand influence on students' openness to diversity in the first year of college supported Astin's research that the peer group is a potent source of influence during college and that the magnitude of any influence is proportional to the frequency and intensity of affiliation and interaction with that group. The study also found that controlling for the influence of all other predictors, living on-campus had a significant positive effect on first year openness to diversity.

While the fact that peers influence student values is widely understood, using interventions to influence this development is just starting to be accepted. Dalton (1989) believes that what is unique about peer influence in today's environment is the extent that it is detached from the

academic community, particularly in large institutions.

"Because the peer culture is largely invisible to outsiders, student affairs staff and faculty are likely to overlook its influence or underestimate its impact....The college peer culture is particularly influential today because its values are not strongly nor consistently confronted in the academic environment" (pp. 4-5). The university must influence peer culture to contribute to the educational goals of the institution. There are three strategies for influencing peer culture. First, it is important to understand the peer culture of the students. There are abundant data, such as the CIRP, on students, but it should be systematically used. In addition, researchers should understand how students spend their time. A look at where students put their energies can provide an important measure of what they are learning. The second strategy is to clearly establish student culture as a domain for intervention. While not returning to in locus parentis, higher education should become "more intentional in making formal connections between the curriculum, teaching, and student life" (pp. 7-8). The third strategy intends to label and challenge those items in the peer culture that conflict with the educational mission and objectives. For example, several issues such as alcohol and drug use or academic integrity should be targets for institutional intervention.

Role of Residence Halls in Student Development

The role of dormitories in campus life dates back to early English universities such as Oxford and Cambridge. The early American colonial colleges adopted the English tradition, and the dormitories became the center of the collegiate way of life, and the forerunner of in locus parentis. Faculty was charged with total responsibility for the students, including their discipline, and their moral development. After the Civil War, the influence of the German university system was in part responsible for the separation of the role of the residence hall and the academic part of the college life. The German system focused on research and teaching, and paid little attention to student life out of the classroom. American scholars who traveled to Germany to earn advanced degrees implemented this philosophy when they assumed leadership roles in the new educational institutions being formed.

The separation between academics and extra-curricular life continued to grow during the latter part of the nineteenth century. In 1890 the first dean of men was appointed at Harvard relieving faculty of discipline and extra-curricular duties. Throughout the twentieth century the role of faculty changed, and student affairs staff were appointed to serve extra-curricular student needs; this was

especially so after the Second World War. The development of student development theories in the late 1960's had a profound impact on residence hall staffing and programming. With increasing research on the effects of peer influence and the integrated nature of the academic experience, residence halls have become more important in the discussions about higher education reform (Schroeder, Mable & Associates, 1994, pp.5-13).

The role of the residence hall in the relationship between out-of-class experience and academic and cognitive student development is one of the most widely researched topics in higher education literature (Terenzini, Pascarella, & Bliming, 1996, p. 150). In their meta-analysis of college research, Pascarella and Terenzini summarized the effect of residence hall life on student outcomes. Residence hall life has a weak positive effect on the development of student autonomy, independence, and moral development, and there are moderate positive effects on values, self-concepts, and intellectual development. There is a strong correlation between on-campus residence and persistence and degree completion. The summary information included in Table 1.

Residential differences can be distinguished as "academic" and "non-academic" student orientations (Nasatir, 1969). The effect of residence on persistence was

further defined by examining the different rate between these two orientations. The attrition rate was highest when the individual student's orientation was incongruous with the orientation of the student's residence hall.

Table 1. Summary of Estimated Within-College Effects: Residence.

Outcome	Strength of Evidence	Direction of Effect	Major Rival Explanations Controlled	Magnitude of Net Effect
Aesthetic, cultural, intellectual values	Moderate	Positive in direction of on-campus residence	Gender, race, SES, ability, initial values	Unclear ^a
Sociopolitical attitudes and values	Moderate	Positive in direction of on-campus residence	Gender, race, SES, ability	Unclear
Secularism	Moderate	Positive in direction of on-campus residence	Gender, race, SES, ability, initial values	Unclear
Self-concepts	Weak to moderate	Positive in direction of on-campus residence	Gender, race, SES, ability, initial concepts	Unclear, but probably small and indirect via interpersonal relations
Autonomy, independence, internal locus of control	Weak	Positive in direction of on-campus residence	Gender, ability	Unclear
Intellectual orientation	Moderate	Positive in direction of on-campus residence	Gender, ability, initial levels	Unclear, but probably small and indirect, mediated by interpersonal relations and residence environment
Persistence and degree attainment	Strong	Positive in direction of on-campus residence	Gender, ability, SES, educational aspirations, high school achievement	Unclear
Moral development	Weak	Positive in direction of on-campus residence	Initial level	Unclear

Note. SES=socioeconomic status.

^a"Unclear," as used in this table, means we are acknowledging that the studies do not allow such estimates or that the evidence, though generally consistent, is still sufficiently complex to make an estimate of effect size hazardous.

Source: Pascarella & Terenzini, 1991, p. 612.

Over two decades ago, Astin (1975) found that on-campus living in a residence hall during the freshman year increased the student's chances of completing college. These results occurred across all types of students regardless of gender, race, qualification, or background, and across all institutional types.

Terenzini and Pascarella (1982) studied the relationship between residence arrangements and students' decisions to continue at or leave their college institution. All previous studies, except for Nasatir's 1969 study, had failed to examine the varying contexts within different residential types and how these differences influenced persistence. Terenzini and Pascarella found that student's residence influenced whether they persisted or withdrew from their institution.

Whereas the unit of analysis in this study was the entire residential unit, the selection of this level may have added unnecessarily to the within group variance, making real differences more difficult to detect. It seems reasonable to suggest that a larger sample of students, and adoption of a less-aggregated unit of analysis (e.g., floor or wing within large units: may produce greater differentiation and increased predictive power....The influences of these sub-environments, sub-cultures or sub-groups are, however, only dimly understood as yet. (p.16)

In a meta-analysis of the studies, Terenzini, Pascarella, and Bliming (1996) concluded that on-campus residence gave no advantage to students in grade performance

over commuting students. An exception to this is when students were assigned to halls based on their previous academic performance. Students who lived with other high-ability students tended to do better academically, even when controlling for their previous ability. The peer culture that supports academic achievement may account for the better performance. While residence hall life may not have a direct effect on grades, "a growing body of research indicates that student's interpersonal interactions with peers and faculty members shape a number of dimension of cognitive growth...and that residence halls clearly afford more opportunities than other living arrangements for students to interact with peers and faculty members" (p. 152).

While the evidence of effect on grades is limited, the research overwhelmingly shows the positive effects of residential living on persistence and completion of degree (Winston, Anchors, & Associates, 1993, p. 48). This is attributed to the positive influence of residence hall life on student involvement with the university. In addition, on-campus residence has a positive relationship with satisfaction with college, another strong predictor of retention and completion. "Most of the positive effects of traditional residence hall living appear attributable to the physical proximity of large numbers of peers and the

relationships they develop. Without intentionally designed, effective interventions, the potential power of residence hall living for positively affecting the lives of students will remain marginal" (p. 52).

On-campus living is consistently one of the factors leading to involvement and integration into the institution (Pascarella and Terenzini, 1991). Residence hall students also have significantly more social interaction with faculty and other students than do students who commute. This influence exists across student and institutional characteristics and when these characteristics are controlled. The positive effects of residential life are linked to the facilitation of campus involvement.

Despite the volume of research on the impact of residence halls, little is known about the effect of the impact of the residence hall floor or the effect of the immediate peer group. Pascarella and Terenzini (1982) point out that two limitations of these studies are that individual differences of students when they enter college are not taken into account, and that varying residential context is not examined (pp. 2-3).

Pascarella, Terenzini and Bliming offered two general observations about the nature of the impact of residence halls. First, the effects of residence halls are indirect, or rather, "transmitted largely by distinctive peer

environments and increased opportunities for interpersonal and cultural involvement" (Schroeder, et al. 1994, p. 41). Second, residence halls tend to attract like students and reinforce their impact. Future research should investigate the complex and indirect nature of the residence halls on students. In addition, most previous research has been on general effects and the effects of residence on academic achievement. Further research is needed on more specific aspects of the residential experience and on additional dimensions of student growth.

Role of the Resident Advisor

Residence halls commonly employ paraprofessionals, or resident advisors (RA's), to monitor and serve the floor communities. These RA's are typically undergraduate students who are selected, trained, and supervised to contribute to student development and to monitor floor residents and intervene when problems arise. The RA has several duties (Upcraft & Pilato, 1982, pp.10-12). They must provide help and assistance to students and be trained to refer them to other campus resources when necessary. They must also initiate the contact with students and intervene with support, even before being asked directly. RA's must manage and facilitate groups and provide leadership for those groups. They must also direct social,

recreational, and educational programming. Discipline and enforcement of rules are also important aspects of RA duties. A successful RA should explain the rules, and consistently and fairly enforce them. This can be a problematic area for many RA's as they find themselves enforcing rules with other residents of the same age whom they may see as peers. RA's are also required to maintain a safe and relatively quiet environment that is conducive to studying. This needs to be balanced with a sense a freedom for the students as they try to make the residence hall into a comfortable home environment.

There are five types of leadership power of RA's including referent power, legitimate power, expert power, reward power, and coercive power (Upcraft and Pilato, 1982, pp 121-122). RA's use referent power in modeling appropriate behavior. Legitimate power is a facet of the position RA's hold and the authority given them by the institution. RA use expert power because of their training and experience in university life and their interpersonal skills. Reward power comes from the ability to positively reinforce or to offer incentives for behaviors; however RA's generally have little power in this realm because they have little to offer as rewards. Coercive power is used to influence because of the RA's ability to discipline members of the floor.

RA influence on resident behavior has not been well researched (Upcraft & Pilato, 1982, p. 87). In an investigation of the relationship between RA's leadership style and the RA's and the students' influencing behaviors, the results indicated some resident influence on senior male RA's with at least two years of experience (Deluga, 1989). However, the RA's ability to build and maintain group dynamics may prove to be the primary factor of RA/student influence. In another study which examined the leadership practices of effective RA's on five leadership values, it was found that these practices are related to the RA's assessment of their own effectiveness (Posner and Broadsky, 1993). The residents rated their RA's effectiveness consistently with the RA's own appraisal of their practicing of the leadership behaviors. Berkowitz and Perkins (1986) compared the drinking patterns of RA's with their residents. While most of the RA's reported expressing concern to a resident about their drinking, the RA's had similar patterns of drinking, and also a comparable number of negative consequences as their residents.

The resident advisor is at the center of many residence hall systems (Upcraft & Pilato, 1982, p. 254). Many colleges rely on the professional residence life staff to influence the students, and integrate the students into the campus culture. In turn the professional residence life

staff relies upon the RA's to implement the programming. To accomplish these goals the RA's should be well trained.

This training requires that:

People who train RA's must recognize the power of the residential environment, know what creates that power, and understand how students' lives are affected by living in residence halls. They must be familiar with person-environment theories and understand the tremendous power of the peer group, in the residential setting. They must never forget how deeply college students need to be liked and accepted and how intensely they influence each other's attitudes and behaviors.
(p. 255)

CHAPTER 3

METHODOLOGY

Theoretical Framework

This study was an exploratory examination of the influence of peers within a residence floor community on student outcomes. It included measures of behavior; university involvement; personality and self-concept; attitudes, beliefs, and values; academic and cognitive development; degree and life goals; and satisfaction with college. It also included measures on the influence of the resident advisor of the floor on these student outcomes. Astin's (1984) theory of student involvement and Astin's (1993) theory of peer group effects were used as the theoretical frameworks for this study. The input-environment-outcome (I-E-O) model developed by Astin (1991a, pp. 16-37) was used as a conceptual guide for the evaluation of the data in this study. These models focus not on the dimensions of student change but rather on the processes and origins of change, and are often grouped as college impact models of student change (Pascarella & Terenzini, 1991, p. 50).

Astin (1984) defines student involvement as the amount

of physical and psychological energy and focus a student supplies to the college experience. Involvement occurs along a continuum in which different students are differently involved with different things and in which the same student is differently involved at different times. Involvement has both quantitative and qualitative features in that student development or learning is directly related to quality and quantity of student involvement in the program, and that the efficacy of any educational program is directly related to the program's ability to increase student involvement. Astin's theory of student involvement explicitly recognizes that students' time and energy are finite and that educational programs are competing with other factors in student life for that time and energy (pp. 297-298). Residential students have more occasion and opportunity to become involved in all facets of campus life, which leads to more involvement (p. 302).

As a conceptual guide for assessment activities in higher education, Astin (1991a) uses the input-environment-outcome (I-E-O) model. In this model, inputs are the characteristics of the students as they enter college, or control variables; environment refers to the programs, people, and experiences the students encounter in college, or the independent variables; and outcomes are the students' characteristics after exposure to college, or the dependent

variables. Input variables can be related to both outcomes and environments, and so they can affect the observed relationship between the environment and the outcomes.

"Basically, the purpose of the I-E-O design allows us to correct or adjust for input differences in order to get a less biased estimate of the comparative effects of different environments on outcomes" (Higher Education Research Institute [HERI], 1996 p. 3).

In recent years the I-E-O model has been revised to include intermediate outcomes, which are typically activities or experiences occurring after enrollment in college. These intermediate outcomes can be classified as involvement with college, which is affected by input variables and environmental variables. They can also be considered as outcomes, but in turn they can act on other outcomes. For example, the outcome variable which measures a student's political orientation may be considered in the following way. The student's orientation when entering college can be considered the input variable and is likely to affect the greatest influence on the outcome. However, the political orientation of the floor community may be considered an environmental variable and may influence the student to join a political organization which in turn leads to a change in the student's political orientation. Such

involvement in the political organization was influenced by the environment and can be considered an intermediate outcome. This may also influence the final orientation and be considered another environmental variable. Intermediate outcomes are most often entered into the model as the final block of environmental variables. This addition to Astin's I-E-O model was made to include his theory of involvement (HERI, 1996, p. 9).

Astin's (1993, pp. 399-404) theory of peer group effects holds that student's values, beliefs, and aspirations tend to change in the direction of the dominant values, beliefs, and aspirations of the peer group. The effects of peer groups on learning and development are complicated, and the key to understanding peer group influence is in understanding the norms and behavior of the peer group members. Peer groups can be viewed from two perspectives: the individual or psychological point of view and the group or sociological point of view. From the perspective of the individual, the peer group is the entity with whom the student identifies and affiliates, and from whom the student seeks acceptance or approval. From the group or sociological perspective, peer groups operate as an entity of individuals who identify with, affiliate with, and seek approval and acceptance from each other.

Sample

Montana State University in Bozeman is a land-grant institution established in 1893 under the Morrill Act of 1862. Montana State University-Bozeman, located in a growing city of 29,000 in mountainous Gallatin county, offers graduate and undergraduate programs in liberal arts, sciences, agriculture, architecture, business, nursing, education, and engineering. The student population in 1992 was approximately 10,000 of which 80% were from Montana and of which 90% were undergraduate. There were approximately 550 faculty members, more than two-thirds of whom held doctorates. At this time, the university had a student faculty ratio of approximately 19:1. (Montana State University Undergraduate Bulletin, 1991-1993).

Montana State University-Bozeman requires students to live in the residence halls during their freshman year unless they are exempted to live at home with parents, are married, or have dependents. In 1992, residence hall capacity was approximately 3,000 students. There were seven separate residence halls with a total of 69 different floor communities. These floor communities varied in capacity from 8 to 67 students. Population in the residence halls at the end of spring semester of 1993 totaled 2,414 students.

The population for the study includes all first-time

