THE EFFECT OF NEW STUDENT ORIENTATION PROGRAMS ON SOCIAL AND ACADEMIC INTEGRATION AND PERSISTENCE

By

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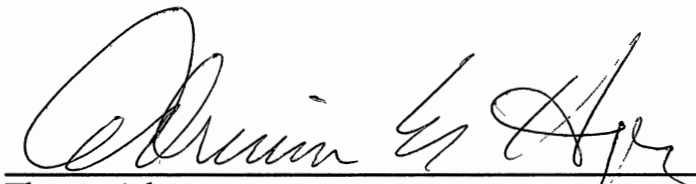

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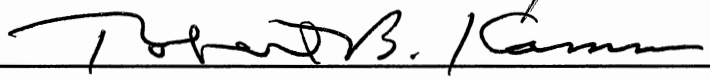

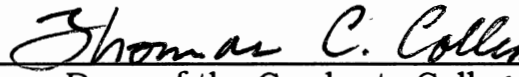

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CHAPTER I

INTRODUCTION

Institutions of higher education have been offering new student orientation programs of various kinds for many years; in fact, the first orientation course was offered in 1888 (Gardner, 1986). Many purposes for orientation programs are given, but their primary goal is to help new students adjust more quickly and easily to the new learning environment. With recent declines in the number of graduating high school seniors, many colleges and universities are placing more emphasis on orientation programs, believing that the programs can assist, not only with orientation, but with retention efforts as well. In fact, Beal and Noel (1980) reported orientation to be the third most effective retention tool available for colleges and universities.

Various studies have indicated that students make the decision to withdraw or persist at an institution within the first six weeks; therefore, the first semester is a very critical time for introducing interventions that assist students in their new environment (Moore, Higginson, & White, 1981; Noel, 1976; Terenzini, Pascarella, & Wolfle, 1977). In a recent interview, Ernest L. Boyer, President of the Carnegie Foundation for the Advancement of Teaching, stated that it is "very clear that the first days

and weeks on campus are crucial" (Greene, 1987a, p. 42). Considering these findings, it is not suprising that orientation programs, the initial interface between the student and the institution, are receiving so much recognition and that various kinds of orientation programs are being offered throughout the country. Some orientation programs are required, others are optional; some are directed toward the entire new student population, others are directed at special populations; some occur at various points prior to the student's first semester, others occur during the first semester.

Although many researchers are extolling the virtues of orientation in helping with the retention effort, and colleges and universities are continuing to spend large quantities of time and effort into their development, the results of studies are often inconsistent and unclear. Some studies have reported that orientation programs make little or no difference in students or student retention (Riesman, 1961; Cole & Ivey, 1967; Gerber, 1970), while others point to many positive outcomes for students and institutions (Reiter, 1964; Pappas, 1967; Robinson, 1970; Chandler, 1972).

Explanations have been given for this contradictory evidence, particularly in early studies. Reviewers of orientation programs have found that most of these studies were basically descriptions and evaluations of very specific programs at particular institutions; therefore, the results were not directly comparable. One reviewer of such programs sums up the problem by describing the collection of articles she reviewed

as being subtitled: "Here's What We Do: It Works For us" (Titley, 1985, p. 232). Brinkerhoff and Sullivan (1982) report that a survey of orientation research reveals "limited research design and methodology, failure to measure relevant variables, or inconsistent and frequently noncomparable results" (p. 384). Few studies use any kind of experimental design.

If the results of orientation programs are to be known, it is necessary to provide research that does more than describe specific programs. More sophisticated research involving designs that take into account a multitude of variables affecting students, to determine the actual effect of orientation programs, needs to be conducted. Experimental designs should be used when possible, and replication of studies should be conducted to compare orientation outcomes across different institutional settings (Brinkerhoff & Sullivan, 1982; Titley, 1985; Pascarella, Terenzini, & Wolfle, 1986).

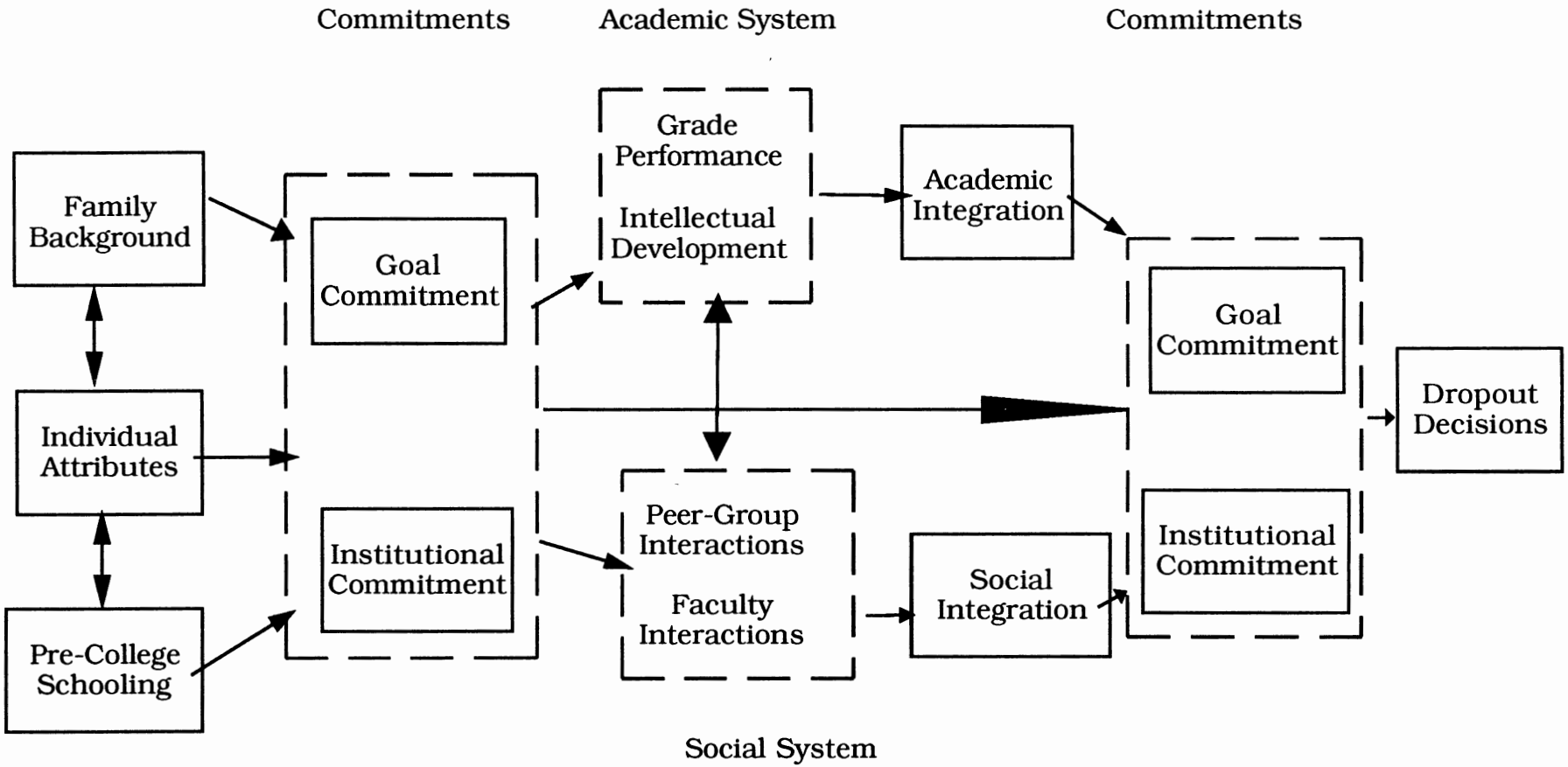
But, before specific orientation programs can be planned, needs of students must first be assessed. A large number of such needs assessment studies have been conducted. Kramer and Washburn (1983) analyzed numerous needs assessment studies and determined eight major classifications of orientation-related needs. They include the needs of: (1) academic advisement and information; (2) career advisement; (3) making the emotional transition to college; (4) understanding requirements, rules, and regulations; (5) becoming geographically oriented to the new locale; (6) making the social

transition to college life; (7) making the intellectual transition to college; and (8) setting academic and personal goals.

Theoretical Framework

It is the degree to which the needs of the student are compatible with the college environment that determines the student-environment "fit." Student-environment "fit" depends on the degree of compatibility students' perceive between themselves and the institution (Cope & Hannah, 1975). It is this "fit" or integration of students into the social and academic settings of an institution that plays a major role in determining whether the student will persist at the institution or "drop out" (Tinto, 1975). Since orientation is the initial interface between the college and the student, it is crucial that as much integration as possible occur during this time.

Tinto (1975) has provided a theoretical model for examining students' withdrawal/persistence decisions based on the degree of fit between the student and his or her college environment as depicted in Figure 1. Through this model, students' background traits and initial commitments can be analyzed as to their effect on their integration into the university community. By holding students' background traits and initial commitments constant, Tinto was able to show that the stronger the students' levels of social and academic integration, the greater their subsequent commitment to the goal of graduation and institutional persistence.



Source: Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. Review of Education Research, 45, 95.

Figure 1. Tinto's Conceptual Model for Dropout from College

Pascarella, Terenzini, and Wolfle (1986) have used Tinto's conceptual model to determine the effects of a pre-college orientation experience on new students. Viewing the orientation program as an intervention which could positively alter students' integration into the institution, they statistically controlled student background traits and initial commitments to determine if exposure to the orientation would affect social and academic integration and subsequent commitment to persistence at the university. Orientation had "relatively substantial and significant positive effects on both social integration during college (0.192) and subsequent commitment to the college attended (0.139). These latter two variables, in turn, had the largest direct effects on freshman year persistence of all variables in the model" (p. 169).

Statement of the Problem

Institutions of higher education invest vast amounts of resources, including time, energy, and dollars, on new student orientation programs. The stated purposes of orientation programs are to help integrate new students into the academic environment and to ultimately support the goal of retention. As early as 1966, of 1,378 institutions surveyed, 92.4% reported new student orientation programs (Chandler, 1972).

Recent concerns with retention have pushed orientation even further to the forefront. With declines in the pool of college-age students, administrators have been faced with grave concerns about

retaining the students they get. A review of the literature on retention reveals that most students make a decision to withdraw from or persist at an institution within the first six weeks of the first semester (Moore, Higginson, & White, 1981). Therefore, this relatively brief period of time is seen as crucial for introducing interventions that assist new students in adapting quickly to their new academic environments.

"Interest and awareness of the freshman year as a cornerstone of the college experience had grown to mammoth proportions" by 1985 (Gardner, 1986, p. 262). The New York Times (Hays, 1987) also reported that orientation programs were becoming "an increasingly lavish and prominent feature of American colleges and universities" (p. 6). Hays' (1987) research further revealed that the University of Rhode Island was planning to spend $200,000 for a series of orientation programs for 2,500 freshmen, Columbia University was budgeting $75,000 for a week-long orientation program, and Mills College in Oakland, California, had recently spent $10,000 for a weekend camping trip for 180 of its freshmen.

Although large quantities of resources are being devoted to orientation programs, research supporting the belief that the programs contribute to student-institution fit and retention is sparse. Numerous studies demonstrate the importance of student-institution fit to retention, yet few studies have examined and assessed the relationship of new student orientation programs to fit and retention. At best, most "orientation studies" merely consist of descriptions of specific programs

for specific institutions or needs assessments for specific institutions (Sagaria, Higginson, & White, 1980; Mayes & McConatha, 1982; Brinkerhoff & Sullivan, 1982; Kramer & Washburn, 1983). Even the descriptive accounts are often not "explicit about their effects on a range of outcome variables . . . It is more typical for such accounts to assert that students enjoyed the program" (Griffore & Griffore, 1983, p. 35).

Brinkerhoff and Sullivan (1982) also indicate that research about the effects of orientation programs is unclear and inconsistent. They noted that researchers often evaluate different orientation programs in noncomparable settings (Titley, 1985) which suggests that there is a "relative dearth of sound, rigorous, recent, documentary evaluation of orientation efforts" and that "orientation directors in the future will be required to spend significant time designing and executing more sophisticated research and evaluation studies" (p. 232). Thus, a need exists for more sophisticated studies which focus on the effects of student orientation programs, on student-institution fit, and ultimately, on retention.

Purpose

The purpose of this study was to determine the relative effectiveness of pre-college summer orientation/enrollment programs in positively influencing social and academic integration and subsequent persistence of new students at a large mid-western university. In addition, the study was to determine if Alpha, a more extensive fall orientation program, or

any of the other variables identified in the literature to have an effect on persistence, postively influence social and academic integration and persistence of new students. In order to address research needs recommended in the literature, this study incorporated a longitudinal rather than cross-sectional design and regression analysis in lieu of merely a descriptive account.

The study replicated, in part, a study by Pascarella, Terenzini, and Wolfle (1986) which sought to determine the effectiveness of orientation experiences in positively influencing the social and academic integration of students at a medium-sized university in central New York State.

The casual variables identified in Pascarella, Terenzini, and Wolfle's 1986 study were also used in the present study. This strategy should enhance the generalizability of the research findings from both of the studies.

Research Questions

The following research questions have been generated in this study:

1. For new students, is summer orientation a significant factor in:
   a) social integration;
   b) academic integration; and/or
   c) persistence?
2. For new students, is Alpha, the fall orientation program a significant factor in:
   a) social integration;

b) academic integration; and/or

c) persistence?

3. For new students, what additional causal factors significantly affect:

a) social integration;

b) academic integration; and/or

c) persistence?

Operational Definitions of Terms

1. Alpha - a voluntary three-day new student orientation program offered at this mid-western university which occurs immediately prior to the fall semester.

2. Orientation/Enrollment - the summer enrollment program for new students at this mid-western university. Varying degrees of orientation experiences are provided, depending upon which one of three options is selected by the student. The enrollment options include:

   a. Enrollment Only - a process of enrollment which may entail a visit to an academic advisor for purposes of course selection and actual enrollment in the courses; as well as "phone-in" or "mail-in" enrollment.

   b. 8-Hour Orientation/Enrollment - an orientation/ enrollment program which involves math placement testing, a presentation on choosing a major with opportunity to spend approximately 20 minutes with two academic colleges, academic advisement in

the academic colleges for purposes of course selection, actual enrollment in courses, and an opportunity to visit information booths to receive information regarding various student services; and

c. 2-Day Orientation/Enrollment - a program which involves an overnight stay and contains all elements of the 8-hour program offered, in addition to: opportunities for various small group interactions, in-depth discussions about career and major selections, tours of campus, and processing time.

3. Social Integration - for purposes of this study, social integration refers to a combination of the following variables measured after the student's first semester:

   a. Frequency of out-of-class contacts (of 10 minutes or more per week) with faculty;

   b. Extent of involvement in extracurricular activities;

   c. Extent and quality of students' relationships with peers as perceived by the students and measured by items on a factorially-derived Likert-type scale; and

   d. Impact and quality of students' out-of-classroom contacts with faculty as measured by items on a factorially-derived Likert-type scale.

4. Academic Integration - for purposes of this study, academic integration refers to a combination of the following two items:

   a. Students' first semester grade point averages (GPAs); and

b. Students' perceived level of intellectual development as measured by items on a factorially-derived Likert-type scale.

5. Retention - continued enrollment the second semester of the freshman year.

Organization of the Study

This chapter has introduced the topic under investigation. Also included in this chapter was the theoretical framework statement of the problem, purpose, research questions, and operational definition of terms. Chapter II contains a review of the literature pertaining to new student orientation programs, student development theories, student-institution fit, and retention. Chapter III includes a discussion of the subjects, instrumentation, and the procedures and analyses. Chapter IV presents the findings and results of the study. The summary, conclusions, and recommendations are included in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

Chapter II presents a review of the literature related to this study. The first section deals with orientation programs and includes a discussion of types of orientation programs, goals of orientation programs, needs of new students, and evaluation of orientation programs. The second section deals with student development theories and their use as a theoretical framework for planning orientation experiences that meet identified needs of students. The relationship of student-institution fit to satisfaction, achievement, and ultimately, retention of students comprise the third section. The fourth section deals with retention, and includes background information, characteristics and factors related to retention, and research on retention and orientation. This section concludes with a discussion of orientation as a retention intervention.

New Student Orientation Programs

The importance of orienting new students to campus has been recognized since before the turn of the 20th century. Boston University

offered a freshman orientation course as early as 1888 and Reed College in Portland, Oregon offered the first freshman orientation course for credit in 1911 (Gardner, 1986). John Gardner, well known for the hosting of South Carolina's Conferences on the Freshman Year Experience, when discussing the students' initial encounters with their new environment, noted that "this transition process may determine whether the student completes college, what his lifestyle will be, his job and social aspirations -- orientation is critical" (Banich, 1988, p. 33).

Daher and Weisinger (1979) reported a growing recognition that initial orientation programs alone can produce only limited assistance in dealing with retention; subsequent programming is necessary to assist with the integration of new students into the institutional environment. Therefore, the freshman seminar, introduced at Boston University in 1888 (Gardner, 1986) is again becoming vogue in 1988.

Over the last 10 to 15 years, a growing interest in orientation programs of various forms has been seen. With the pool of traditional-age students declining, orientation programs are being seen as effective interventions in student retention. In fact, Beal and Noel (1980) list orientation as the third most effective retention tool overall. As an orientation program usually provides the initial interface between the new student and the institution, the importance of the quality of that program is stressed. Additionally, Noel has accumulated evidence indicating that the decision to stay or leave an institution is made within the first six weeks of a student's college experience. Noel states

that "if you want to get students to succeed, you've got to get them started right. And that means in a concerted, systematic, intrusive way find the means to get the student hooked on the institution" (Greene, 1987a, p. A42).

Types of Orientation Programs

A multitude of options and forms of freshman orientation programs exist. Van Eaton (1974) reported that the most common options are currently divided into four basic forms: (1) a summer program, consisting of from one to four days of intensive orientation activities; (2) orientation week, consisting of several days to a week of orientation activities immediately prior to the fall semester; (3) continuing orientation which is usually offered in the form of a required (although sometimes optional) course which continues throughout the first semester; and (4) a com- prehensive orientation program which consists of various combinations of forms 1, 2, and 3.

Summer Orientation Programs. The summer orientation "clinic" has become increasingly popular during the last few years, with 50% of the junior colleges, 43% of the smaller four-year colleges, and 84% of the larger institutions using this form of orientation (Van Eaton, 1974).

Summer orientation programs generally occur mid-summer, follow application and acceptance, and precede actual enrollment. Actual enrollment is often the last step in the summer program. Titley (1985)

suggests that summer programs have distinct time advantages. He noted that students, as well as parents who often attend, leave the program with ample time to prepare for:

> student's physical needs such as clothing, furniture, transportation, money, and corn poppers . . . . The time advantage for institutions lies in getting scheduling information far enough ahead to adjust the class sections offered to meet student requests. (p. 226)

Van Eaton (1974) notes that the summer program generally consists of one to four days of orientation activities. Programs "typically" consist of:

1) academic testing;
2) academic advising and consultation;
3) selection and enrollment in courses;
4) payment of tuition and fees (optional);
5) introduction to academic procedures, policies, and materials;
6) introduction to university and personnel services;
7) introduction to residence hall life;
8) physical examinations (if required);
9) small group discussions with peers and student leaders;
10) meetings with faculty and administrators;
11) introduction to campus life with limited social activities;
12) academic planning;
13) financial planning;
14) campus tours;

15) library tours; and

16) other concentrated programs to acquaint the student with the new environment (e.g., encounter groups, racial relations, men and women roles, etc.). (p. 22)

Most summer programs are offered on several different occasions throughout the summer months, giving students options as to dates of attendance. Generally 100 to 400 students attend on each of the designated dates (Van Eaton, 1974).

Many variations on this typical summer orientation program exist. For example, each of the campuses of Rutgers University conducts several summer orientation programs over a six-week period. The programs are sponsored by the Educational Opportunity Fund Program (EOF) and each is tailored to meet the particular uniqueness of the specific campus. Livingston College, one of the campuses of Rutgers, is designed to prepare students for the multi-ethnic, multicultural, urban environment at that specific campus. The program, devised for students requiring assistance in various developmental areas, has been shown to be successful in helping those students to pass necessary developmental courses. Those students were also found to utilize the available support services much more so than the students not attending the program (Fitts, 1979).

Brigham Young University conducts another unique type of summer orientation program designed to reduce the attrition rate that often occurs between the admission process and actual registration for the fall

semester. Upperclassmen at BYU are trained to "pre-orient" new students in the new students' actual local communities throughout the country. These small group orientation sessions, which focus on the individual needs of the incoming students, have been quite successful. Of those new students who attended the local meetings, there was a no-show rate of 2.3% in the fall; whereas for those who did not attend a local meeting, the no-show rate rose markedly to 27.4% (Kramer & Hardy, 1985).

At Boston College, another "non-typical" summer orientation program is offered. Upperclassmen are trained as "freshman registration advisors" and are available all summer to talk with new students about courses, instructors, major requirements, and other skills necessary for registration into classes. These students replace a very impersonal automated scheduling program and allow new students to interact with older students throughout the summer prior to a fall "orientation weekend" program (Lonabocker, 1987).

Orientation week programs. Surveys by Van Eaton (1974) indicated that orientation week (the week preceding the fall semester) is the most common form of orientation, with approximately 85% of the junior colleges, 89% of the smaller four-year colleges, and 80% of the large institutions utilizing this form.

However, these fall orientation sessions are as diverse as summer programs. One of the advantages of a fall orientation program, following

a summer orientation and registration programs, is the reduction of information overload. Summer sessions usually focus on the type of information necessary for the immediate needs of students, including course selection and information concerning those things that need to be determined prior to fall. Fall sessions can then concentrate on survival skills necessary for the first few weeks of college (Van Eaton, 1974).

Orientation activities in fall sessions sometimes duplicate activities found in the summer programs. Van Eaton (1974) also reports that fall programs generally place less emphasis on solid academic advising and small groups. He cites the following advantages of fall programs:

1. Inexpensive for both the institution and student;
2. Increased relevancy for the student since school will be starting immediately;
3. Provide a natural time for settling in and becoming well acquainted with the new environment, particularly for those in residence halls;
4. Provide natural integration of all elements of the campus into orientation, due to availability of personnel and resources; and
5. Eliminate need to provide programs both during the summer and fall. (p. 23)

Disadvantages noted by Van Eaton (1974) include:

1. Less emphasis is placed on academic planning and advising because of commitments associated with the opening of a school year and lack of time;

2. Tends to result in impersonal programs and contacts with students in larger institutions;
3. Students may be distracted by other campus activities -- rush, social activities, roommate and residence hall adjustments, etc.; and
4. Strong emphasis is placed on a whirlwind of social activities, and this emphasis tends to be superficial and may serve to distort perceptions of the campus environment. (p. 23)

Fall orientation programs often combine more entertainment than do summer programs. The New York Times reports that almost "every college offers at least one big party, moonlight cruise, hiking trip or snorkeling expedition, at or near the end of orientation" (Hays, 1987, p. 6). Fall orientation programs are often involved in entertaining the students in the hope of making their first few days of campus life pleasant. Orientation organizers need to keep in mind the importance of giving the students an orientation to the true mission of the academy as well, so that students will not get an initial false impression of academic life.

Titley (1985) believes fall orientation, used alone, can work for smaller institutions who can give more attention to the types of information materials sent to the students in the summer, but emphasizes that neither the summer nor the fall programs is as effective as the two combined. Any "one-shot" program is bound to produce information overload. Titley further suggests that orientation actually

begins the first time a student inquires about an institution. Recruiting, by means of responding to the student's inquiry with effective information and materials, is a part of the orientation process as much as a summer enrollment and orientation process or as fall orientation week.

Continuing orientation programs. Since Van Eaton's 1974 report, which indicated that a majority of institutions did not have extended orientation programs, a new emphasis on such programs is being seen. The most well-known example of an extended new orientation program is "University 101," a one-semester optional course offered at the University of South Carolina. The course focuses on academic life and is designed to teach new students basic "survival skills." Students who have enrolled in the course have higher retention rates and become much more actively involved in campus life. Many campuses throughout the United States, Great Britain, and Canada have replicated the course since its success has been shown.

Dr. John Gardner, who developed the University 101, now hosts a national conference annually on "The Freshman Year Experience," with regional meetings in various locations throughout the United States. The conferences cover all of the important aspects of the freshman year, including orientation, advising, and freshman seminars, and reflect the growing movement toward an emphasis on a more integrated freshman year (Greene, 1987b). Gardner (1986) insists that "a

one day or one week summer orientation program (can) no longer suffice to meet the students' complex needs for information" (p. 265).

Continuing or extended types of orientation programs are as varied as summer and fall programs. For example, since retention research has shown the first six weeks of a new student's college experience to be the most critical, the University of Louisville decided to focus their efforts on those first six weeks. Although the content of this extended program was similar to that at the University of South Carolina, the University of Louisville explored three basic orientation formats to determine which would have the most impact on students. One section met 50 minutes once a week for 14 weeks; the second section called for two 50-minute meetings twice a week for seven weeks, and the third section met for one hour twice a week for seven weeks. Initial feedback indicated that more frequent contact was helpful and three meetings per week for five weeks is currently being utilized (Rhodes, 1988).

Comprehensive orientation programs. Although most universities emphasize pre-college or first semester orientations, the University of California at Los Angeles visualizes orientation for new students as a 16 month process. The process begins with a phone calling project to high school seniors, includes a summer orientation and follows with a student involvement project in the fall in which student interests are matched to campus organizations and activities. A counseling assistant program which begins in the fall and continues throughout the spring is

responsible for monitoring students' progress, leading workshops in development of academic skills, and encouraging personal and social development, as well as academic awareness and proficiency (Barbee & Lewis, 1987).

Many educators are calling for well-developed and comprehensive orientation programs rather than "one-shot" approaches. Daher and Weisinger (1979) and Noel, Levitz, and Saluri (1985) point to the growing recognition that initial orientation programs can provide only limited assistance and that subsequent programming is necessary if students are to be well-integrated into their new environments. Ernest Boyer (1987) also urges colleges to consider new student orientation as a process that begins with pre-term sessions for all new undergraduates, includes a special "orientation convocation" at the beginning of the year, and contains extended for-credit courses throughout the first semester. Boyer (1987) also suggests that the actual orientation program should be supplemental to a "well-planned program of advising" which "provides support throughout the entire freshman year" (p. 51).

Summary. As has been described, the types and forms of new student orientation programs are numerous, occurring in the summer, immediately prior to the fall semester, and/or during the fall semester. Although their forms vary, the goals of orientation programs are generally quite similar.

Goals of Orientation Programs

Entering a new college environment can be very stressful for students. Although the stress can vary in intensity from mild to severe, there can be little doubt that a certain degree of stress is aroused in most students. The goal of orientation programs in general is to help students adjust to the new environment as smoothly and quickly as possible, with a minimum of stress. The end result should be that of a student who is well-integrated into the college environment. Ross (1975) supports this goal and notes that: "the basic purpose of an orientation program is to assist students new to campus each year to function fully, intelligently, and profitably as members of the college community as early after coming as possible" (p. 468). And, the Council for the Advancement of Standards for Student Services Development Programs (1986) suggests the following:

> The mission of student orientation must be to provide for continuing services and assistance that will: aid new students in their transition to the institution; expose new students to the broad educational opportunities of the institution; and integrate new students into the life of the institution. (p. 97)

In order for these goals to be accomplished, two essential components are required of an orientation program: 1) "an introduction to both the academic and student life aspects of the institution," and 2) "structured

opportunities for the interaction of new students with faculty, staff, and continuing students" (p. 97).

Fitzgerald and Busch (1963) define the two basic goals of new student orientation programs in terms of "microcosmic" and "macrocosmic" emphasis. The microcosmic emphasis is shown by the institution's concern for orienting or directing the new students in their immediate relationship to the physical environment of the specific institution. The macrocosmic emphasis for orientation programs is designed to present intellectual challenges in terms of the functions and goals of higher education in general. They identify the components of an ideal college orientation program as one which:

(a) Accurately reflects the educational expectation held by the total college for the student;

(b) Can be confined within the days and hours available for orientation;

(c) Will reflect recognition of special student requirements because of selected admissions or unique program offerings; and

(d) Will most adequately utilize the contribution of the faculty and staff involved in this aspect of the education process. (p. 272)

Barr (1974) divides the goals of orientation into two basic areas: goals of the institution and goals for personal growth of the new students. Although institutional goals will vary greatly based on the size and mission of the particular institution, she recommends the performing of certain essential services, including registration and

testing. Exposing the student to the broad educational philosophy of the institution is another generally accepted institutional goal noted by Barr. Boyer (1987) also lists instruction of institutional philosophy as a vital goal of orientation: "Above all, incoming students should understand the purposes and traditions of the institution and be reminded of both the opportunities and obligations that guide a collegiate education" (p. 57).

Summary. As the basic goals for new student orientation are quite similar, there are some different approaches that are necessary, depending on the specific population of new students. In order to understand what the goals should be, it is necessary to first determine the needs of new students, in general, as well as the special needs of different kinds of students.

Needs of New Students

Regular assessment of perceived needs of new students is critical in designing effective orientation programs. With the diversity of today's student population, as well as institutions, it is absurd to assume all incoming students have the same needs. Palladino and Tryon (1978) emphasized the importance of regular assessment of students' needs. They assert that: "Over the years, one might expect the nature and intensity of the problems experienced by incoming students to change" (p. 313).

In the 22nd Annual survey of 289,875 entering freshmen conducted by Alexander Astin, the director of UCLA's Higher Education Research Institute, interesting characteristics about new students in the 1987-88 school year were revealed (Higher Education Research Institute, 1987). The data indicates that "being very well off financially" was one of the students' top goals. Seventy-five percent of the new students identified that goal as essential, a percentage almost double that of students in 1970. In contrast, only 39% of the freshmen in 1987 identified "developing a meaningful philosophy of life" as an essential goal; whereas 83% listed the goal as essential in 1967 (Higher Education Institute Report, 1987). This example illustrates the importance of continuous assessment of new students needs so that adequate programs will be developed to meet those identified needs.

Higginson, Moore, and White (1981) identify needs assessment as perhaps the single most important part of planning for orientation programs. However, the literature reveals that few orientation planners begin with a needs assessment, and those who do assess needs often do not evaluate the effectiveness of their programs in meeting those needs.

Although research provides information about general developmental needs of students, Sagaria, Higginson, and White (1980) report that most of those studies are based on the reported needs of students after they have already completed their orientation experiences. They argue that the needs of students during pre-enrollment are quite different from the needs of the same students a few weeks later. Based on this thesis, they

conducted a needs assessment on entering freshmen in 1977. The results of the study indicated that entering students were more concerned about matters in the academic domain than in the personal domain. Of greatest concern in the academic domain were course scheduling, determining a major, and finding sources of academic information. Although concerns in the personal domain, including concerns regarding housing, money, extracurricular activities, and social activities were also expressed, the greatest needs were in the academic domain. The authors suggest that the primacy of concern for academic issues should be of central importance to orientation planners when goals of the orientation program are being formulated.

A second study at the same university was conducted in the summer and fall terms of 1979. It confirmed the earlier results which indicated that academic needs were found to be of greater importance to new students than social or personal needs (Moore, Higginson, & White, 1981). Tinto's (1975) research regarding the primacy of the academic over the personal domain in retention parallels the findings of these studies as well.

Conversely, a different set of studies report that new students are primarily concerned with problems in the social and personal domain. A study by Palladino and Tryon (1978) revealed that primary concerns of new students are in the personal and social domains.

Although there is contradiction in the literature as to the priority of concerns and needs of students, a great deal of literature does exist

concerning the range of the most often identified, perceived needs of new students. After an extensive literature review, Knott and Daher (1978) identified a set of tasks and coping skills which assisted students in making the transition into their new educational environments. Structured group workshops were then planned for the explicit purpose of teaching the identified tasks to students. The tasks included being able to: adapt to a new environment; acquire self-discipline and decision-making skills; meet new academic demands; clarify sexual values; resolve separation and loss in relationships; and initiate new relationships.

Kramer and Washburn (1983), after an extensive literature review, have indicated that successful orientation programs meet the following classifications of orientation-related needs:

1. The need for academic advisement and information;
2. The need for career advisement;
3. Help in making the emotional transition to college;
4. Help with understanding requirements, rules, and regulations;
5. Help in becoming geographically oriented to the new locale;
6. Help in making the social transition to college life;
7. Help in making the intellectual transition to college; and
8. Help in setting academic and personal goals.

Summary. Once an orientation program has been developed on the basis of the assessed needs of the new students in the population, it is

necessary to determine if the program has been successful in meeting those needs. In order to determine the success of the program, evaluations should be conducted on a regular basis.

Evaluation of Orientation Programs

The basic reason for presenting an orientation program is to promote measurable positive effects on students. If changes are important, they should be objectively measurable" (Griffore & Griffore, 1983, p. 35). Thus, the evaluation of orientation programs is of critical importance. Titley (1985) cited a 1969 study which pointed to a scarcity of good research on orientation programs, and she suggests that 20 years later, evaluation of orientation programs is not much improved.

Chandler (1972) reported that some research indicates "benign effects" of orientation programs, while other studies indicate virtually no effects. He suggested that "additional research in the way of experimental or comparative studies is essential" (p. 60). Higginson, Moore, and White (1981) found that evaluations which have been conducted tend to use "unsophisticated methods that focus primarily on student satisfaction with orientation activities" (p. 27), and insisted that broader sources of input for evaluation should be used. Borrowing from a model for evaluating academic instruction, input should be taken from three sources: students, campus program planners, and orientation planners from other campuses. The authors propose that this three-

pronged approach should be supplemented by studies in he relationship of the orientation program to the campus' onger-range retention studies.

Brinkerhoff and Sullivan (1982) reported that research which deals with orientation "has generally suffered from either limited research design and methodology, failure to measure relevant variables, or inconsistent and frequently noncomparable results" (p. 384). Titley (1985) concurred, noting that most studies on orientation programs are "primarily institution specific" and "hampered by inconsistent methodology, making results almost unusable in situations even slightly different from the one under scrutiny" (p. 231).

Recently, some researchers have begun to develop more sophisticated studies of orientation experiences. Pascarella, Terenzini, and Wolfle (1986) conducted a study concerning the effects of orientation on retention which took into account the effects of several variables on retention and their interrelationships. The researchers were able to take into account the various effects of several causal variables earlier identified by Tinto (1975) as variables affecting retention. By the use of a longitudinal study, Tinto's model (Figure 1, p. 5), and multiple regression, Pascarella, Terenzini, and Wolfle were able to examine the effects of orientation with the other identified variables held constant. Although the researchers admitted to the internal validity problems associated with correlational data, their research design represented a positive attempt at dealing with the inherent problems in the lack of control that is a part of most studies of orientation programs.

In most instances, students self-select themselves into orientation or non/orientation groups, so it is generally not possible to have the tight controls and randomization available in a true experimental study. Nonetheless, the attempt to deal with the problem by providing as many controls as possible is a positive step towards providing better research in the study on the effects of orientation. The present study is an additional attempt to add to that growing body of knowledge with the best design possible in the case where students have the opportunity to self-select orientation experiences.

Summary. In order to develop effective orientation programs that assist new students adjust more quickly to the new educational environment, university administrators are offering an array of different types of and approaches to new student orientation. The various institutions need to assess the needs of their particular group of students in order to determine their specific needs, as well as be familiar with the general needs of new students as identified in the literature. It is important that the programs be evaluated on a regular basis to see if they are successfully meeting the identified needs. In order to fully understand the needs of new students and the goals for new student orientation programs, college administrators should be knowledgeable in the area of human development, and especially in theories relating to student development.

Student Development Theories

Because of the changing population of new students, it is becoming more difficult to plan orientation programs that meet the diverse and unique needs of the new student population. The need for a theoretical framework upon which to base decisions about appropriate activities to meet the diverse needs has led many administrators to incorporate what is known about stages of human development into orientation planning.

Knowledge about human development has grown rapidly over the last few decades. Havighurst (1953) noted that as a person develops and changes, certain "developmental tasks" occur which must be resolved if the person is to develop adequately. A developmental task is described as:

> . . . a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by society, and difficulty with later tasks. (p. 2)

Erik Erikson (1963, 1968) has provided additional groundwork for the study of stage development in individuals. Erikson saw development occurring in stages throughout one's lifetime. Each stage was concerned with a critical issue or task that needed to be resolved in order for the individual to develop fully. Erikson demonstrated the importance of societal demands (aspects of the environment) "fitting" with the needs of

the individual at that particular stage in order for development to occur. Other developmentalists are continuing to add to the growing body of knowledge in the area of life cycle stages and tasks. If programming, curricula, and teaching methods can be adjusted to fit with the appropriate life cycle stages and "teachable moments" of an individual, the result should be that the educational process will be much more successful.

Traditional Age Students

Arthur Chickering's (1969) stage development theory is particularly helpful in understanding the special needs of traditional-age students. Chickering takes Erikson's development stage of late adolescence, which coincides with the age of the traditional college student, and deals with the resolution of identity. He divides that stage into seven vectors or small stages that must occur in order for traditional-age students to develop fully. Chickering then lists six major aspects of the college environment and describes how they impact these particular vectors. The following description and discussion of those six aspects provides a theoretical framework for looking at the developmental needs of traditional-age students.

A first major aspect of the college environment identified by Chickering (1969) is clarity and consistency of objectives. Chickering emphasizes that a college has much greater impact in all vectors of student development if its objectives are clearly stated and internally

consistent. This allows students to determine whether their personal objectives "fit" with those of the institution; thereby, eliminating many of the problems of retention with which administrators must deal.

Others support this focus. Mayhew (1983), in Surviving the Eighties, devoted an entire chapter to the importance of a well-defined educational mission. Cope and Hannah (1975) and Noel, Levitz, and Saluri (1985) also stress the importance of this initial "fit" between the institution's mission and the individual student.

A second major aspect of the college environment identified by Chickering (1969) is that of institutional size. Student development is inhibited when the student is not confronted frequently with opportunities for active participation. These opportunities generally decrease with increased size of institution. Alexander Astin (1977), in an extensive research project of over 200,000 freshmen, found that the size of the institution was crucial in terms of involvement of freshmen. As the size of the institution increased, student involvement decreased.

As student involvement on campus was shown to be a positive variable for retention, this leaves major implications for administrators of large colleges. Institutional planning at large institutions should include finding ways to simulate certain aspects of the environment at smaller institutions. Small group activities, small class size, and a variety of different kinds of organizations that reflect the unique needs of individual students can facilitate opportunities for more involvement for larger numbers of students (Astin, 1977).

A third environmental influence Chickering (1969) discusses is the area of curriculum, teaching, and evaluation. Chickering emphasizes the importance of student-centered teaching with less emphasis on rote memory and competetive evaluations, and with more emphasis on critical thinking and self-evaluation. Levine and Weingart (1973), well-known educators in the area of curriculum, reiterate the importance of a student-centered curriculum. They stress the importance of gradually increasing the responsibility for learning on students, with teachers acting as managers in the learning endeavor, and with the curriculum based on the needs of the students themselves.

A fourth environmental influence listed by Chickering (1969) is residential living. With traditional college-age students, residence hall living has been shown to be highly effective developmentally. Chickering points to ways in which residence hall arrangements can be used to effectively promote diversity in relationships, points of view, values and cultures. Astin (1977) also found that living on campus substantially increases the likelihood that a student will actually graduate, will pursue advanced degrees, and will become involved in extracurricular activities. In fact, Astin stated that "by far the most important environmental characteristic associated with college persistence is living in a dormitory during the freshman year" (1977, p. 109).

Many other studies have supported the idea that living in residence halls can provide a highly significant influence on student development. Nowick and Hanson (1985) found in a recent study that "freshman

residence hall students achieve significantly higher GPA's than non-residence hall students and experience significantly less academic difficulty than non-residence hall students" (p. 26).

The environmental influence of involvement with faculty and administration is also addressed by Chickering (1969). The importance of faculty and staff involvement with students is shown to be significant in terms of the student's ability to see congruence and achieve the "fit" discussed earlier. A recent report in the ASHE-ERIC Higher Education Report Series (Clark, Spendlove, & Whiteman, 1986) points to numerous ways in which faculty involvement with students can be a primary environmental influence. Much of the "match" or "mismatch" between a student and his or her environment can be shown to be directly related to the quality and degree of participation with faculty members. In the report and in the selected references listed at the end of the report, the impact of quality teaching, evaluation, and of the teachers themselves is stressed. Astin (1977) found that students who are actively involved with faculty show more satisfaction with all aspects of their college experience than in any other involvement area.

A final environmental area discussed by Chickering (1969) is found in the student culture itself. Chickering asserts that it is in the area of relationships of students dealing with other students that the greatest potential for student development occurs. The ability to share ideas with other students assists students to resolve many of the dilemmas faced in the stage of identify resolution, the stage with which most traditional-

age students are dealing. This is probably a major reason why the impact of residence hall living has been shown to be such a significant influence.

Adults

The environmental influences described above are those that have been shown to affect primarily traditional-age students. With the increasing number of adults now involved in higher education, it is important that educators determine what factors in the environment are most conductive to adult development. Many educational researchers are currently addressing the concerns of older students. Chickering and Havighurst (1981) suggest that the study of the life cycle and developmental stages beyond traditional age students must be conducted since participation in college by adults is expected to continue to expand. McCoy (1977) has taken the adult life-cycle tasks and developmental stages from 18 years of age through retirement age and suggested program responses and desired outcomes for each stage. The program responses listed by McCoy are very specific and can be used by college administrators to assist in developing aspects of the environment that positively affect the satisfaction and retention of adult students.

Richter-Anton (1986) has analyzed six factors that distinguish adults from traditional students. These factors include sense of purpose, nature of financial commitment, nature of time commitment, difference in life experiences, difference in availability of a reference peer group, and

a difference in concept of social acceptability. An understanding of these basic differences can also help an administrator in dealing with adult students. Hughes (1983) suggests that with the 20% predicted decline of traditional-age students and the predicted increase of adult learners who are to exceed 20 million by the year 2000, "the growth and survival of institutions of higher education are dependent upon the ability of these institutions to attract and retain older students" (p. 51).

In Hughes' (1983) study, he suggests that non- traditional students can be differentiated from traditional students in the following ways:

> Non-traditional students generally have multiple commitments, are not campus-focused, and prefer informal learning. Traditional students, by contrast, can be characterized as having limited commitments, as being campus-focused, and as preferring formal learning. (p. 61)

A comprehensive list of program responses for faculty and administrators to use in dealing with non-traditional students is also given by Hughes.

Summary. A basic understanding of human development and of the various stages of development is necessary if college administrators are to incorporate appropriate activities that meet the needs of their diverse students into their orientation programs. Administrators must also be familiar with the interplay that exists between the environment and the student, in order to assist in "student-institution fit."

Student-Institution Fit

The age-old debate as to whether the environment (external force) or the individual (internal force) plays the largest part in an individual's development and growth is probably still not resolved to everyone's satisfaction. However, there is general agreement that development is a function of the interaction between the environment and the individual. "Both a maturity or readiness within the individual and certain elements in the environment are assumed necessary for growth to occur" (Widick, Knefelkamp, & Parker, 1983, p. 91).

It is important that administrators be able to determine the "certain elements" in the environment which affect students most readily, and at what stage of maturity the elements are most effective in bringing about growth. Huebner (1983) indicates:

> A good fit between persons (their needs, attitudes, goals, and expectations) and the environment (its press, demands, supports, and the characteristics of its inhabitants) is generally hypothesized to have a positive impact, promoting satisfaction, productivity, performance, achievement, personal growth, and so on, while poor fit creates stress. (p. 129)

Numerous studies indicate that a good student-institution fit not only produces high satisfaction and performance in students, but is also directly related to students' persistence in college (Cope & Hannah, 1975; Tinto, 1975; Pascarella, Terenzini, & Wolfle, 1986). Considering these

findings on the importance of fit, the critical nature of well-planned orientation programs as the initial interface between the student and the institution can be more clearly understood.

There are both informal and formal ways of assessing the developmental level of students and determining the appropriate environmental "fit" with that level of development. An informal type of assessment suggested by Stonewater and Stonewater (1983) helps provide clues for educators to use in determining developmental levels. Based on theory by William Perry, Stonewater and Stonewater (1983) have developed a way that "theory can be used in professional practice without requiring the practitioner to become a theory expert" (p. 52).

Many formal assessment techniques for determining environmental "fit" exist. Winston, Miller, and Hackney (1981) based their assessment instrument, the Student Development Task Inventory (SDTI), on Havighurst's (1953) developmental tasks. The SDTI is a practical assessment instrument that allows students to assess their own developmental level and to assume responsibility for their own development and growth.

The Environmental Satisfaction Questionnaire (ESQ) is another formal assessment tool. The ESQ provides information which helps administrators determine student-environment "misfits" and provides recommendations for making changes. In this way, student needs and university resources are more easily matched (Corazzini, Wilson, & Huebner, 1977). A third formal assessment instrument is the

Environmental Assessment Technique (EAT). This technique takes into account eight characteristics of a student body, total number of students, average IQ of students, and six "personal orientations." Its basis is that by knowing the character of the student body, one can determine the most fitting climate or environment for that group of students (Astin & Holland, 1961).

The growing body of knowledge concerning students' developmental needs and the importance of student-institution fit can be used to design effective orientation programs that will intentionally encourage developmental growth and satisfaction. Developmental theories, if used effectively, can assist in working with students at their own levels of development. By so doing, they can provide for the essential goal of education, which Kamm (1980) so eloquently describes: "To help each person to be and to become the best each is capable of being and becoming is, after all, what education is all about" (p. 114).

Orientation programs are seen not only as a means of encouraging developmental growth and satisfaction in students. As the pool of traditional-age students is diminishing, administrators are faced with the problem of retaining the students they attract. Studies are indicating that students who find a satisfactory student-institution fit tend to stay, and that the decision to stay or leave is often made within the first few weeks at the institution. Orientation programs, as students' initial interface with the institution, are being look at closely as an effective intervention tool in promoting retention.

Student Retention

For many years, there were so many applicants for colleges and universities that not much was done to "retain" those who came to study. There was always a new supply of students ready to replace those who left. However, with enrollment trends which have been developing over the past few years, the present and the future have changed drastically. Although attrition rates have held relatively constant over the last 50 to 75 years (Summerskill, 1962; Astin, 1975; Mayhew, 1980), the pool of new students has diminished greatly.

Noel (1985) notes the drop in rate of births from 1963-1975. In 1963, there were more than four million births 26% -- to just over three million. In addition to the decline in the pool of traditional-age college students, there was as well a decline in the "college-going rate" among 18 and 19 year old males. Although the "college-going" rate of all ages of women and men of 25 or over is up slightly, the overall decline is still significant.

Lea, Sedlacek, and Stewart (1979) have noted that in the 1960's, before there was a concern over a decline of the "baby-boomers," "attrition," which implied deficiencies in the selection process, was the word used in referring to "drop out" rates. Currently, "retention has been used to describe the problem, and implicit is a change in focus from the student to the institution" (Childress, 1984, p. 28). Cohen (1985) also notes the change in focus:

> In typical fashion, the educators have changed direction not on the basis of philosophy, but on FTE. When more applicants were coming each year, there was no problem if students stayed a few weeks or a semester or two and then left. The attitude seemed to be: those who dropped out had been given their opportunity; new students would be coming in the ensuing term; it was just as well if the students could not find their way through the demands placed on them by institutions and instructors left. (p. 4)

Since state funding formulas are enrollment-driven and based on FTE, public institutions stand to receive less in state appropriations. The Carnegie Council on Policy Studies in Higher Education reports that private institutions who receive about 50% of their income from tuition and fees will also suffer drastically from the enrollment drop (Gardiner & Nazari-Robati, 1983).

Noel (1985) also notes the change in focus from the selection of students to quality of institutional programs and goals in the 1980's. He insists:

> The excitement ahead in higher education lies in what an institution can do to deliver learning -- student growth and success -- that leads to reenrollment, to the desire on the part of students to come back. . . . Reenrollment or retention is not then the goal; retention is the result or by-product of improved programs and services in our classrooms and elsewhere on campus that contribute to student success. (p. 1)

Mayhew (1980), in addressing goals for both recruitment and retention in the 1980's, also points to institutional attractiveness and viability. He suggests that the "greatest single factor is to continue ways for almost all students to become directly involved in some significant activity" (p. 193). He also points to the importance of successful academic achievement, assistance with financial aid, and improving the overall attractiveness of the campus environment.

Characteristics and Factors Related to Retention

A number of descriptive studies have been conducted to determine characteristics or factors influencing student retention. A national survey conducted in 1979 by the American College Testing Program (ACT) and the National Center for Higher Education Management Systems (NCHEMS) identified the most important factors in student retention. The study indicated that the most important characteristics affecting student retention positively included (in rank order): 1) caring attitudes of faculty and staff; 2) high quality of teaching; 3) adequate financial aid; 4) student involvement in campus life; and 5) high quality of advising. The most important campus and student characteristics affecting retention negatively included (in rank order): 1) inadequate academic advising; 2) inadequate curricular offerings; 3) conflict between class schedules and job; 4) inadequate financial aid; 5) inadequate extracurricular offerings; and 6) inadequate counseling support systems.

A "drop-out prone" student was one who had low academic achievement, limited educational aspirations, was indecisive about major and career goals, and had inadequate financial resources (Beal & Noel, 1980).

Astin (1975) noted the greatest predictive factor of a drop out is the student's past academic ability and record. Other important predictive factors include concern for finances, study habits, and education attainment level of students.

Zwerling (1980) also stressed the importance of a student's background prior to college in determining his or her persistence at an institution. He notes that students who drop out "have poor academic records, low aspirations, poor study habits, relatively uneducated parents, and come from small towns" (p. 55).

Yet, many current researchers, while acknowledging the importance of a student's pre-college background, are finding a great deal of evidence to support the notion that it is what occurs to a student in interaction with the institution that plays a greater role in dropout behaviors. In fact, Vincent Tinto, highly acclaimed for his theoretical model of the dropout (Figure 1, p. 5), insists that: "Decisions to withdraw are more a function of what occurs after entry than what precedes it" (Tinto, 1987, p. 6).

Substantial research based on Tinto's theoretical model confirms that what occurs after the student enters college plays a very large role in drop out behaviors (Pascarella, 1980, 1985; Pascarella & Terenzini, 1977,

1980; Pascarella, Terenzini, & Wolfle, 1986; Terenzini & Pascarella, 1978, 1980, 1986; Terenzini, Pascarella, & Wolfle, 1977).

Regardless of which is more important in the matter of retention, pre-entry background and attributes or that which happens after the student's entry into college, many educators agree that since we know that what occurs after entry is very important to retention, it is that part with which higher education can and should concern itself. Tinto's model gives equal credence to the effects of both the social and academic systems of college on retention/dropout behaviors. Drew (1990) points out that the interaction between the social and academic systems "can strengthen the students' goals and institutional commitments to maintain persistence; the lack of it can lead to various forms of dropout" (p. 55).

Research on Retention

Knoell (1960) identifies four types of research that have been conducted on retention: 1) census studies which document the magnitude of the problem; 2) autopsy studies which list specific reasons given for the dropping out; 3) case studies which follow students longitudinally; and 4) predictive studies which attempt to predict success from a variety of college measures.

There are numerous studies similar to those related earlier which describe characteristics and factors related to retention. However, the studies are generally descriptive in nature and the factors are considered

independently instead f as a part of a process. As a result, the studies usually describe who the students are without explaining why they drop out. Mayhew (1983) states: "The problem of how to retain students once they matriculate is at least fifty years old. By now, there should have been a rich literature on the subject -- but strangely, this is not true" (p. 222). Munro (1981) continues this idea and suggests that:

> Shortcomings in the research include ambiguous definition of dropouts, lack of control groups, lack of a representative sample of institutions for making estimates that could be generalized to the college population in the United States, and lack of a theoretical model of the dropout process. (p. 133)

Studies by Spady (1970) and Tinto (1975) have noted the need for a different kind of retention study. They indicated the need for using theory-based research which adopts multivariate designs and statistical procedures (Terenzini & Pascarella, 1978). Each used an analytical model that focused on isolating underlying explanations of attrition and that took into account the interaction between student and institutional characteristics. Durkheim's (1961) theory of suicide was used in developing these theories of college dropouts.

Durkheim (1961) linked the probability of suicide clearly to the individual's lack of interaction with society. The individual's lack of integration consisted of a lack of congruence with the values of the rest of society and lack of close personal interaction with others in society.

Spady (1970) applied Durkheim's suicide theory to dropouts by treating the college environment as a social system with its own values and social structures. Thus, students with insufficient personal interactions with others in the college and a lack of congruence with others in the environment would be likely to drop out. Spady (1970) added the academic domain to the social environment in his model of the college dropout. He then compared the levels of integration within both the social and academic domains.

Tinto (1975) built onto and expanded the work of Spady (1970) in ways which led to a "predictive" rather than simply descriptive theory of dropout behavior. By developing a longitudinal explanatory model (Figure 1, p. 5) of the persistence/withdrawal process, Tinto was able to determine in large measure the degree of "fit" between the student and the institution. Tinto argues that "given individual characteristics, prior experiences, and commitments . . . it is the individual's integration into the academic and social systems of the college that most directly relates to his continuance in that college" (1975, p. 96).

Numerous other studies which focus on the best fit between student and institution have been cited (Terenzini & Pascarella, 1978; Munro, 1981; Noel, Levitz, & Saluri, 1985; Terenzini, Pascarella, & Wolfle, 1986; Billson & Terry, 1987). They add to the growing concern about assuring a congruent fit between the students and their environments in order to promote student success and institutional persistence.

Orientation - As a Retention Intervention

Numerous authors and studies point to the importance of orientation as an effective retention tool. Designing effective orientation programs can be seen as interventions in reducing an institution's drop-out rate. The importance of orientation programs in institution-wide retention efforts is found in a great deal of literature on retention. Because the critical time of the first six weeks is cited by many researchers for withdrawal/persistence decisions, orientation which "occurs within the critical decision period . . . represents a common denominator for an institution-wide retention effort" (Moore, Higginson, & White, 1981, p. 82).

Billson and Terry (1987) describe their development of a student retention model "to guide institutions toward enhancing both involvement and institutional fit for as many students as feasible, thereby increasing student retention" (p. 290). In their model, they recognize eight important phases in the career model of a college student. Orientation is one of the eight phases which should be required of all students. They consider the orientation phase as a critical phase by its encouragement of retention "through increased utilization of student support systems and campus activities" (p. 296).

Cohen (1985) describes the "noteable comeback" of orientation programs in the 1970's. He pointed to numerous studies which described higher retention rates of students who had been involved in orientation

programs or courses. Cohen reported similar findings by Jones, Hoeber, Clagett, and others. All the studies pointed to success in terms of retention.

In linking orientation to retention, Forrest (1985) describes institutions surveyed in terms of advising and orientation programs. Those having the most comprehensive orientation and advising programs showed an average of 60% of new students graduating in a three to five year period, while the institutions with the least comprehensive programs showed an average persistence rate of 47%.

Pascarella, Terenzini, and Wolfle (1986) used Tinto's (1975) conceptual model, depicted on p. 5 (Figure 1), to test the influence of an orientation experience on retention. They view orientation programs as forms of "anticipatory socialization," the process of experiences from which a student is enabled to "anticipate correctly" the values and norms of his or her new environment. By anticipatory socialization, students become more successfully integrated into the institution's social and academic systems than those students not exposed to orientation. In order to test this theory, the authors used the longitudinal explanatory model developed by Tinto (1975). By holding background traits and initial commitments constant, and by the use of multiple regression analysis, they were able to determine the relative influence of orientation on retention. Of all variables in the model, orientation had the largest indirect effect on persistence. The indirect effect was mediated both through social integration and institutional

commitment. According to Pascarella, Terenzini, and Wolfle (1986) this indirect effect on retention is very important:

> The fact that the major part of this impact was transmitted through the influence of orientation on causally subsequent variables, which had major direct effects on persistence, should not detract from its potential significance. Indirect effects are no less important as an index of impact than are direct effects . . . . A distinct advantage of estimating the influence of orientation within a causal model was that it permitted an assessment of its total influence on persistence, disaggregated into direct and indirect effects. Since most of this influence was indirect, a more conventional approach (which considered only direct effects) would have seriously underestimated the true impact of orientation on persistence. (pp. 170-171).

Gass (1987, 1990) conducted two studies to determine the effects of orientation programs which focused on six specific academic and social goals. His 1987 study compared the effectiveness of a five-day adventure-based orientation program (SFEP) which focused on both social and academic goals with two other orientation programs. After controlling for initial critical differences, the study found that SFEP participants "had significantly higher retention rates than did members of the other two groups one year following their entrance into school" (Gass, 1990, p. 34). In his 1990 study, Gass again compared the effectiveness of the five-day adventure-based program (SFEP) with two other orientation programs. This study again clearly supported the effectiveness of the

SFEP in retaining more students than either of the other two orientation programs for the one-year period. Although the retention rates of the SFEP groups over the other two groups was not as great after three and one-half years, as after one year, the difference was still great.

In both studies potential initial differences between the subjects were held constant so that the type of orientation program was clearly responsible for the differences in retention rates among the three groups. Gass concluded that: "the adventure orientation program was specifically designed to focus on six academic and social goals related to student retention. The focus of these goals, using the processes of the adventure experiences, led to the changes that were observed in this study" (1990, p. 36).

Summary. Based on studies cited in the literature, an effective orientation program can be a highly successful tool for retention. Administrators should analyze this tool carefully to determine if it is being appropriately used to assist in the transition of new students to their educational environment; and ultimately to assist with their retention.

Summary

The literature review pointed to the development of a variety of new student orientation programs, beginning with the first recorded orientation course in 1888. The multitude and variety of orientation

programs now being offered reflect the types of colleges, needs of the specific students, and a general concern about offering the most appropriate kind of program to encourage student-institution fit.

Many studies have focused on determining what the goals of an effective orientation program should be. Although numerous goals have been offered, the primary emphasis must be on helping students to adjust to both the academic and social aspects of the new college environment. The importance of assessing specific needs of students at the various institutions as well as of evaluating the programs to determine their effectiveness in assisting with the students' integration and subsequent persistence in college were discussed.

The use of a theoretical framework for designing effective new student programs is fundamental. An under- standing of human development and particularly of the stages of development of the students attending the orientation program is essential. A program must be developed which meets the developmental needs of the target population if it is to effectively assist with the fit between the student and the institution.

The link between orientation programs and persistence of students has been documented in research studies. Orientation programs have been identified as effective interventions in assisting with social and academic integration of new students, which in turn results in persistence.

Chapter III, "Design and Methodology," follows this chapter. Chapter III provides a description of the population and sample, the design and administration of the survey instruments, and procedures and analyses used. Chapter IV provides the presentation and analysis of data, and Chapter V provides the summary, conclusions, and recommendations.

CHAPTER III

DESIGN AND METHODOLOGY

The purpose of this study was to determine the relative effectiveness of three different kinds of summer orientation programs in positively influencing student-institution fit as determined by social and academic integration, and subsequent persistence at a large midwestern university. The study was also designed to determine if additional variables, including participation in Alpha, a fall orientation program, affect social and/or academic integration and subsequent persistence. Effectiveness was measured by the results of pre- and post-test survey instruments, as well as by a determination of which students were still retained in the spring semester.

This chapter presents the specific methodologies used to conduct the study. Topics discussed include the population and sample, instrumentation, data collection, and treatment of the data.

Population and Sample

The population for this study was all new students (except transfer and graduate students) who enrolled at this large midwestern university for the fall of 1989. A sample was selected from this population by

means of proportional stratified sampling which allowed each of three identified sub-groups to be represented in the sample in approximately the same proportion that they were represented in the population.

Each of the three sub-groups was determined by which of three possible summer enrollment options was selected by the students. Random assignment of students to each of the three sub-groups was not possible due to university policy which stipulated that students be allowed a choice of enrollment options. Therefore, students were randomly selected from each of the three sub-groups for participation.

Because multiple regression was to be employed to analyze the data, the appropriate sample size was based on a recommended sample size for multiple regression. Tabachnick and Fidell (1983) recommend an ideal case-to-variable ratio of 40:1. Since this study deals with 14 variables, the ideal sample size was determined to be 560.

Because it was necessary for the pre-test to be taken prior to the summer orientation sessions, there was no way to determine how many students would choose which of the three enrollment options prior to that time. Therefore, pre-test surveys were distributed to the entire population. Post-test surveys were mailed to 560 students with each of the three identified sub-groups represented in the same proportion as in the population.

Instrumentation

The instruments selected for the study had been developed and used in numerous studies, including the study by Pascarella, Terenzini, and Wolfle (1986) upon which the present study is based.

Reliability and Validity

In an earlier study by Terenzini and Pascarella (1980), the authors reported the findings related to the instruments used in six studies which had drawn upon one or more of three independent random samples of freshmen in the three successive fall semesters between 1974 and 1976. Findings included:

1. Acceptably high response rates for each data collection;
2. Statistical tests indicate that respondents in each data set were representative of the population from which they were drawn;
3. A sufficient number of respondents . . . to yield relatively stable results; and
4. Each scale of these instruments appears to meet accepted standards of internal consistency reliability. (p. 273)

Further information regarding the reliability of the instruments was discussed by the authors in another study the same year: "The alpha reliabilities of the scales ranged from .71 to .84 and were judged adequate

for using the scales in further analyses" (Pascarella & Terenzini, 1980, p. 67).

A limitation of the data sets noted by the authors was that they had been collected at a single institution. As mentioned previously, this study was undertaken, in part, to replicate the previous studies in another institutional setting. Minor updating and editorial changes were made to the instruments developed by Pascarella and Terenzini in order to reflect demographic information appropriate for the population in the current setting of this large midwestern university. The minor revisions had to do with modifying dates, racial and ethnic categories, and ranges of high school graduating class sizes.

New Student Survey

The pre-test (New Student Survey), located in Appendix A, was used to gather background information regarding variables previously identified in the literature by Tinto (1975) and others to affect student retention. The variables included: socioeconomic status, individual attributes (operationalized as gender, ethnicity, and academic aptitude) and pre-college schooling (operationalized by measures of secondary school academic and social integration and ACT or SAT scores). Students' initial commitment to the goal of graduation (Goal Commitment I) was operationalized as the sum of two items -- responses to survey items concerning highest expected academic degree and the degree of importance placed on graduating from college. Students' initial

commitment to this university (Institutional Commitment I) was operationalized as the sum of two items: the ranking of the midwestern university under study as a college choice and their degree of confidence that the choice had been the "right" choice.

On the questionnaire, students checked which of the three summer orientation options they had selected. The list of students per option was then checked with the lists in the university admissions office for accuracy. Two items in the survey, which identified reasons for selection or rejection of the extended (2-day) summer enrollment option were incorporated primarily to assist orientation planners rather than for purposes of this study.

Follow-Up Survey

The post-test New Student Follow-up Survey which is located in Appendix B, sought information on the first semester freshman year experience, including the degree of academic and social integration experienced, general college commitment, and commitment to the midwestern university under study. Academic integration was operationally defined as a combination of two items: responses to a Likert-type item measuring students' perceived level of academic development and first semester GPA (obtained from official university records in Institutional Research after the first semester). Social integration was operationally defined using a combination of: (1) extent of involvement in extracurricular activities the first semester; (2)

frequency of first semester non classroom faculty contacts; (3) responses to Likert-type items measuring quality of students' relationships with peers; and (4) responses to Likert-type items measuring the impact and quality of students' contact with faculty (outside the classroom).

Subsequent goal commitments (taken after the first semester) were also measured by the follow-up survey. Goal Commitment II was determined by degree of importance placed on graduation from college by students. Institutional Commitment II was operationally defined as the sum of two items on the survey measuring: (1) the students' degree of confidence that the university selected had been the correct choice, and (2) the degree of confidence (expressed by the student on the survey) as to the importance of graduating from the particular midwestern university. The final variable measured on the follow-up survey was the students' choice of academic college. Attendance at Alpha, the fall orientation program, was determined by a self-reported item on the survey.

Procedures

The procedures included conducting a pilot study and collection of data. Data were collected by means of pre-test and post-test instruments and record checks with the office of Institutional Research for first semester GPA and second semester persistence information.

Pilot Study

Prior to the actual distribution of the pre-test, the New Student Survey, a small pilot study was conducted for purposes of determining the priority of the minor revisions to the original instruments used by Pascarella, Terenzini, and Wolfle (1986) to analyze and refine techniques for coding the data, and to solicit information regarding the amount of time required to complete the survey.

Since access to "incoming" freshmen was not readily available, ten second-semester freshmen were selected to complete the questionnaire and record the amount of time required to complete the survey. The average time required to take the questionnaire was approximately eight minutes, and the subjects indicated there were no unclear questions.

The New Student Follow-Up Survey (NSFS) was not used as a part of the pilot study since the codes for the instrument in the 1980 study were available and no significant changes had been made to the instrument.

Data Collection

The New Student Survey (NSS) was mailed with enrollment materials to all prospective students whose initial application to the university had been accepted in the spring and summer of 1989. The students were instructed to return the completed enrollment materials which included the pre-test (NSS) to the Admissions Office prior to

enrollment. The enrollment materials also included the students' selected summer enrollment/orientation program option and preferred dates for attending the program. The computer center than generated three lists for use by the Office of Admissions and the researcher. The three lists of new student names were based upon which of the three summer enrollment options had been selected by the student. From the lists, 560 names were randomly selected, with each of the three identified subgroups represented in the same proportion as it was represented in the population. The post-tests (NSFS) were then color-coded by summer enrollment option and mailed to the 560 students in November.

At the end of three weeks, telephone calls were attempted to all students who had not returned the surveys. The final number returned was 378 surveys, which represented a 68% return rate. Of the 378 surveys returned, 321 surveys (85%) were returned by students in subgroup one, the traditional one-day summer orientation option. Students from subgroup two, those who selected the more extensive two-day option, returned 40 surveys (11%), and students in subgroup three who simply enrolled (by phone, mail, or drop-in) with no actual orientation, returned 17 surveys (4%). The number of surveys returned in each subgroup were proportional to the distribution of each subgroup in the population.

The third data collection, Spring of 1990, consisted of a first semester GPA for each of the 560 students, as well as information

regarding whether the students had been retained the second semester. This information was obtained from the office of Institutional Research.

Treatment of the Data

The need for a more sophisticated research design than the typical descriptive design used in most orientation and retention studies had been noted in the literature review. The literature review also revealed the need for theory-based research which adopts multivariate designs and statistical procedures. Therefore, in this study, a correlational research design which was longitudinal and utilized multiple regression analysis was used. The study was based on Tinto's (1975) explanatory model of retention, described in Figure 1. It was, in large part, a replication of a study conducted by Pascarella, Terenzini, and Wolfle (1986). Tinto's model explains retention as dependent to a large extent on student-institution fit or integration. In order to determine how successful orientation experiences can be in positively influencing student-institution fit, it was necessary to hold all causal variables occurring prior to orientation experiences statistically constant. All subsequent variables in the model would be influenced by orientation.

Data on prior causal variables were collected prior to enrollment on the pre-test (NSS) and included demographic information concerning gender, ethnicity, socioeconomic status, secondary school academic and social integration, academic aptitude, goal commitment to graduate from college (Goal Commitment I) and institutional commitment

(Institutional Commitment I). Orientation experiences were then placed in the model between subsequent variables, including social and academic integration, goal commitment to college graduation (Goal Commitment II), and institutional commitment (Institutional Commitment II). As hypothesized by Pascarella, Terenzini, and Wolfle (1986), these subsequent variables would be affected directly by orientation experiences, with the dependent variable, persistence, occurring as a result of the interplay of all the variables.

The second data collection occurred in the form of a follow-up survey mailed in November of 1989. The third data collection occurred in the Spring of 1990 and consisted of a review of official university records obtained from Institutional Research to determine first semester GPA's and retention data. Data from the last two collections provided the necessary information concerning variables occurring after orientation (subsequent causal variables). According to Pascarella, Terenzini, and Wolfle (1986), the variables occurring prior to orientation were referred to as "exogenous" (determined outside the model), and all subsequent variables including orientation experiences, academic and social integration, and subsequent institutional and goal commitments were referred to as "endogenous" and goal commitments by other variables within the model).

In order to answer the research questions posed for this study, a multiple regression analysis was computed to determine which of the independent variables contributed significantly to each of the three

dependent variables (social integration, academic integration, and persistence). Independent variables included all other variables contained in the model. When necessary, an analysis of variance (ANOVA) and Tukey post-hoc were conducted to determine where significance occurred.

Summary

Data for this study were accumulated via mail surveys and a review of official institutional records from the Division of Institutional Research. The pre-test instrument (NSS) was mailed to the entire new student population. After the new students had selected their summer orientation option, the sample was randomly selected from within each of the three self-selected subgroups in proportion to the groups within the population. A second survey instrument (NSFS) was mailed to the sample in the fall, and review of official institutional records from the Division of Institutional Research to determine first semester GPA's and retention data was conducted the following spring.

The instruments were adaptations of the pre-test and post-test surveys used in a similar study by Pascarella, Terenzini, and Wolfle (1986). Minor modifications were made in demographic information to make the instruments suitable for the particular institution and the type of students it served.

Because of the complexity and diversity of variables identified in the study and in order to keep all casual variables occurring prior to

orientation experiences constant, a multiple regression analysis was used. By utilization of this statistical procedure, all the variables actually affecting social integration, academic integration, and persistence, as well as their degree of influence could be more accurately determined.

This chapter has defined the sample and population for the study, described the survey instruments, and explained procedures for data collection and analysis.

Chapter IV provides the presentation and analysis of data.

Chapter V provides the summary, conclusions, and recommendations.

CHAPTER IV

FINDINGS AND ANALYSES OF DATA

This chapter presents the findings of the data analyses. The findings are based on responses to the research instruments by a sample of 378 new students at a large midwestern university.

The findings of this study will be organized as follows: sample demographics, testing of the research questions, and the summary.

Demographics of the Sample

Selected demographic information was collected from the New Student Survey, the pre-test survey instrument, and is presented for the purpose of providing a description of the students in the sample. Generally, respondents were white, females, attended large public high schools, and came from well-educated families.

More specifically, as shown in Table I, females accounted for 225 (59.5%) of the returned surveys, males accounted for 147 (38.9%), and six (1.6%) students did not respond to this question.

Racial/ethnic identification reported in Table II as follows: 343 (90.7%) were White Caucasian Americans, seven (1.9%) were Black Americans, 23 (6%) were Native Americans, one (.3%) was Asian

TABLE I

GENDER DISTRIBUTION OF THE SAMPLE

GENDER		
	NUMBER	PERCENT
FEMALE	225	59.5
MALE	147	38.9
NO RESPONSE	6	1.6
TOTAL	378	100.00

TABLE II

RACIAL/ETHNIC DISTRIBUTION OF THE SAMPLE

RACIAL/ETHNICITY		
	NUMBER	PERCENT
WHITE	344	91.0
BLACK	7	1.9
NATIVE AMERICAN	23	6.0
ASIAN/PACIFIC ISLANDER	1	.3
HISPANIC	1	.3
OTHER	2	.5
TOTAL	378	100.00

American, one (.3%) was Hispanic American, and two students (.5%) listed either "other" or "no response."

Regarding high schools attended, 359 students (95%) had attended public high schools, 18 students (4.8%) had attended private high schools, and one student (.2%) did not respond to the question (see Table III).

In terms of the five categories of high school graduating class sizes, the largest number of students (45.5%) indicated a graduating class size category of 300 or more. Graduating class sizes for the remainder of the students were distributed somewhat evenly into the other four categories (see Table IV).

Table V illustrates the educational levels attained by students' parents. As indicated in the table, parents' highest educational levels were reported as: approximately 18% of the fathers and 30% of the mothers had attained a high school education; approximately 25% of the fathers and 16% of the mothers had completed undergraduate degrees; and approximately 21% of the fathers and 12% of the mothers had completed graduate degrees.

Other pertinent demographic information gathered from the sample pertained to students' ages and ACT scores. Students' ages ranged from 17-24 years, with 18.2 years representing the mean. A mean ACT score of 22.5 was reported.

TABLE III

SCHOOL BY TYPE

SCHOOL TYPE		
	NUMBER	PERCENT
PUBLIC	359	95.0
PRIVATE	18	4.8
NO RESPONSE	1	.2
TOTAL	378	100.00

TABLE IV

CATEGORIES OF GRADUATING CLASS SIZE

SCHOOL SIZE		
	NUMBER	PERCENT
UNDER 50	50	13.2
50-99	60	15.9
100-199	50	13.2
200-299	46	12.2
300 OR MORE	172	45.5
TOTAL	378	100.00

TABLE V

HIGHEST EDUCATIONAL LEVEL
ATTAINED BY PARENTS

PARENTS EDUCATION				
	FATHER		MOTHER	
	N	%	N	%
GRAMMAR SCHOOL	3	.8	1	.3
SOME HIGH SCHOOL	9	2.4	7	1.9
HIGH SCHOOL GRADUATE	68	18.0	112	29.6
SOME COLLEGE	88	23.3	116	30.7
COLLEGE GRADUATE	93	24.6	62	16.4
SOME GRADUATE STUDY	26	6.9	30	7.9
GRADUATE DEGREE	79	20.9	45	11.9
NO RESPONSE	12	3.1	5	1.3
TOTAL	378	100.00	378	100.00

Testing of the Research Questions

A Pearson correlation matrix was developed, using the variables identified in the literature to affect retention, as can be seen in Table VI. Next, in order to answer the research questions for this survey, three multiple regression equations were developed, each using one of the following three variables as the dependent variable: social integration, academic integration, and persistence. As significances were found, analyses of variance (ANOVAs) were conducted to determine what levels of the variables were significant. An alpha level of .05 was used in all analyses.

Research Question No. 1

For new students, is summer orientation/enrollment a significant factor in:

a. Social integration;

b. Academic integration; and/or

c. Persistence?

Social integration. With social integration as the dependent variable, a regression equation was developed, as shown in Table VII. Orientation/enrollment was found to be significant (p=.002). An analysis of variance (ANOVA) was run to determine if differences in social integration among the three options existed. Based on results of the ANOVA, siginficant differences among the options were found p=.003).

TABLE VI

PEARSON CORRELATION COEFFICIENT

Means, Standard Deviations, and Intercorrelations Among Variables

	VARIABLES	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Ethnicity (0-nonwhite, 1=white)	0.91	0.29																
2.	Secondary School Social Integration	3.02	1.89	03															
3	Socioeconomic Status	12.08	3.04	07	-02														
4	Academic Aptitude	22.54	4 61	02	-04	05													
5	Secondary School Academic Integration	1.71	0.91	04	-23	-02	-42												
6.	Liberal Arts Major (0=liberal arts major, 1=other major)	0.40	0.49	-02	-04	02	08	-01											
7.	Gender (1=male, 2=female)	1.61	0.49	-05	15	-03	-20	-14	09										
8.	Goal Commitment I	5.85	1 21	-09	01	11	33	-24	25	-04									
9.	Institutional Commitment I	5.42	0.69	02	-04	-01	-12	05	-03	04	-11								
10	Orientation Session (1=8 hour, 2=2 day, 3=enrollment only)	1.92	0.36	-02	-08	01	-06	05	14	01	-05	-01							
11.	Alpha (1=attend, 2=did not attend)	1.26	0.47	-003	06	04	-06	01	01	01	05	-01	00						
12.	Social Integration	41.24	10.26	-04	01	-01	13	-02	04	-10	14	-01	-01	11					
13	Academic Integration	22.17	3.47	-02	-04	09	22	-11	01	-08	08	04	-04	03	13				
14.	Goal Commitment II	4.88	0.40	-02	02	-06	02	-09	-06	02	17	-15	-05	-002	07	-07			
15.	Institutional Commitment II	6.58	1.36	02	11	-02	02	-08	05	05	-001	02	05	-02	09	-03	06		
16.	Freshman Year Persistence (0=nonpersist, 1=persist)	0.88	0.33	02	04	04	09-	-13	-07	-003	-05	-04	-04	00	-06	06	09	11	

Note. Decimals omitted from correlations

TABLE VII

MULTIPLE REGRESSION ANALYSIS
ON SOCIAL INTEGRATION

Multiple R: 0.392		Squared Multiple R: 0.154		
Standard Error of Estimate: 11.28				
VARIABLES	B WEIGHT	BETA WEIGHT	T	P
Constant	4.10	0.00	0.25	0.80
Ethinic	-1.94	-0.05	-0.74	0.46
Ex. Act.	0.22	0.04	0.54	0.59
SES	-0.14	-0.04	-0.58	0.56
ACT	0.18	0.07	0.95	0.34
GPA	0.97	0.07	0.88	0.38
Liberal Arts	1.98	0.08	1.21	0.23
Gender	-4.02	-0.17	-2.38	0.02
Goal Com.	0.61	0.07	0.89	0.37
Inst. Com.	0.04	0.002	0.04	0.97
Alpha	1.93	0.07	1.17	0.24
Aca. Int.	0.38	0.11	1.74	0.08
Goal Com. 2	3.91	0.11	1.72	0.09
Inst. Com. 2	0.70	0.07	1.18	0.24
Persist	-4.74	-0.12	-1.88	0.06
Color	4.89	0.20	3.195	0.002

A Tukey post hoc revealed significant differences between the 8-hour enrollment/orientation option and the no orientation option with p=.001. Significant differences were also found between the 2-day enrollment/orientation and no orientation option, with p=.019. No significant differences were found between the 8-hour and 2-day options. Therefore, students involved in both the 8-hour and the 2-day options were found to have significantly higher social integration scores than students who enrolled with no orientation.

Academic integration. Table VIII presents the multiple regression equation with academic integration as the dependent variable. Attendance at summer enrollment/ orientation (color) was determined not to be a significant factor in academic integration (p=.467).

Persistence. With persistence as the dependent variable, a multiple regression equation was developed, as shown in Table IX. Attendance at summer enrollment/ orientation (color) was not a significant factor in student persistence (p=.491).

Research Question No. 2

For new students, is Alpha, the fall orientation program, a significant factor in:

a. Social integration;

b. Academic integration; and/or

c. Persistence?

TABLE VIII

MULTIPLE REGRESSION ANALYSIS
ON ACADEMIC INTEGRATION

Multiple R: 0.326		Squared Multiple R: 0.106		
Standard Error of Estimate: 3.444				
VARIABLES	B WEIGHT	BETA WEIGHT	T	P
Constant	17.55	0.00	3.61	0.00
Ethinic	-0.46	0.04	-0.58	0.56
Ex. Act.	-0.06	-0.03	-0.49	0.62
SES	0.06	0.06	0.89	0.37
ACT	0.12	0.16	2.10	0.04
GPA	-0.18	-0.04	-0.52	0.60
Liberal Arts	0.16	0.02	0.32	0.75
Gender	-0.07	-0.01	-0.13	0.89
Goal Com.	0.16	0.06	0.78	0.44
Inst. Com.	0.62	0.12	1.82	0.07
Soc. Int.	0.04	0.12	1.74	0.08
Alpha	0.20	0.02	0.39	0.70
Goal Com. 2	-0.85	-0.08	-1.21	0.23
Inst. Com. 2	-0.26	-0.09	-1.44	0.15
Persist	1.47	0.13	1.91	0.06
Color	0.35	0.05	0.73	0.47

TABLE IX

MULTIPLE REGRESSION ANALYSIS
ON PERSISTENCE

Multiple R: 0.339		Squared Multiple R: 0.115		
Standard Error of Estimate: 0.301				
VARIABLES	B WEIGHT	BETA WEIGHT	T	P
Constant	0.78	0.00	1.78	0.08
Ethinic	0.03	0.03	0.50	0.61
Ex. Act.	-0.005	-0.03	-0.45	0.66
SES	0.005	0.05	0.77	0.44
ACT	-0.003	-0.05	-0.62	0.53
GPA	-0.06	-0.17	-2.17	0.03
Liberal Arts	-0.06	-0.09	-1.32	0.19
Gender	-0.07	-0.11	-1.52	0.13
Goal Com.	-0.01	-0.05	-0.70	0.48
Inst. Com.	-0.06	-0.13	-2.05	0.04
Soc. Int.	-0.003	-0.13	-1.88	0.06
Aca. Int.	0.01	0.13	1.91	0.06
Goal Com. 2	0.08	0.09	1.32	0.19
Inst. Com. 2	0.03	0.14	2.14	0.03
Persist	-0.01	-0.01	-0.18	0.85
Color	0.03	0.05	0.69	0.49

Social integration. The regression equation with social integration as the dependent variable is shown in Table VII. Attendance at Alpha was not found to be significant in social integration (p=.245).

Academic integration. The regression equation with academic integration as the dependent variable is shown in Table VIII. Attendance at Alpha was not found to be significant in academic integration (p=.467).

Persistence. The regression equation with persistence as the dependent variable is shown in Table IX. Attendance at Alpha was not found to be significant in persistence (p=.855).

Research Question No. 3

For new students, what additional factors significantly affect:

a. Social integration;

b. Academic integration; and/or

c. Persistence?

Social integration. The regression equation with social integration as the dependent variable is shown in Table VII. Besides type of summer enrollment/orientation discussed earlier, gender was the only variable found to significantly affect social integration, (p=.018). Based on examination of the means in Table VI, the Pearson correlation matrix (p. 77), the males were determined to have greater social integration. The

mean for males was 42.49, with a standard deviation of 13.90. The mean for females was 40.38, with a standard deviation of 6.93.

Academic integration. The regression equation with academic integration as the dependent variable is depicted in Table VIII. The only variable shown to significantly affect academic integration was ACT score, with p=.037. As would be expected, the higher the students' ACT score, the greater his or her academic integration.

Persistence. The regression equation with persistence as the dependent variable is shown in Table IX. Three variables are shown to significantly affect persistence. The first variable was high school GPA, with p=.031. The higher the GPA, the greater the chance of persistence.

The second variable found to significantly affect persistence was Institutional Commitment I (p=.041), which was operationalized as the sum of two items from the survey instruments: the ranking of the midwestern university under study as a college choice and their degree of confidence that the choice had been the "right" choice for respondent.

The third variable found to significantly affect persistence was Institutional Commitment II (p=.034), which was operationally defined as the sum of two items on the survey measuring: (1) the students' degree of confidence that the university selected had been the correct choice, and (2) the degree of confidence (expressed by the student on the survey) as to the importance of graduating from the particular midwestern university.

Summary of Findings

In general, respondents were white, attended large public high schools, and came from relatively well-educated families.

To determine the effects of variables identified in the literature as affecting the social integration, academic integration, and persistence of new students, three multiple regression analyses were conducted.

In the first multiple regression analysis, summer orientation and gender were the two variables found to significantly affect the dependent variable of social integration. Males were found to have higher levels of social integration than females when the variable of gender was analyzed in combination with other variables in the multiple regression analysis. Additionally, both summer enrollment options which had an orientation element (8-hour and 2-day) were found to significantly affect student retention; the enrollment option with which had no orientation element had lower levels of social integration than either enrollment option with orientation elements.

In the second multiple regression analysis, ACT score was the only variable found to significantly affect the dependent variable of academic integration. Students with higher ACT scores had significantly higher levels of academic integration.

In the third multiple regression analysis, three variables were shown to significantly affect the dependent variable of persistence: high school GPA, Institutional Commitment I, and Institutional Commitment II.

New students with higher GPAs had significantly higher levels of academic integration. Higher levels of both Institutional Commitment I and Institutional Commitment II resulted in significantly higher levels of academic integration. Institutional Commitment I was a measure of students' initial commitment to the institution prior to the first semester, and Institutional Commitment II was a measure of students' commitment to the institution at the end of the first semester.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a brief summary of the study, suggests an explanation of the research findings, formulates conclusions regarding the findings, and recommends directions for further research.

Summary of the Study

The purpose of this study was to determine the effects of orientation, as well as of other variables identified as important in the literature, on persistence of new students at a large mid-western university.

In order to address the research needs addressed in the literature review, a longitudinal design which incorporated the use of multiple regression analyses and Tinto's (1975) theoretical model was used. The study replicated, in part, an earlier study by Pascarella, Terenzini, and Wolfle (1986) with the intent of furthering the generalizability of the results of that study.

Theoretical Framework for the Findings

To understand the significance of the findings in this study, it is essential to examine them in the context of the theoretical model upon

which the study was based (Tinto, 1975) and in relationship to the study this research replicates (Pascarella, Terenzini, & Wolfle, 1986).

The research questions involved the use of variables previously identified in the literature to affect retention. While focusing on the effect of orientation experiences on the dependent variables of social integration, academic integration, and persistence, significance of other variables in Tinto's (1975) model were also examined. Understanding how the three dependent variables are themselves related in the model gives a much clearer picture of the relationship of all of the variables discussed. According to Tinto (1975), "given individual characteristics, prior experiences, and commitments . . . . it is the individual's integration into the academic and social systems of the college that most directly relates to his continuance in college" (p. 96).

In terms of the relative importance of social integration and academic integration to persistence, the literature reveals conflicting viewpoints and findings. In a review of six studies seeking to validate Tinto's model of college student retention (Terenzini & Pascarella, 1980), results from one study suggested social integration factors were more important, and another study suggested the greater importance of academic integration factors. Other studies indicated that the relative importance of each type of orientation was dependent upon the type of student. It was concluded that both types of integration were important to retention because "each type had its own independent influence" (Terenzini & Pascarella, 1980, p. 277).

In light of Tinto's (1975) theoretical model, variables in the current study found to directly affect either social integration or academic integration will be referred to as having "indirect" effects on persistence. As discussed in Chapter 2, according to Pascarella, Terenzini, and Wolfle (1986) indirect effects on retention are "no less important as an index of impact than are direct effects" (p. 170).

Thus, each of the independent variables found to significantly affect social and/or academic integration, will indirectly affect persistence.

Explanation and Conclusions Regarding Findings

In the present study, variables found to have significant direct or indirect effects on persistence included background or initial traits of gender, ACT score and high school GPA. Other variables affecting persistence included orientation, Institutional Commitment I and Institutional Commitment II.

Initial Traits

Three initial, or background traits, found to have significant effects, either direct or indirect, on persistence included gender, high school GPA, and ACT score.

Gender. Gender was found to be a significant factor in the present study when analyzed with a multiple regression analysis. Males were found to have higher levels of social integration than females. For

purposes of this study, social integration refers to a combination of: frequency of out-of-class contacts with faculty; the extent of involvement in extracurricular activities; extent and quality of students' relationships with peers as perceived by the students and measured by items on a factorially-derived Likert-type scale; and impact and quality of students' out-of-classroom contacts with faculty as measured by items on a factorially-derived Likert-type scale. It was concluded that gender, in combination with other variables, was significant in student social integration, and ultimately, to retention.

In a review of six studies related to student persistence, Terenzini and Pascarella (1980) discussed two findings related to gender. Although they noted that one study had indicated "academic integration is more important than social integration for men, whereas the reverse is true for women" (p. 277); they also related the complexities in determining what combination of variables was significant in the differences between males and females.

In the same review, Terenzini and Pascarella (1980) found the following:

> non-class contacts with faculty focusing on intellectual topics were most important in positively influencing the persistence of men with relatively low levels of institution/goal commitment and women with relatively low ratings of the quality and impact of their interactions with their peers . . . . The quality and impact of a student's peer group relations was most important in positively influencing the

persistence of women who at entrance to college attached a relatively high level of importance to college graduation. (p. 279)

Tinto (1975) also points to the differential aspects of certain variables, or combination of variables on males and females. He presents findings that indicate "grade performance tends to be more important for male students . . . but males who drop out are more often academic dismissals than are females" (p. 105). Tinto also indicates other confounding findings that suggest intellectual development is more directly related to college persistence in females than in males.

Findings in regard to gender were very different in the study by Pascarella, Terenzini, and Wolfle (1986) than in the present study. Findings indicated "being female had a positive indirect effect on persistence, which appeared to be transmitted primarily through social integration, Goal Commitment II, and Institutional Commitment II" (p. 167). However, in the present study, being male had a positive effect on social integration. Statistical analyses to determine differences in gender for Goal Commitment II and Institutional Commitment II were not conducted in the present study.

High School GPA and ACT Score. Although ACT score was shown to have an indirect effect on persistence through its effect on academic integration, high school GPA was the only background trait found to have a significant direct effect on persistence, when persistence was used as the dependent variable. It is not clear why ACT score was a better

predictor of first semester GPA and students' perception of intellectual development (academic integration) and high school GPA was a better predictor of persistence. However, the fact that both were found to be important factors in persistence in this study parallels findings in the literature. Astin (1975) noted the importance of both and suggested that the greatest predictive factor of a "drop out" is the student's past academic ability and performance.

For purposes of predicting college success, colleges generally use a combination of high school GPA and standardized test scores. Tinto (1975), while acknowledging the importance of both measures, argues that:

> past grade performance tends to be the better predictor of success in college if only because it corresponds more closely to the individual's ability to achieve within an educational setting with social and academic requirements not too different from that of the college. (p. 101)

Discussion. It cannot be denied that initial traits, those traits students bring to college, have an effect on success and retention in college. Indeed, numerous studies refer to the significance of initial or background traits in influencing college success or persistence (Spady, 1970; Tinto, 1975; Cope & Hannah, 1975; Zwerling, 1980).

However, Tinto (1987) insists that: "Decisions to withdraw are more a function of what occurs after entry than what precedes it" (p. 6).

Terenzini and Pascarella (1978) while acknowledging the importance of initial student characteristics, insist:

> there would appear to be little future in trying to predict attrition solely on the basis of students' matriculation characteristics. The findings suggest that efforts to reduce current attrition levels are more likely to succeed if they are focused on what happens to students after their arrival on campus, rather than on what they are like at the time of admission. (p. 363)

Orientation

Besides gender, orientation was the only variable in the model found to significantly affect social integration. Although both summer orientation options were significant, Alpha, the fall orientation program did not indicate a significant effect on social integration.

Findings by Pascarella, Terenzini, and Wolfle (1986) also found that attendance at orientation significantly affected social integration. It was reported that "of all variables in the model, exposure to orientation had the largest positive, indirect effect on freshman year persistence . . . . Indeed, the direct effect of orientation on social integration, 0.192, was the largest of any variable" (pp. 166-167).

Since both summer orientation options in the current study and the orientation in the Pascarella, Terenzini, and Wolfle (1986) study clearly showed significant effects on social integration, it was unclear why Alpha, the fall orientation program, did not indicate significance. To

discover possible reasons for the differences, it is necessary to examine and compare the components of the various types of orientation offered in the current study, as well as in the Pascarella, Terenzini, and Wolfle (1986) study.

In the Pascarella, Terenzini, and Wolfle (1986) study, the 2-day summer orientation program was designed to "facilitate the successful transition of new freshmen from secondary school to a new and quite different setting" (p. 159); a purpose not unlike that of the summer and fall orientation programs in the present study.

In the Pascarella, Terenzini, and Wolfle (1986) study, orientation consisted of three components. The first component was small group sessions meant to develop academic and educational awareness. Students were exposed to academic policies, procedures, and requirements; academic advisement; and development of a course schedule. Component two consisted of sessions designed to develop awareness of institutional resources and student services. The third component consisted of an attempt to develop identification with the university, including physical, social, and academic aspects, through interactions with faculty, administrators, and students.

In the current study, both the 2-day and 8-hour summer orientation programs were found to significantly affect social integration as was the orientation program in the Pascarella, Terenzini, and Wolfle (1986) study. The 8-hour session in the current study contained all elements found in the first component of the Pascarella, Terenzini, and Wolfle

(1986) study, except for the small group sessions. The 8-hour session contained no aspects of the second and third components except for some interaction with faculty, administrators, and students during the college sessions. The 2-day summer program in the present study appeared to contain all components of the program in the Pascarella, Terenzini, and Wolfle (1986) study, including small group sessions. It is, therefore, not surprising that the 2-day orientation in the present study proved successful; but the impact of the 8-hour orientation is somewhat remarkable.

Alpha, the 3-day fall orientation program in the present study, occurred immediately prior to the fall semester. It was developed in coordination with the summer orientation programs and was meant to supplement the summer program with additional opportunities on social and academic integration. All aspects of the Pascarella, Terenzini, and Wolfle (1986) program were found in Alpha except for components that had been completed during summer orientation. For example, the goal of the first component in the Pascarella, Terenzini, and Wolfle (1986) program, that of academic and educational awareness, was met in Alpha through activities such as college academic sessions and "mini sessions" rather than through academic advising and course scheduling. In addition to including all components of the Pascarella, Terenzini, and Wolfle (1986) orientation program, Alpha offered various other opportunities including resource and campus tours, class schedule tours, open houses, small group meetings, and numerous social activities.

Discussion. Given that Alpha offered even more opportunities for social and academic integration than were offered by either of the summer programs, and that the literature supported the notion that persistence depended upon the degree of social and academic integration, it would be logical to conclude that attendance at Alpha would significantly affect persistence, or at least levels of social and/or academic integration, which would in turn, affect persistence.

In searching for possible reasons for this discrepancy, differences were found in how attendance was assessed at both the summer programs and Alpha. First, the lists which indicated student enrollment by summer option were generated by the institutional computer center. Depending upon which list a students' name was found, it could be determined what kinds of orientation components the student had experienced. The summer sessions had tight controls in that a student was not given options as to what components to attend. In order to enroll, the student went through all aspects of the program. The sessions were relatively small (usually less than 100 students per session), and students did not leave the program once it began.

On the other hand, attendance at Alpha was determined by one self reported item on the post-test instrument (Appendix B). A simple positive response to the self-report item indicated that the student had registered for Alpha only and may have attended all or none of the Alpha activities. Because the Alpha session had almost 2,000 students enrolled, there were no controls on attendance at activities or sessions.

The sessions and activities were not mandatory; some students may have only attended social activities; some may have simply gone on tours; while others may have gone to one "mini session." Also, since only Alpha registrants could move into the residence halls early, it was reported that some students who registered attended few, if any, sessions. Therefore, a simple negative or positive response to the question of attendance at Alpha was not enough information to give meaning to whether the student had been involved in a variety of activities designed to enhance social and academic integration. In order to effectively determine the impact of Alpha, the institution under study will need to find a method for documenting options and sessions selected by students for future studies.

Institutional Commitments

Institutional Commitments I and II were the only factors other than high school GPA, found to have a significant direct effect on persistence. Degree of Institutional Commitment I was determined by scores on items of the pre-test instrument which indicated rank of the subject institution as college choice and confidence that the subject university was the right choice. The degree of Institutional Commitment II was determined by scores on items of the follow-up instrument which indicated a continued confidence that the subject university was the right choice.

Tinto (1975) discussed, at length, the importance of the "interplay" between institutional commitment and goal commitment, and how that "interplay" affected retention. Goal commitment has to do with a students' determination to graduate from college, whereas, institutional commitment has to do with a students' determination to graduate from a particular college. The interplay between a students' institutional commitments and goal commitments determines whether a student will "drop out" of college and what form of "drop out" will result. For example, if the goal commitment is high, but institutional commitment low, a student will likely drop out of the institution, but transfer to another. Yet high levels of institutional commitment may result in students' staying at an institution even though there is little commitment to the goal of degree completion.

Tinto (1975) also explained the relationship of social and academic integration to goal and institutional commitments, as illustrated in his model for drop out behavior in Figure 1 (p. 5). As can be seen, behaviors in the academic system most directly affect goal commitment, and integration into the social system of the college most directly relates to institutional commitment.

Discussion. It is important to note that in the present study, neither Goal Commitments I or II had an affect on academic integration or persistence. The only variables which occurred after college entry that had an effect on persistence were orientation and Institutional Commitment II. Both relate to social integration.

In discussing the aspects of interaction that contribute significantly to social integration and institutional commitment, Tinto (1975) points out that:

> peer-group associations appear to be most directly related to individual social integration, whereas extracurricular activities and faculty interactions appear to be of approximately equal secondary importance in developing commitment in the institution. (p. 110)

Although informal, non-class interactions with faculty are placed within the social integration portion of Tinto's (1975) model, Tinto points to numerous findings which suggest "that interaction with the faculty not only increases social integration and therefore institutional commitment but also increases the individual's academic integration" (p. 109).

However, in the present study, neither academic integration, which consisted of a combination of first semester GPA and perceived level of intellectual development as indicated on the follow-up survey, nor goal commitment II had any effect on persistence.

Implications and Recommendations

Results of the present study, the Pascarella, Terenzini, and Wolfle (1986) study, and others reviewed in the literature have clear implications: concerning both the need for further research dealing with orientation and persistence, as well as for the practitioner.

Research

Research dealing with student retention should continue to use multivariate statistical procedures that take into account the complex nature of the variables affecting retention. In order to more clearly examine the relationships of the variables, longitudinal studies which use established theory to guide the direction of the research are important.

As seen in the literature, numerous descriptive studies have already identified important variables that affect retention and "drop out profiles." Research in the future needs to focus on institutional interventions which take into account initial and background traits of students; not research that simply identifies high risk traits and factors, and uses these as an excuse for low retention rate.

The scope of the present study did not allow for the examination of understandings of how orientation or other institutional interventions affect different groups of students in different ways. Future studies need to look at the effects of such factors as background, race, gender, and academic major, with a focus on designing effective institutional interventions.

Although numerous possibilities exist for more research, studies related to faculty/student out-of-class contacts are needed. The importance of this relationship has been clearly documented in numerous studies. Although the present study dealt with the aspect in combination with others known to affect social integration, very little

was actually revealed about what kinds of contacts were most effective and the effects of variables related to quality and quantity of time issues. The study (or studies) could be most effective as a cooperative effort between student and academic affairs, with faculty and staff involved in the research, as well as in the planning of the interventions.

Practical Implications

An obvious implication for the practitioner involves the need to make use of the abundant information available on retention in order to plan successful orientations and other interventions, particularly during the first semester as indicated in the literature review. The interventions should take into account the variables known to affect social and academic integration of students. The importance of institutional and goal commitments and how the commitments affect and are affected by social and academic integration needs to be understood. Administrative policies and procedures developed to take advantage of this knowledge.

The study institution should seek to clarify the effects of Alpha on persistence by having a tracking system that allows identification of which students were involved in all components of the program. Those students can then be compared to students not attending Alpha, as well as to students who were involved in only one or two components of the program. The study would be more effective if it took into account the combined effects of other institutional interventions as well.

Pascarella, Terenzini, and Wolfle (1986) suggested that although the effects of orientation on persistence were found to be significant, they believed a "one-time" event such as orientation could not be expected to have a direct effect on persistence, measured several months later. The same indirect finding was found in the present study, with orientation affecting persistence through social integration. Given that these "one-shot" programs offered prior to the fall semester have indirect effects on persistence of students one semester later, it would make sense to offer numerous programs or interventions throughout the first semester in order to continue to produce and develop the positive effects. The intervention should begin with students' first inquiry for university information and should continue in a planned, systematic way throughout the first year, with particular emphasis in the first semester. It will take a united, cooperative effort among the various divisions of the institution to be most effective. Each planned intervention should identify exactly what variable or variables the intervention is attempting to affect. The relationship of that intervention to others being offered also needs to be examined.

The study institution should examine thoroughly the ways interventions can have an effect on goal commitment and academic integration, since the present study found a definite void in these two areas. Without the development of strong goal commitments and academic integration, the institution will undoubtedly continue to lose large numbers of new students.

Summary

This study as well as others in the literature have revealed a great deal about factors and interventions that are necessary for student retention. Yet, "from both a research and administrative perspective, considerable work lies ahead" (Terenzini & Pascarella, 1980, p. 282).

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APPENDICES

APPENDIX A

OSU NEW STUDENT SURVEY

OSU NEW STUDENT SURVEY

This questionnaire will take you approximately eight minutes to complete. The information obtained will be used to assist us in the planning for Summer Orientation Please fill it out completely, then mail it immediately in the self-addressed, stamped envelope provided. **It is critical that the questionnaire be mailed back immediately.**

1. Name _____ 2. Soc. Sec. No. _____
3. Age as of Dec. 31, 1989 _____ 4. Sex: M or F (Circle one)
5. Composite ACT score _____ (If no ACT, SAT score) _____
6. Racial/Ethnic Identification: (Please check one)

____	White/Caucasian American	____	Hispanic American
____	Black American	____	Other (Please specify)
____	Native American		_____
____	Asian American		

7. From what type of secondary school did you graduate?

____	Public	____	Private

8. The size of your high school graduating class was:

____	Under 50	____	50 - 99
____	100 - 199	____	200 - 299
____	300 or more		

9. During your last year in high school, in <u>how many</u> extracurricular activities did you spend, on the average, <u>more than 2 hours</u> per week? (Include clubs, organized athletics, etc.) _____

10. What was your <u>average grade</u> in high school? (Please check ONE)

____ A/A+ (3.5-4.0)	____ A- (3.0-3.5)	____ B+ (2.5-3.0)	____ B- (2.0-2.5)
____ C+ (1.5-2.0)	____ C- (1.0-1.5)	____ D or below	

11. What is the highest academic degree you expect to obtain?

____	Bachelor's (B.A., B.S., etc.)	____	M.D., D.D.S., D.V.M., etc.
____	Master's (M.A., M.S., etc.)	____	LL.B. or J.D. (Law)
____	Pd.D. or Ed.D.	____	Other

12. In applying to colleges, was OSU your: (Please check one)
____ 1st Choice ____ 2nd Choice ____ 3rd Choice ____ 4th or lower choice

13. How important is it to you to graduate from college? (Please check one)

____	Not at all Important	____	Very Important
____	Somewhat Important	____	Extremely Important

14. How confident are you that you made the right choice in choosing to attend OSU? (Please check one)

____	Not at all Confident	____	Very Confident
____	Somewhat Confident	____	Extremely Confident

15. What is your best estimate of your parents (combined) total income during 1988? (Under $20,000, $20,000-$30,000, $30,000-$50,000, $50,000 and above) _____

What is your best estimate of your own personal earned income in 1988? _____

16. What is the highest level of formal education obtained by your parents?

Father	Mother	
____	____	Grammar School or less (1-8 years)
____	____	Some High School (9-11 years)
____	____	High School Graduate (12 years)
____	____	Some college
____	____	College Graduate (Bachelor's Degree)
____	____	Some Graduate Study
____	____	Received graduate degree

17. Please indicate the number of hours per week, on the average, you are spending in paid employment this summer.

_____

18. During the period from June 25 to July 30 this summer, in which of the 50 states (or foreign country) will you spend most of your time?

19. Which summer enrollment session are you planning to attend?
____ Plan 1 (1 1/2 days) ____ Plan 2 (1 day) ____ Plan 3 (Mail-In Enrollment)

If you did not select Plan 1 (1 1/2 days), please check any of the following reasons which explain why it was not selected.

____ See no value/need to attend
____ Have to work
____ Cost of program
____ Travel Distance/Costs
____ Couldn't get into session I wanted/needed
____ Summer trips planned
____ Parents couldn't attend
____ Medical reasons
____ Other (please specify)
_____

If you did select Plan I, please check any of the reasons why it was selected.

____ Wanted more help with selecting a major
____ Parents encourage me
____ Sounded more interesting
____ Sounded like more fun
____ Other (please specify)

20. Are your parents planning to attend one of the Summer Orientation Sessions?
___ Yes ____ No

21. Below are four possible goals for a college education. Please rank-order the statements, beginning with the one which is your most important goal. (For example, 1 = Most Important Goal; 2 = Next Important, and so on.)

____ To gain a broad, liberal arts education and appreciation of ideas

____ To gain knowledge and skills directly applicable to a career

____ To learn more about myself, my values, and my life's goals

____ To learn how to get along with different kinds of people and enhance my interpersonal skills

22. During the coming year, approximately how many times per month do you expect to meet informally with a faculty member outside of class for 10 minutes or more? (Please estimate a number) _____

23. Facilities, policies, procedures, attitudes, etc., differ from one campus to another. What do you expect to find at OSU? As you read each of the statements below, check the space under TRUE (T) if the statement describes a condition, event, attitude, etc., that you generally expect to find at OSU; or under FALSE (F) if you do not generally expect to find it at OSU. Please respond to every statement.

Generally T	F		
____	____	1.	Frequent tests are given in most courses.
____	____	2.	The college offers many really practical courses such as typing, report writing, etc.
____	____	3.	The most important people at the school expect others to show proper respect for them.
____	____	4.	There is a recognized group of student leaders on campus.
____	____	5.	Many upperclassmen play an active role in helping new students adjust to campus life.
____	____	6.	The professors go our of their way to help you.
____	____	7.	The school has a reputation for being friendly.
____	____	8.	It's easy to get a group together for card games, singing, going to the movies, etc.
____	____	9.	Students are encouraged to criticize administrative policies and teaching practices.
____	____	10.	The school offers many opportunities for students to understand and criticize important works in art, music, and drama
____	____	11.	Students are actively concerned about national and international affairs.

___ ___ 12. Many famous people are brought to the campus for lectures, concerts, and student discussions.

___ ___ 13. Students are conscientious about taking good care of school property.

___ ___ 14. Students are expected to report any violation of rules and regulations.

___ ___ 15. Students ask permission before deviating from common policies or practices.

___ ___ 16. Student publications never lampoon dignified people or institutions.

___ ___ 17. Most courses are a real intellectual challenge.

___ ___ 18. Students set high standards of achievement for themselves.

___ ___ 19. Most courses require intensive study and preparation out of class.

___ ___ 20. Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussions.

Please use the space below for any additional comments you wish to make. Thanks very much for your help. Remember to return the questionnaire to us in the stamped, self-addressed envelope provided immediately.

APPENDIX B

OSU NEW STUDENT FOLLOW-UP SURVEY

OSU NEW STUDENT FOLLOW-UP SURVEY

1. Name _____ 2. Soc. Sec. No. _____

3. College of Enrollment _____

4. Did you attend Alpha (the fall orientation program)? _____

5. Current residences
   _____ Campus housing (residence hall or greek housing)
   _____ Off campus housing
   _____ Commute

6. During the current academic year, how many organized student activities (including athletic activities) did you spend on the average, two hours or more per week? _____

7. Listed below are a number of areas which are seen by many to be desirable outcomes of college. Please indicate the progress you believe you have made at OSU in each of these areas by checking the appropriate response block to the right.

	A Great Deal of Progress	Moderate Progress	Slight Progress	No Progress At All	
a.	Gaining factual knowledge (terminology, methods, trends)	_____	_____	_____	_____
b.	Developing the ability to critically evaluate ideas, materials, methods	_____	_____	_____	_____
c.	Developing the ability to apply abstractions or principles in solving problems	_____	_____	_____	_____
d.	Developing a sense of personal responsibility (self-reliance or self-discipline)	_____	_____	_____	_____
e.	Developing skills in expressing myself orally or in writing	_____	_____	_____	_____
f.	Developing an interest in or openness to new ideas	_____	_____	_____	_____
g.	Developing fundamental principles, generalizations, or theories	_____	_____	_____	_____
h.	Developing a clearer idea of my career goals and plans	_____	_____	_____	_____

i.	Developing a clearer or better understanding of myself as a person (my interests, talents, values)	____	____	____	____
j.	Learning how to learn	____	____	____	____
k.	Developing interpersonal skills, and the ability to relate to others	____	____	____	____

8. Students have a variety of contacts with faculty members. In the blank to the right, please estimate the number of times for each semester you have met with a faculty member outside the classroom for each of the following reasons. Count only conversations of 10-15 minutes or more.

	Primary Purpose of Conversation	Fall Semester	Spring Semester To Date
1.	To get basic information and advice about my academic program	____	____
2.	To discuss matters related to my future career	____	____
3.	To help resolve a disturbing personal problem	____	____
4.	To discuss intellectual or course-related matters	____	____
5.	To discuss a campus issue or problem	____	____
6.	To socialize informally	____	____

9. Following is a list of statements characterizing various aspects of academic and social life at OSU, and with which you may or may not agree. Using the scale to the right of each statement, please indicate the extent of your agreement or disagreement with each statement, as it applies to your OSU experience, by circling the appropriate abbreviation. Please circle ONLY ONE abbreviation for each statement.

		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1.	Few of my courses this year have been intellectually stimulating	1	2	3	4	5
2.	I am satisfied with my academic experience at OSU	1	2	3	4	5
3.	I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to OSU	1	2	3	4	5

4.	I am satisfied with the extent of my intellectual development since enrolling at OSU	1	2	3	4	5
5.	In addition to required reading assignments, I typically read many of the recommended books in my course	1	2	3	4	5
6.	My interest in ideas and intellectual matters has increased since coming to OSU	1	2	3	4	5
7.	I have no idea at all what I want to major in	1	2	3	4	5
8.	My academic experience at OSU has had a positive influence on my intellectual growth and interest in ideas	1	2	3	4	5
9.	Getting good grades is not important to me	1	2	3	4	5
10.	I have performed academically as well as I anticipated I would	1	2	3	4	5
11.	My interpersonal relationships with other students at OSU have had a positive influence on my intellectual growth and interest in ideas	1	2	3	4	5
12.	Since coming to OSU, I have developed close personal relationships with other students	1	2	3	4	5
13.	The student friendships I have developed at OSU have been personally satisfying	1	2	3	4	5
14.	My interpersonal relationships with other students at OSU have had a positive influence on my personal growth, values, and attitudes	1	2	3	4	5
15.	It has been difficult for me to meet and make friends with other students	1	2	3	4	5
16.	I am dissatisfied with my dating relationships at OSU	1	2	3	4	5

17.	Few of the OSU students I know would be willing to listen to me and help me if I had a personal problem	1	2	3	4	5
18.	Most students at OSU have values and attitudes which are different from my own	1	2	3	4	5
19.	I am satisfied with the opportunities to participate in organized extracurricular activities at OSU	1	2	3	4	5
20.	I am happy with my living/residence arrangement at OSU	1	2	3	4	5
21.	I am satisfied with the opportunities at OSU to meet and interact informally with faculty members	1	2	3	4	5
22.	Few of the OSU faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students	1	2	3	4	5
23.	Since coming to OSU, I have developed close, personal relationships with at least one faculty member	1	2	3	4	5
24.	My non-classroom interactions with OSU faculty have had a positive influence on my intellectual growth and interest in ideas	1	2	3	4	5
25.	My non-classroom interactions with OSU faculty have had a positive influence on my personal growth, values and attitudes	1	2	3	4	5
26.	My non-classroom interactions with OSU faculty have had a positive influence on my career goals and aspirations	1	2	3	4	5
27.	Few of the OSU faculty members I have had contact with are genuinely outstanding or superior teachers	1	2	3	4	5

28. Few of the OSU faculty members I have had contact with are genuinely interested in students	1	2	3	4	5
29. Most OSU faculty members I have had contact with are genuinely interested in teaching	1	2	3	4	5
30. Most of the OSU faculty members I have had contact with are interested in helping students grow in more than just academic areas	1	2	3	4	5
31. It is important for me to graduate from college	1	2	3	4	5
32. It is not important for me to graduate from Okla. State University	1	2	3	4	5
33. I am confident that I made the right decision in choosing to attend OSU	1	2	3	4	5
34. It is likely that I will register at OSU next fall	1	2	3	4	5

10. DIRECTIONS: Facilities, procedures, policies, requirements, attitudes, etc. differ from one campus to another. In your judgment, what is characteristic at OSU? As you read each of the statements below, check the space under TRUE (T) if the statement describes a condition, event, attitude, etc., that is generally characteristic of OSU; or under FALSE (F) if it is not generally characteristic of OSU. Please answer every statement.

Generally T	F		
____	____	1.	Frequent tests are given in most courses.
____	____	2.	The college offers many really practical courses such as typing, report writing, etc.
____	____	3.	The most important people at the school expect others to show proper respect for them.
____	____	4.	There is a recognized group of student leaders on campus.
____	____	5.	Many upperclassmen play an active role in helping new students adjust to campus life.
____	____	6.	The professors go our of their way to help you.
____	____	7.	The school has a reputation for being friendly.

___ ___ 8. It's easy to get a group together for card games, singing, going to the movies, etc.

___ ___ 9. Students are encouraged to criticize administrative policies and teaching practices.

___ ___ 10. The school offers many opportunities for students to understand and criticize important works in art, music, and drama.

___ ___ 11. Students are actively concerned about national and international affairs.

___ ___ 12. Many famous people are brought to the campus for lectures, concerts, and student discussions.

___ ___ 13. Students are conscientious about taking good care of school property.

___ ___ 14. Students are expected to report any violation of rules and regulations.

___ ___ 15. Students ask permission before deviating from common policies or practices.

___ ___ 16. Student publications never lampoon dignified people or institutions.

___ ___ 17. Most courses are a real intellectual challenge.

___ ___ 18. Students set high standards of achievement for themselves.

___ ___ 19. Most courses require intensive study and preparation out of class.

___ ___ 20. Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussions.

VITA

Sandra L. Ogrosky

Candidate for the Degree of
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