This study attempted to determine the predictability of adult students' educational orientations and college environmental relationship perceptions according to their enrollment in three contrasting liberal arts baccalaureate degree programs. Additionally, it sought to determine if there was a positive relationship between selected educational orientations and college environmental perceptions of adult students at three contrasting liberal arts baccalaureate degree programs.

A stratified random sample of 314 adult students from three contrasting liberal arts baccalaureate programs returned 177 (56.3%) usable responses to the data gathering instruments: the Student Orientation Survey; the College Environment scales of the College Student Experiences Inventory; and a demographic questionnaire.
One-way analysis of variance, multiple range tests, t-tests, and Pearson coefficient of correlation were used to test the various hypotheses. The following findings were considered significant at the .05 level of confidence:

1. Linfield College's Off-Campus Degree (OCD) adult students achieved a significantly higher preparatory educational orientation than adults at Marylhurst's College for Lifelong Learning (LL); and LL adult students achieved a significantly higher exploratory educational orientation than OCD adult respondents.

2. OCD adult students achieved a significantly higher college environmental relationship perception than adult students from Oregon State University.

Among the recommendations were:

1. that the findings have program planning, policy formation, and procedural implications for administrators and educators of adults in differing baccalaureate degree settings;

2. that further research should be done to determine whether the college environmental perception differences of adult students at the three programs accurately represent differences in actual program modes of operation and delivery services, or simply differences in adult student perception;

3. that administrators, program planners, and educators of adults in baccalaureate degree settings, should design and implement programs with consideration of the educational orientation preferences and college environmental relationship perceptions of adult students; and

4. that further research should be conducted to expand this investigation to a larger sample, and other forms of baccalaureate degree program variations to permit a finer classification and more accurate measure of adult student's educational orientations and perceptions of the college environment.
A Comparison of Adult Students' Educational Orientations and Perceptions of the College Environment in Three Contrasting Liberal Arts Baccalaureate Degree Programs: Traditional; Off-Campus Degree; and Lifelong Learning

by

Richard J. Skwarek

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Dean of Graduate School

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CHAPTER I

INTRODUCTION

Recent technological, cultural and demographic trends in American society have contributed to what Apps (1981) described as a quiet revolution on college and university campuses. The quiet revolution is the movement of adults into a variety of higher education settings to undertake or resume college education. The speed, intensity, and magnitude of modern cultural change has altered man's relationship to his culture. Historically, the education a person received as a youth was sufficient to last a lifetime. Fifty years ago Whitehead (Knowles, 1970) pointed out that this traditional view of education is no longer functional; the time-span of major cultural and technological change in contemporary society has become considerably shorter than that of a human-life-time. Evidence of the impact of this expansion and reorganization of knowledge on the college curriculum is provided in a study by Hefferlin (1969). His investigation concluded that the content of the college curriculum is being reconstituted at least every 22 years. His findings suggest that old courses are being eliminated at the rate of five percent a year and new courses introduced at the rate of nine percent a year.
Toffler (1970) suggests that these changes will have an impact on the educational patterns of adults and predicts that people born in today's society will have to prepare for three to five careers in a lifetime.

The U. S. Department of Commerce (1981) has noted the reversal of a longtime trend and points out that the adult segment of our population is increasing proportionate to a decrease in number and relative size of the youth cohort. Additionally, National Center for Educational Statistics projections (1980) show that adults are increasingly demanding and participating in college and university degree programs.

Authors in adult development have observed that as occupational and life roles shift, adults must continue learning to maintain a stable sense of themselves through a succession of changing life roles and transitions (Erikson, 1959; Sanford, 1967; Knox, 1977; Gould, 1978). These trends combine to create an additional dimension to the expansion of educational opportunities for adults and an opportunity for institutions of higher education to reconceptualize programs and policies as they relate to the educational needs, life situations, and multiple life roles of adults in a post-industrial society.

**Background of the Problem**

Historically, American undergraduate colleges and universities have been designed to meet the academic and developmental needs of
the 16-to-21-year-old college population (Brubacher and Rudy, 1958; Chickering, 1969), who are at a relatively distinct point in their development (Chickering, 1969; Perry, 1970; Kohlberg, 1975). However, recently there has been a dramatic increase in the number of adults enrolled full- and part-time in credit college and university programs.

In 1968, approximately 3,000,031 adults 22 years of age and older were enrolled in degree credit programs in higher education institutions, compared with 4,485,000 16 to 21 year old youths. By 1978, adult enrollment had doubled to 6,030,000, compared with a 14% increase (5,230,000) of typical college age students. National Center for Educational Statistics intermediate projections for 1988 project (1980) a continued increase of adult college student enrollment to 6,590,000, and a decline in typical-age college student enrollment to 4,457,000. The Final Report of the Carnegie Council on Policy Studies in Higher Education (1980) predicts that the trends represented in these 1988 projections will remain constant until at least the year 2000.

Thus, it is predicted that by 1988 adult college students will represent 59.6% of the total college population, and typical-age college students will represent only 40.3%, a reversal of the 1968 figures (National Center for Educational Statistics, 1980). Table 1 summarizes this trend.

This new population mix represents a challenge for higher education administrators and educators. Extensive literature and research
TABLE 1
ENROLLMENT TRENDS AND PROJECTIONS OF ADULT AND TYPICAL AGE
COLLEGE STUDENTS, 1968-1988

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>16 - 21 Years of Age</td>
<td>4,485</td>
<td>59.7</td>
<td>4,047</td>
<td>411</td>
<td>5,230</td>
<td>41.5</td>
<td>4,480</td>
<td>411</td>
<td>4,657</td>
<td>40.3</td>
<td>3,813</td>
<td>617</td>
</tr>
<tr>
<td>22 Years of Age and Over</td>
<td>3,031</td>
<td>40.3</td>
<td>1,137</td>
<td>1,894</td>
<td>6,030</td>
<td>54.0</td>
<td>2,187</td>
<td>6,030</td>
<td>4,657</td>
<td>59.6</td>
<td>2,345</td>
<td>4245</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7,513b</td>
<td></td>
<td>11,259</td>
<td></td>
<td>11,047</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

a Figures in thousands
b Because of rounding, details may not add to totals.

Source: National Center for Educational Statistics, 1980
is available to facilitate college and university educators' understanding of the typical-age student. Research investigating the demographic characteristics, educational needs, interests, and goals of adult students in institutions of higher education has only begun to understand these characteristics of the adult student. This research was an attempt to examine adult student educational orientations and perceptions of the college environment in three contrasting liberal arts baccalaureate degree programs. It was thought that an examination of these characteristics would contribute to the limited but growing knowledge of adult college students. The three contrasting programs selected for this study were: Oregon State University, traditional program (T); Linfield College's Off-Campus Degree Program (OCD); and Marylhurst College for Lifelong Learning (LL).

**Purpose of the Study**

The central purpose of this study was to assess and analyze adult student participation patterns in three contrasting liberal arts baccalaureate programs to determine if the educational orientations and selected perceptions of the college environment differ according to the type of program in which adult students are enrolled. It was anticipated that findings from this study would provide a clearer understanding of the educational orientations and perceptions of the college environment of adult baccalaureate students.
Objectives

The specific objectives of this study are:

1. To identify the educational orientations of adult students in three contrasting liberal arts baccalaureate programs: T, OCD, and LL.

2. To identify selected college environmental perceptions of adult students in three contrasting liberal arts baccalaureate programs: T, OCD, and LL.

3. To determine if there are significant differences in adult students' preparatory and exploratory educational orientations in three contrasting liberal arts baccalaureate programs: T, OCD, and LL.

4. To determine if there are significant differences in adult students' educational relationship perceptions of the college environment in three contrasting liberal arts baccalaureate programs: T, OCD, and LL.

5. To determine if positive relationships exist between selected educational orientations and college environmental perceptions of adult students in three contrasting liberal arts baccalaureate programs: T, OCD, and LL.

Significance of the Study

This study of adult baccalaureate students is both relevant and timely. A number of authors writing about problems within higher
education have responded to the rapid increase in adult student enrollment in undergraduate degree programs and have recommended that colleges and universities develop a better understanding of adult students (Cross, 1971, 1978, 1980, 1981; Gould and Cross, 1972; Weathersby, 1977; Winn, 1980). Sanford (1962) and Gammason (1966) affirm that knowledge about the educational characteristics of students helps an educational institution define its mission.

This research is timely because a major concern of higher education institutions is the projected decline in the number of typical-age students enrolled in college programs over the next two decades. This decline is expected to be offset by a sizeable increase in the enrollment of adults. Many colleges are attempting to modify traditional academic programs or develop new ones to become more responsive to these new consumers (Eldred and Marienau, 1979).

An increasing number of adult students are entering baccalaureate programs. This points to a need among educators and administrators to clarify uncertainties about the needs, interests, educational orientations and perceptions of the college environment of adults. It is hoped that the findings of this research will contribute more systematic information to the field of knowledge on adult college students' educational orientations and college environmental perceptions, and provide new insight to administrators, faculty members and others who design the programs and provide the
delivery services for adult students in liberal arts baccalaureate settings.

Theoretical Framework

A major premise examined in this study was that predictable differences exist in the educational orientations of adult students according to their enrollment in three contrasting liberal arts baccalaureate programs. Morstain and Smart (1973), Morstain (1976), and Morstain and Kraft (1979) have developed an educational orientation typology of college students which conceptualizes students on a theoretical continuum ranging from preparatory to exploratory educational orientations. The typological framework enables one to identify, based on patterns of the Student Orientation Survey (SOS) scale profile (Morstain, 1976), whether a student has a more preparatory orientation to college or a more exploratory orientation to college. In previous research, Morstain and Kraft (1979) sampled 3,806 undergraduate students in 12 public and private traditional colleges and universities. Their findings revealed five relatively distinct clusters or groups of students. These ranged from preparatory to exploratory. Morstain (1976) has conceptualized these groups on an exploratory-preparatory continuum (see Figure 1).

<table>
<thead>
<tr>
<th>Groups</th>
<th>Most Exploratory</th>
<th>Relatively Undifferentiated</th>
<th>Most Preparatory</th>
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Figure 1. Preparatory and Exploratory Continuum Representing Students' Educational Orientations to College (Morstain, 1976).
According to Morstain, students in group 1, most exploratory, were assessed to have the following educational orientations:

a. Inquiry (INQ) students prefer learning for its own reward and express curiosity and intellectual inquiry for the value of the insight education provides.

b. Independent Study (IS) students prefer working on their own and emphasize self-directed learning arrangements.

c. Interaction (INT) students possess an egalitarian attitude toward faculty and prefer a coequal role with faculty in academic decisions which affect students.

Students in group 5, most preparatory, were assessed to have the following educational orientations:

a. Achievement (ACH) students have a practical, goal-oriented outlook such as achievement for a specific career/vocational area or credential.

b. Assignment Learning (AL) students prefer relatively structured learning arrangements.

c. Assessment (AS) students prefer evaluations by faculty, the expert authorities in their respective fields.

Students in groups two, three, and four (Figure 1) had less distinct typological profiles, expressing neither strong nor weak exploratory or preparatory orientation profiles. Morstain (1976) describes those profile scores as relatively undifferentiated. An earlier study by Morstain and Smart (1973), which surveyed college
students in public and private traditional colleges, found significant differences among student educational orientations in different curricular areas and substantial variation across relatively similar types of traditional college programs. Morstain's preparatory and exploratory educational orientation typology provided the conceptual basis for adult student educational orientation analysis.

Houle's typology of non-traditional external degree programs (1973) provided a conceptual basis for program analysis. He identified three different forms of external baccalaureate degree programs. His external degree programs are summarized as follows:

1. Extension degree - this program type awards a baccalaureate degree on completion of a traditional degree program. It differs from a traditional degree program by offering all the traditional degree subjects and options at a time or place accessible to adults whose responsibilities prevent them from coming to the central campus.

2. Adult degree - this program type establishes a new degree pattern of learning and teaching that seeks to adjust to the interests, capacities, and circumstances of adults.

3. Assessment degree - this program type utilizes new and developing admissions, teaching, evaluation, and certification procedures and emphasizes the learning of
the student rather than completion of formal degree requirements as the basis for awarding a degree.

A hypothetical continuum constructed for this study approximates the range of institutionally related traditional and external degree programs (See Figure 2).

This study utilized Morstain's educational orientation typology (1976) and Houle's non-traditional external degree typology (1973) to test the hypothesis that there were significant differences in adult baccalaureate students' educational orientations according to their enrollment in three contrasting types of undergraduate liberal arts baccalaureate programs. Thus, this study expanded on Morstain's conceptual typology and Houle's non-traditional external degree typology. Its aim was to determine the differences of adult students educational orientations and college environmental relationship perceptions in three contrasting baccalaureate programs and to compare selected audit student educational orientations and perceptions of the college environment by:

<table>
<thead>
<tr>
<th>Assessment Degree</th>
<th>Adult Degree</th>
<th>Extension (a) Degree</th>
<th>Traditional (b) Degree</th>
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</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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</table>

Figure 2. Continuum Representing the Range of Institutionally Related Traditional and External Forms of Degree Programs.

(a) Extension programs are not incorporated in this study.

(b) Traditional degree programs are not classified as external degree programs.
1. Applying SOS typological scale profiles to adult baccalaureate students (22 years of age and older) in three contrasting liberal arts baccalaureate programs.

2. Comparing the SOS typological scale exploratory and preparatory mean scores of adult students in three contrasting liberal arts baccalaureate programs.

3. Comparing selected adult student environmental perceptions in three contrasting liberal arts baccalaureate programs.

Delimitations of the Study

1. This study did not attempt to examine significant differences or relationships of adult students' educational orientations or perceptions of the college environment and typical-age (17 to 21 year old) college students. Rather, the focus of this study was the examination of significant differences of preparatory and exploratory educational orientations and college environmental relationship perceptions of adult students (22 years of age and older) in three contrasting baccalaureate settings.

2. This study did not attempt to predict the future educational orientations or perceptions of the college environment of adult students. Rather, it attempted
to identify significant differences and compare relationships of adult students who were degree candidates and who were registered for classes spring quarter of 1982, in one of the three undergraduate baccalaureate degree programs of this study.

3. This study was limited to a stratified random sample of a selected population of adult students in three undergraduate programs: T, OCD, and LL.

Limitations

1. This study was limited to the extent that the Environmental Scales of the College Student Experiences (CSE) questionnaire is a suitable measure of adult students' perceptions of the prevailing college environment.

2. This study was limited to the extent that the Student Orientations Survey (SOS) is a suitable measure of adult students' educational orientations.

3. This study was limited to the extent that the educational orientations and perception of the college environment was representative of the general program population.

Definition of Terms

In order to attain precision and clarity of meaning, the terms frequently used in this research are defined as follows:
1. **Adult Student** - An individual, 22 years of age or older, enrolled in any of the three types of undergraduate baccalaureate degree programs of this study.

2. **Congruence** - The measure of similarities and differences, or fit, between the personal educational orientations of the students and their perception of the academic and personal characteristics of the college environment.

3. **Designed Major** - A structured baccalaureate degree program available to adult students at Marylhurst College for Lifelong Learning. Majors include art, crafts, music, and pastoral ministries.

4. **Exploratory Orientation** - An educational attitude or view of a college student as measured by the Student Orientations Survey (Morstain, 1976). It emphasizes the view of the purpose of a college education which stresses "learning as its own reward," a preference for informal, individually tailored learning procedures, and a co-equal role with faculty in educational decision making.

5. **Extra Institutional Learning** - Credit which may be granted for learning sponsored by business, industry, government agencies, voluntary and professional associations, and labor unions. Before credit is awarded,
learning must be evaluated by the Office of Educational Credit of the American Council on Education.

6. **Individualized Major** - A flexible baccalaureate degree program at Marylhurst College for Lifelong Learning which enables students to design degree programs based on their educational goals. Specialized majors include communications, humanities, science/math, social science, and interdisciplinary studies.

7. **Lifelong Learning Program (LL)** - The undergraduate Liberal Arts program at Marylhurst College for Lifelong Learning. The LL program offers adult students a flexible, individualized Bachelor of Arts degree with majors in communications, humanities, science/mathematics, social science and interdisciplinary studies. Designed degree programs include a Bachelor of Arts degree with a major in art or music, and a Bachelor of Music degree. Credit in either program may be earned through documented prior learning experiences, extra-institutional learning, correspondence, independent study, examinations, internships, and classes which normally meet during the evening and on weekends at times and places convenient for the adult student. A minimum of 180 quarter hours of credit is required to fulfill baccalaureate degree requirements. Majors in a liberal arts area must com-
plete 60 quarter hours with a minimum of 12 credits representing at least two subjects in communications, humanities, science/math, and the social sciences. The remaining 12 hours of major course requirements may be distributed anywhere within the liberal arts area.

Counseling, seminars, workshops, and degree credit classes are provided through the Life Planning Center. The purpose of this center is to provide adults a comprehensive perspective of human development over the life span and to help adults reach their own potential to direct their own lives. The educational delivery services and the environment of the LL program are specifically designed to serve the educational and developmental needs of the adult student (The Marylhurst Experience: Marylhurst College for Lifelong Learning - 1980-1982, 1980).

8. Off-Campus Degree Program (OCD) - The undergraduate adult baccalaureate program at Linfield College which leads to a Bachelor of Arts degree in Liberal Studies. The Liberal Studies major includes courses in the humanities, social and behavioral sciences, and natural sciences. The majority of program participants are part-time adult students who seek to earn a degree in Liberal Studies at times and
locations convenient to them. Credit may be earned through: documented prior learning assessment; independent study; classroom instruction, which is offered primarily in the evenings and weekends at off-campus learning sites; examination; and structured reading combined with supplemental television instruction in conjunction with the National University Consortium for Telecommunications in Teaching (NUC). One hundred twenty-five semester hours are required for graduation. A candidate for the BA in Liberal Studies degree normally enters the program after earning the equivalent of 60 semester hours of undergraduate credit. A candidate must complete the following minimum requirements: 9 semester hours of humanities; 6 semester hours of social and behavioral sciences; 6 semester hours of natural sciences; and a minimum of 40 semester hours within these areas. Beyond the minimum requirements, adult students are encouraged and assisted in designing an educational plan that meets their individual needs and goals. An express purpose of the OCD program is to provide adults with a comprehensive foundation of knowledge and skills in the liberal arts in an educational delivery service format designed to meet the needs of working adult students (Linfield College
9. **Preparatory Orientation** - An educational attitude or view of a college student, as measured by the Student Orientations Survey (Morstain, 1976). It emphasizes the view of the purpose of a college education which stresses the pragmatic nature of education, practical skills and knowledge, having a more structured learning process, valuing the assessment of a student's work by faculty authorities, and attaching importance to careers and competition.

10. **Prior Learning Credit** - The awarding of college credit for college level learning which was acquired outside the classroom, prior to starting a degree program and for which one has not already received college credit. Credit may be given for work, volunteer, and leisure activities.

11. **Traditional Program (T)** - The undergraduate baccalaureate program at Oregon State University which leads to a Bachelor of Arts degree or a Bachelor of Science degree in Liberal Arts. The College of Liberal Arts offers major programs in the humanities, social sciences, and arts. The majority of its participants are full-time, typical-age students. Credit is earned primarily through daytime classroom instruction. Daytime advising is provided for all students.
to help in planning their studies, particularly during the freshman year. One hundred and ninety-two term hours are required for graduation. The candidate must complete seven sequences of Liberal Arts distribution requirements which are normally taken in the first two years. These range from a minimum of 82 term hours to 108 term hours depending on the course of study selected. Additionally, 51 term hours of general institutional requirements must be completed. A minimum of 133 term hours and a maximum of 159 term hours of combined Liberal Arts and institutional credit, of the total 192 term hours necessary for graduation, are prescribed as minimum degree requirements. The remaining term hours comprise the students' major and electives. The overall structure is designed to meet the needs of the typical-age student (Oregon State University General Catalog, 1982).

12. **Typical-Age Student** - An individual, 17 to 21 years of age, enrolled in the traditional undergraduate baccalaureate degree program of this study.

13. **Undifferentiated Orientation** - An educational attitude or view of a college student as measured by the Student Orientations Survey (Morstain, 1976). It is represented by a relatively flat profile which indicates the student does not place a high emphasis on
the view of the purpose of education as either preparatory or exploratory.
CHAPTER II

REVIEW OF RELATED LITERATURE

The review of related literature was conducted in three topic areas:

1. An overview of the historical expansion of educational opportunities for adults in American society.
2. A discussion of the models of external degree baccalaureate programs designed to serve adult students.
3. A review of selected research on the special characteristics of adult students.

An Overview of the Historical Expansion of Educational Opportunities for Adults

The Colonial Period

Educational, intellectual, and social historians have identified adult education as an activity of the early colonial settlers (Cubberly, 1919; Adams, 1949; Morison, 1956). The development of a variety of formal and informal forms of adult education has, in part, been the result of the interaction between the changing needs and interests of adults and the changing nature of American society. Historically, the flexible nature of adult education institutions, agencies, and groups has been an advantage compared with other forms of education which have tended to be conservative and resistant to change (London, 1959).
The need for education among the men and women in 17th and 18th century colonial society was established by the newness and unfamiliarity of an environment which stood in contrast to life in 17th century England. The colonists had few of the material amenities of the Old World. To succeed in the frontier environment, colonists developed forms of adult education which were essentially unorganized, informal, and primarily vocational (Knowles, 1962).

Sources of information such as newspapers and magazines were not available until the early 18th and 19th century, respectively (Portman, 1978). Books were expensive, generally imported from abroad, and bought mainly by ministers, lawyers, and wealthy merchants. Libraries were small and private, and thus a means of learning for only a comparatively wealthy few.

Bibles and almanacs were found in most homes. The Bible complemented the role of the church and minister as important disseminators of education to adults. The church acted as the chief repository of books and newspapers, and regularly a portion of the ministers' sermon carried relevant secular messages on practical matters of concern to their parishioners (Morison, 1956). Knowles (1977) suggests that the church was perhaps the most influential institution for the education of adults in the first 200 years of the American experience.

In New England, the town meeting served as the center for each town's political activities. It also provided a setting for adults
to educate themselves on political matters, and to exchange news and opinions with other adults. Taverns and coffee houses played a role in providing educational as well as social opportunities for adults in the colonies. Long (1981) stated that these:

establishments were of great importance in the development of impressions, opinions, attitudes, and knowledge about agriculture, business, shipping, economics, community and world affairs, and recreation (p. 15).

The village store rivaled churches and public houses as mediums for information and education (Brubacher, 1947).

Throughout the 17th and 18th centuries in America, higher education was not accessible to adults. Harvard and other colleges, established during the colonial period, provided a uniform classic liberal arts bachelors curriculum. Each class moved through an identical series of instruction and readings at the same pace and on a full-time basis (Valentine, 1974). The formal classic liberal arts curriculum prepared future professionals and gentlemen to be leaders of their communities, and completion of a degree was viewed as sufficient formal education to last a lifetime (Morison, 1956).

In contrast to the historical, classical education offered by colonial colleges, Benjamin Franklin represented an eclectic of the classic liberal arts and the practical arts. He appreciated the value both forms of education could have for adults. Franklin established the Junto in 1729, a debating club which explored the areas of morals, politics, and natural philosophy. Knowles (1977) stated that the Junto was the "only uniquely adult education
institution founded in this period" (p. 10). Under Franklin's leadership, the Junto became intercolonial, and in 1744 became the American Philosophical Society (Grattan, 1955).

Franklin contributed to the practical educational needs and interests of colonial adults through his support of the library movement, his active involvement with mechanics and subscription libraries, and his weekly publication of the \textit{New England Courant}, a newspaper he founded in 1721 (Portman, 1978). He brought a secular tone to higher education, introducing practical arts to the curriculum of the first nondenominational college, Franklin Academy, which eventually became the University of Pennsylvania (Cubberly, 1934).

The colonial period established the precedent of education for adults (Grattan, 1955; Knowles, 1962). The expansion of educational activity to increasingly include the secular, practical, and utilitarian, as well as classic literature, ideas, and language, was a central pattern in the development of education in the colonies, consistent with the developing American cultural ethos of democracy.

\textbf{Nineteenth-Century Adult Education in America}

During the colonial period the education of adults had been largely informal and unorganized. In the 19th century adult education took on a more formal aspect with the development of libraries, correspondence study, Lowell Institute, Cooper Union, the Lyceum Movement, agricultural education and agricultural extension, public
evening schools, the opening of colleges and universities to a wider public, Chautauqua, and the development of a variety of voluntary and professional associations and agencies (Knowles, 1962).

Free public libraries began in 1833 in Petersborough, New Hampshire, and library extension first originated in the State of New York in 1883 (Cubberly, 1934). Cubberly emphasized the value and usefulness of public libraries and the library extension service to adult continuing education when he pointed out the "library supplies the means by which the education of one's self may be continued throughout life" (p. 598).

Lowell Institute (1836), Cooper Union (1859), and correspondence study (1873) were pace setters in adult workers' education, providing lectures and instruction in both the fine and practical arts. They established a precedent which was followed into the 20th century by such organizations as the Rand School of Social Science, Bryn Mawr's Summer School for Women Workers, and the International Lady Garment Workers Unions' educational programs for adult women (Burbacher, 1947).

The American Lyceum was introduced by Josiah Holbrook in 1826. Its function was to bring liberal and practical knowledge to the people of the towns. Noffsinger (1926) viewed the Lyceum as one of the first channels for the diffusion of learning to adults in America. Following Holbrook's prescription, these adult education centers were established on a nationwide scale and flourished at the local and county levels until the onset of the Civil War. At its
peak around 1835, the movement was represented in 3,000 towns, 100 county organizations, and 15 state clearinghouses (Shawen, 1979).

The Lyceums embodied many of the principles advanced by adult education theorists today: wide accessibility logistically and financially, a membership was not restricted by social or sexual distinction, they were, learner-centered, community-based, had wide educational parameters incorporating liberal and practical knowledge, and utilized practical demonstrations (Shawen, 1979). The American Lyceum was the largest and best of a genre of adult education institutions that came into existence in the 19th century. Their precedent, as a volunteer based adult education organization, was followed by other institutions and associations including: farmers' institutes, mechanics' institutes, and professional associations representing lawyers, physicians, engineers, and teachers (Cremin, 1980).

The popularization of agricultural societies and farmers' institutes influenced the formation of the Federal Department of Agriculture in 1862, and the passage of the Land Grant Act (Morrill Act) in 1862. Among other things, the Morrill Act provided federal money to colleges to teach agriculture and mechanical arts (Knowles, 1977). Under the leadership of Seaman Knapp, agricultural extension education expanded throughout the latter half of the 19th century bringing information and instruction, largely through the demonstration method, to farmers. In 1914 the Cooperative Extension Service was formed, guaranteeing the permanence of separate extension
divisions at each land-grant college (Grattan, 1955; Knowles, 1977). Cooperative extension broadened its role after World War I to an agency which not only educated farmers in methods to increase production, but educated them in ways to enhance the well being and health of the farm family and community (Knowles, 1977).

Between 1865 and 1895, 200 public and private colleges were founded (Butts and Cremin, 1953). The increase in the number of colleges paralleled an expansion in their scope and role. This rapid rate of growth had a democratizing influence on higher education (Brubacher and Rudy, 1958). During this period two events had particular relevance for adult higher education: the creation of university extension and the advent of the elective system. The first formal approach aimed at extending higher education services to adults was through university extension. The beginning of university extension was at John Hopkins University in 1876. The American Association for the Extension of University Teaching (1890-1916), with an active membership of approximately 18,000, was an important factor strengthening the university extension movement (Grattan, 1955). The association sponsored an average of 95 lectures per year. Prominent lecturers provided presentations primarily in the liberal studies.

In 1892 William Rainey Harper, President of the University of Chicago, was the first to give extension equal status with the other university divisions. In 1906 the President of the University of Wisconsin, Charles R. Van Hise, created the "Wisconsin Idea", a
program of university service which was based on the belief that the university should use its professional resources to form an alliance between the university and the state (Rudolph, 1962). University professors were called upon to apply their technical expertise to help solve problems of the state and modern society. A part of this plan was university extension, committed to the idea that it was the responsibility of the university to use its resources to bring education to adults through instruction, community service, and public debates and discussion. The Wisconsin model stimulated the growth of university extension throughout the nation (Portman, 1978).

While the idea of university extension was to extend the university toward the adult population, one aspect of Chautauqua attempted to extend the parameters of the education of adults toward the university (Grattan, 1955). Correspondence study, extension, and summer school, three forms of contemporary adult education delivery methods, were first popularized through John H. Vincent's Chautauqua movement (Tolman, 1937). Along with practical training, Chautauqua and university extension recognized a demand among adults for liberal education, and each became a part of university extension in the 20th century. The Chautauqua College of Liberal Arts (1888) set an adult education precedent by granting a bachelors degree for a four-year program of residence, correspondence, and extension study (Butts and Cremin, 1953). By 1899 approximately 48 colleges and universities in the United States were granting
bachelor, masters, and doctoral degrees through correspondence (Portman, 1978). Case and Case (1948) stated that at the height of the movement in 1924, approximately 30,000,000 Americans participated in Chautauqua educational and cultural offerings.

The 19th century brought a great increase in the number and types of people, institutions, and organizations involved in adult education. Higher education began to respond to adult educational needs through extension and correspondence study. A pattern of increasing diversity and access to adult educational opportunity was established.

Twentieth-Century Adult Education in America

The adult education movement in the 20th century, particularly after World War I, continued to expand into new forms and settings. Some of the areas 20th century adult education has entered or continued its expansion to include: citizenship and literacy education, vocational education, education in government, business and labor, and higher education.

Until the passage of compulsory education laws for children and youth, prior to the beginning of the 20th century, public evening schools served young people who worked during the day and thus received their elementary or secondary education at night. Around the turn of this century, public evening schools expanded and changed their character. Adult immigrants had a need for English education
and preparation for citizenship, and the industrial revolution created a demand for the education of adults in technical, trade, and business studies. The Smith-Lever Act (1914) and the Smith-Hughes Act (1917) encouraged the instruction of vocational subjects in the public evening schools (Cubberly, 1919). Gradually, 20th century evening schools expanded the curriculum to common branches of common subjects while continuing to respond to the literacy and citizenship needs of diverse adult immigrants (Brubacher, 1947).

An earlier method of vocational training, the apprenticeship system, has not sufficed since the late 19th century. The techniques of production changed, and the need for trained labor increased, as a result of the onset of the industrial revolution. Vocational-Technical institutes such as Worcester Polytechnic Institute and Pratt Institute, were created in the late 19th century to provide vocational education at "something less than the college grade" (Grattan, 1955, p. 211). During the 20th century, and particularly after World War II, business, industry, and government moved toward a broader conceptualization and involvement in the vocational-industrial education of adults (Knowles, 1962). The Servicemen's Readjustment Act (1949), like the earlier Smith-Lever and Smith-Hughes Acts, was an important government initiative expanding the role of adult education (Hartle and Kutner, 1979). Evidence of the expansion of adult education to government and business is provided by a recent survey of the education and training practices of Fortune 500 companies, major trade associations, and government at all
levels. It revealed their combined annual spending on continuing education was approximately 32 million dollars in 1972, and estimated at 50 million dollars in 1980 (Kost, 1980).

Unions have also participated in the education of adults. Since the founding of the Workers Education Bureau in 1921, 20 major unions have had educational programs (Grattan, 1955). In 1920 the University of California Extension Division set the precedent for university involvement in workers' education. These programs have ranged from on-campus resident institutes for workers (Rutgers University) to extension non-campus classes. The university union educational collaboration emphasizes topics such as leadership training, consumer problems, and public speaking (Grattan, 1955).

Volunteer organizations generally came into being to advance a specific course, or to improve the condition of a professional or occupational group. Many of them carry out educational functions, but only as part of their primary goal as an organization. Increasingly, in the 20th century, volunteer organizations have identified distinct adult education functions within their organizations (Knowles, 1962).

Attempts to systematize the organizational structure of adult education resulted in the creation of the American Association for Adult Education (AAAE) in 1926. At the time of its founding it was estimated that approximately 15,000,000 adults engaged at one time or another in formal or informal adult education (Brubacher, 1947). The recognition of such a large number of adults involved in
education brought lavish funding from the Carnegie Corporation. Part of the money was used to research learning capacities of adults. Research findings by Thorndike and others confirmed the ability of adults to learn, and the prejudicial notion that "you can't teach an old dog new tricks" began to be dispelled (Brubacher, 1947). A variety of new methods for teaching adults began to develop. The AAAE contributed form and direction to the adult education movement through conferences, grants, disbursements, and the publication of the quarterly *Adult Education* journal (Knowles, 1977).

In 1951 the AAAE merged with the National Education Association's Department of Adult Education, and formed the Adult Education Association of the U.S.A. (AEA/USA). The AEA/USA presently publishes two monthly publications, *Adult Education*, and *Adult Leadership*.

The Center for the Study of Liberal Education for Adults (CSLEA) was also founded in 1951. For 17 years the organization studied and published monographs on university programs of liberal education for adults. Through its research and publication on adults, the CSLEA had an impact on the development of college and university degree and non-degree programs for adults (Portman, 1978).

Junior colleges began serving the educational needs of adults in the 1920's. Today a major function of almost all community colleges is their commitment to adults. Adult education programs have developed in relation to the community colleges' threefold mission:
"community orientation; open door principle; and comprehensive curricula" (Monroe, 1972, p. 26-29). Community colleges, along with two- and four-year colleges and universities, are the leading providers of adult education. They provide approximately 37% of the organized educational services for adults (Cross, 1979).

Government support of adult education has been on an incremental nature. The Agricultural Extension Service (1847), the Smith-Lever Act (1914), the Smith-Hughes Act (1917), and the Servicemen's Readjustment Act (1944) are illustrative of the historical interest of the government in increasing educational opportunities for adults. In the post-World War II era, two major reports, the Harvard Report, General Education in a Free Society (1945), and the President's Commission on Higher Education for Democracy (1947) (Hofstadter and Smith, 1961) addressed the importance of adult education in a rapidly changing society. The President's Commission on Higher Education for Democracy specifically charged colleges and universities with the responsibility to considerably expand their programs for adults.

The federal role in adult education has expanded since World War II. Hartle and Kutner (1979) reviewed the history of federal policies, programs, and legislation relating to adult education. The most recent, the Lifelong Learning Act (1976), is a clear statement of the interest of the federal government in the role of adult education in contemporary American society.
Knowles (1977) provided six Genetic Principles which have characterized the historical development of adult education in American society. They are as follows:

1. Adult education institutions typically emerge in response to specific needs, rather than as a part of a general design for continuing education.

2. The developmental process of adult education tends to be more episodic than consistent.

3. Institutional forms of adult education tend to survive to the extent that they become attached to agencies established for other purposes.

4. Adult education programs tend to emerge with a secondary status in the institutional hierarchy.

5. Adult education programs tend to gain stability and permanence as they become increasingly differentiated in administration, finance, curriculum, and methodology.

6. The institutional segments of the adult education field tend to crystallize into organized sub-structures without reference to any conception of a general adult education movement (p. 257-60).

As a result of the expansion of adult opportunities for learning, American society has moved closer to becoming a learning society. Adult education in a contemporary society has become an activity with great diversity among its sponsors, clientele, educational delivery systems, methods, and missions.

The following section of the literature review narrows the focus to a description of traditional and a variety of nontraditional external degree baccalaureate programs which serve adult students.
Characteristics of Baccalaureate Degree Programs Presently Serving Adults

Precedents and Background

Innovation and diversification of undergraduate baccalaureate programs has been unique, compared with the relatively static German and British models of higher education (Brubacher and Rudy, 1958; Brick and McGrath, 1969). The Carnegie Foundation for the Advancement of Teaching (Rudolph, 1977) divided the changes into three eras: 1636-1870, the liberal arts curriculum was broadened and secularized; 1870-1960, the curriculum became more oriented toward practical knowledge rather than toward cultural knowledge; 1960-present, the curriculum reflects the two earlier eras plus a new consumerism characterized by a consumer independence which makes social demand a major influence on enrollments and on the curricula. Hefferlin (1969) provided evidence of the societal press on higher education. His study of the catalogues of 110 four-year colleges and universities revealed that the content of the undergraduate curriculum is being reconstituted completely at least every 22 years. He found that courses are eliminated at the rate of nine percent a year. These changes are in part a result of new knowledge and the emergence of new disciplines and reflect the historic shift in the role of higher education from education for the elite, to meritocratic access, and now to universal access (Hodgkinson, 1976; Rudolph, 1977).
An important element which prepared the way for increased participation of adults in higher education was the creation of the elective system started in 1869 by Charles W. Eliot, then President of Harvard. This had national impact and paved the way for the granting of baccalaureate degrees on the basis of a specified number of credit hours rather than completion, by full-time study, of the prescribed classic curriculum (Hofstader and Smith, 1961). The advent of the elective system created a curriculum with more flexibility and allowed a student with the motivation and ability to complete some of his or her degree requirements on a part-time basis (Dressel, 1963). A recent national study of higher education institutions showed that at 75% of the colleges and universities, students can earn their undergraduate degree by part-time attendance, although some short-term intensive campus residence may be required (Ruyle and Geiselman, 1974).

The flexible nature of the elective system allowed for curricular innovation and created the opportunity for colleges and universities to extend their course offerings to adults attending part-time (Portman, 1978). During the first half of the 20th century, an evening division at many colleges and universities began offering the traditional day-time curriculum to adult students at night. However, degrees were granted through the day-time college and required some form of full-time residency in the regular college to complete degree requirements. The first adult baccalaureate program, established with degree granting authority, was at Brooklyn
College in 1954 (McMahon, 1960). Since 1954, approximately 137 adult baccalaureate programs have been created (Eldred and Marienau, 1979.

Baccalaureate Degree Programs Presently Serving Adults

The development of a number of program approaches to provide a college education for adults has been comprehensively described by Valley (1972), Houle (1973) and Apps (1981). The external, nontraditional degree models described by Valley (1972) and Houle (1973), represent the present range of non-traditional approaches to external academic degrees. Houle (1973) describes their historical development and integrates his three forms of baccalaureate degrees for adults with Valleys' (1972) models (See Figure 3).

Apps (1982) reviewed the types of baccalaureate programs currently accessible to adults. At one end of a hypothetical continuum are traditional baccalaureate programs offered by traditional colleges and universities. These programs allow adults to attend, but provide no special consideration for them. The adult student conforms to the same admissions, instructional, assessment and certification processes and policies as the typical-age student. By definition, programs at this end of the continuum are not incorporated in Valley's (1972) nontraditional and Houle's (1973) external degree typologies. At the opposite end of the continuum are institutions which develop degree programs whose structure, programs, and policies are planned entirely for adults.
The authors indicate that their models and descriptions may not exist in pure form. The programs of the various institutions and agencies which provide educational services for adults often adapt their programs by integrating concepts from one or more of the models. "Few if any colleges or universities today are totally traditional and few are totally non-traditional" (Gould, 1974, p. xvii).

The following comparison (Figure 3) lists and matches Valley's six models of non-traditional degrees (1972) with Houle's three forms of external baccalaureate programs for adults (1973).

<table>
<thead>
<tr>
<th>Valley's Models of Non-Traditional Degree Programs</th>
<th>Houle's External Baccalaureate Programs for Adults</th>
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<tr>
<td>1. Administrative-Facilitation</td>
<td>1. Extension degree</td>
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<tr>
<td>2. Modes of Learning</td>
<td>2. Adult degree</td>
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<td>3. Examination</td>
<td>3. Assessment degree</td>
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<td>4. Validation</td>
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<td>5. Credits</td>
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<td>6. Complex Systems</td>
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Figure 3. A Comparison of Valley's Six Non-Traditional Degree Program Models with Houle's Three External Degree Program Models for Adults

Summary of Model Components

Based upon careful analysis of the guiding principles and dominant characteristics of the program models and delivery services
provided by Valley (1972), Houle (1973), and Apps (1981), the following description is provided. It is an integration and summary of the component parts of the models and typologies described by the respective authors. The purpose of this synthesis is to provide clarity of understanding of the range of baccalaureate degree programs currently available to adults.

1. Traditional Internal Degree Programs (T). T degree granting programs center on the idea that a man or woman of any age requires the same kind of programs as the post adolescent typical age college students or they simply do not consider adult students. These programs allow students to attend classes, but make no special effort to accommodate them. The adult must adhere to the same admissions and entrance procedures, same internal degree requirements, same time schedule, and same university policies and administrative structure as the typical daytime student. The classroom lecture method is the typical form of instruction, and the content of the program is conventional.

2. Administrative-Facilitation Model or Extension and Evening Degree Programs (EED). EED programs center on the belief that a man or woman living in the community requires the same kind of degree granting program as the post adolescent typical age student living on campus. These programs continue their normal degree pattern and traditional curricular program goals but take instruction to adults primarily through a variety of off-campus satellite locations. Courses are offered at special times and in special time blocks: weekends; evenings; late afternoon; once a week; concentrated classes in short periods of time, particularly summer school; and through correspondence. Special registration approaches have been developed. Support staff procedures have been designed to make facilities and services such as libraries and counseling available at nontraditional times. Organizational structure and programs have been changed to facilitate enrollment of adults, but the university's regular degree requirements remain the same for students of all ages.
3. Modes of Learning Model or Adult Baccalaureate Degree Programs (ABD). ABD programs center on the belief that adults are psychologically and socially so distinct from young people that a program of studies designed for men and women should be based at every point on their maturity. These degree granting programs make all the structural and procedural changes that EED programs do, but free adult students from the internal degree requirements by creating entirely new degree programs and curriculum emphasis. Special degrees and degree patterns are designed which are different from those of the regular institution. They are adjusted to the circumstances, interests, and capacities of adults. Their dominant theme is that education should be fitted to the concerns and lifestyles of the "mature adult student who is active in the normal affairs of adulthood." An adult student studies an area, such as humanities or natural science, rather than a subject. The curriculum is self paced and common educational methods used are area seminars, tutorial advisors, and independent study. Evaluation is measured either by oral exam, written exam, or demonstrated competency in writing or discussion. Faculty development programs have been initiated to facilitate better understanding of the adult student and to utilize more applicable teaching/learning approaches. Similar to the T and EED programs, it is sponsored by a regular degree-granting institution, but usually has independence as a school or college.

4. Examination, Validation, and Credits Model or Assessment Degree Programs (A). The A programs center on the idea that the actual learning of the student, rather than his/her completion of formal requirements, can become the center of attention and basis of the awarding of the degree. The A degree primarily focuses on adult students who have traditionally been considered good college material but who, for one reason or another either lacked the opportunity to attend or did not take advantage of the opportunity. In its most pure form, an adult can receive credit and/or complete degree requirements through:

a. Examination - A degree granting institution or agency awards credits and/or a degree upon successful performance on examinations without that student ever enrolling in courses. Standardized examinations are provided by the College Proficiency Examination Program
(CPEP), College Level Examination Program (CLEP), or other national, regional, or local college-level examinations.

b. Validation - A degree granting institution or agency awards credits and/or degrees by a variety of means such as exams or documentation and demonstration of the appropriate level of prior learning experience. Presently, the local institution or agency establishes the criteria level.

c. Credits - A degree granting institution or agency "vouches for the quality of student programming" in awarding credits and/or degrees for work completed elsewhere.

5. Complex Systems Model (CS). These degree granting programs center on the idea that an institution or agency should provide optimal credit and degree options to respond effectively to the full range of individual differences represented by degree-seeking adults. These programs reshape their patterns of services by combining various forms of external degree programs to meet the needs of different clientele. By combining elements from a variety of external degree program forms, the CS programs represent entirely new structural forms with an innovative blend of administrative procedures and rules, structure, support systems, curriculum, and faculty development programs.

The development of a variety of innovative external baccalaureate degree program forms represents the efforts of higher education administrators, program planners, and faculty to provide program alternatives to the traditional form of baccalaureate degree that are congruent with the capacities, circumstances, needs, and interests of adults. Thus, an important effect of the development of these external degree granting programs is that they offer a number of alternatives to the access and accomplishment of educational goals not previously available to adults.
The final section of the review of literature focuses on the special characteristics of adult students in college and university settings. Particular emphasis is given to research on the special characteristics of adult students in a variety of baccalaureate degree programs.

**Special Characteristics of Adult Students**

This section of the literature review presents research findings on the special characteristics of adult students. The literature contains extensive studies, both national and institutional in scope, on the special characteristics of adult students. Findings which are related to adults in the undergraduate degree setting are emphasized.

The findings of these studies can be difficult to interpret because of the diversity of program settings and inconsistencies in research procedures, such as the use of different criteria for full- and part-time students. Some research has defined adult students as 17 years of age and older. Thus, typical-age adolescent youth are occasionally included in the adult population, while others have chosen ages 22, 25, or 29 years as the demarcation point.

The studies are organized in the following manner:

1. National studies of the educational characteristics of adults.
2. Socioeconomic and motivational characteristics of adult students in undergraduate college settings.

3. Adult women in college and university undergraduate settings.

National Studies of the Educational Characteristics of Adults

Volunteers for Learning (Johnstone and Rivera, 1965) is a detailed report of a major National Opinion Research Center study on adult education in America. The study was sponsored by the Carnegie Corporation and surveyed the extent and nature of adult participation in continuing education. The research was based on a national probability sample of 13,293 adult males and females and consisted of four basic phases: Phase I, a national survey of the educational activities of the adult population; Phase II, an intensive study of the reactions of adults to continuing education; Phase III, case studies of adult education facilities in four middle size American cities; and Phase IV, an inquiry into the past school educational experiences of youth.

About 25 million American adults were found by Johnstone and Rivera, to have been active in some form of continuing education during the one year period covered by the survey, but those from the lower class were least likely to avail themselves of the opportunity. The two barriers of finances and time were the reasons most frequently given by adults for not pursuing higher education.
Johnstone and Rivera concluded that fewer older adults than younger adults participate in continuing education. The most frequent reason for young adult participation is job centered, while older adults use education for less pragmatic, more leisure-centered goals. Five characteristics most highly correlated with an adult's degree of interest in continuing education are: those people who are under age 45 and have at least a high school education; those who have at least one parent who completed high school; those who are optimistic about their income in five years; those who know someone who took an adult education course during the previous two years; and those who have taken an adult education course themselves in the previous two years. Adults possessing none of these attributes have a very slight interest in continuing education.

Carp, Peterson and Roelf (1974) conducted a nationwide survey of a sample of over 2,000 adults representing approximately 104 million persons between the ages of 18 and 60. The study was sponsored by the Commission on Non-Traditional Study. Through an interview survey, the respondents were divided into two subgroups, "Learners" and "Would be Learners." Approximately five percent of the sample were enrolled full-time in colleges and universities and omitted from the data analysis. However, adult part-time college students, who represent the majority (63%) of the higher education population were included (NCES, 1980).

Thirty-one percent of the adult respondents were engaged in some form of adult learning within 12 months prior to the study, 77%
of the "Would Be Learners" had not participated in some form of adult learning within 12 months prior to the study, but 95% of these "Would be Learners" expressed a desire to return to an adult education setting. The study pointed out that twice as many "Learners" as "Would Be Learners" had some post-secondary education and that almost one-half of these individuals had previous experience in an institution of post-secondary education. Learners tended to be younger than the general adult population; 40% of them were under age 30, compared with 32% of the total sample. Interest and participation in learning activities began to decline in the 30's for both males and females and dropped sharply after 50. No appreciable differences existed between the orientation to learning of "Learners" and "Would Be Learners" according to sex. Among those actually participating in some type of educational activity, 49% were male, 51% were female and 90% were white. Among "Learners" job-related reasons were more important to men, whereas personal fulfillment was more important to women.

Socioeconomic level was positively related to educational participation with the exception of professionals and executives in business and industry. Although relatively high in socioeconomic status, they were found to be under-represented as learners. The first choice of learning options among "Learners" was hobbies and recreation (42%), followed by occupational and career-related education (35%). "Potential Learners" ranked vocational subjects as a
distinct first choice (43%), but all other areas of educational interest were ranked quite low (Carp et al., 1974).

Johnstone's and Rivera's (1965) findings were similar to those of Carp et al. (1974). Both found that: finances and time are major barriers to learning for adults; approximately one-third of all adults were active in learning; high socioeconomic level was positively related to adult participation in education; and younger adults are more active in learning and more oriented toward practical vocational education than older adults. In addition, active participants have a higher educational level than potential learners, men are more interested in job-related education than women, and home-centered reasons are of more importance to women than to men in both surveys.

Ruyle and Geiselman (1974) described the characteristics of non-traditional opportunities and programs for adults in American colleges and universities in 1972. Non-traditional college programs were defined as "any specially designed programs based on new or unconventional classroom instruction" (p. 67). Non-traditional adults were defined as individuals over 25 years of age, who were either involved in a role prohibiting full-time access to campus or who chose not to attend full-time. Seventy-two percent, or 1,185, of the 2,670 eligible institutions responded with usable data which formed the basis of this survey. In analyzing the findings it should be noted that 34% of the institutional responses were community colleges, which have historically had, as part of their
policies and program function, the provision of opportunities for adult students (Monroe, 1972).

The survey revealed that adults were welcomed in approximately 83% of the colleges and universities in the nation. Ninety-five of the community colleges reported actively seeking and encouraging adult participation. Sixty-six percent of the four-year colleges and universities encouraged adults to enroll. Approximately 80% of the institutions interested in adult enrollment advertised this fact. Ten percent of the institutions made literature available upon inquiry, while 70% advertised. Only 20% of those colleges and universities which expressed interest in adult student enrollment provided special services for adults such as counselors or special fees. At the time of the survey, 75% of American colleges and universities offered undergraduate degrees through part-time study, although an unspecified amount of intensive full-time residency was required.

Two of the six forms of the non-traditional credit addressed by Valley (1972), credit for experiences not directly related to course work and credit by examination, were incorporated in Ruyle's and Geiselman's survey (1974). At over one-half of the institutions, students were able to gain some credit toward their degree for a variety of experiences not related to course work. Cooperative work experience (35%) and volunteer work in community agencies (28%) were the most frequently reported. Sixty-three percent of the institutions reported students could earn credit toward a degree by passing
one of the locally developed regional or national standardized tests.

Only 363 (33%) of the institutions offered programs which fit the researchers' definition of "non-traditional". Of the 641 non-traditional programs offered by the 363 institutions, 70% were designed for non-traditional students, 67% were carried out at non-traditional locations, 57% used non-traditional methods, and 48% offered non-traditional content. Fifty-nine percent were distinctive because they implemented two of the criteria, including 20% of these same institutions which used all four criteria.

Forty-seven percent of the non-traditional programs offered intensive and continuous advisement to the adult student throughout the length of the program. Sixty-six percent of the faculty members in the non-traditional programs served as counselor-advisors. Of the 1,184 institutions surveyed, 85% recognized a need for non-traditional programs but were restricted by lack of funds.

From the findings of Ruyle and Geiselman (1974) it appears the majority of colleges and universities (83%) were interested in serving the adult student, but only 33% had developed any form of non-traditional delivery service to meet adult students' needs. This finding is corroborated by Eldred and Marienau (1979), who estimated approximately 95% of the undergraduate baccalaureate degree granting institutions in America do not have special programs for adult students.
Eldred's and Marienau's (1979) nationwide survey of higher education institutions identified 136 colleges and universities that have developed baccalaureate degree programs designed specifically for adults. Four issues related to degree offerings were examined: clientele, access to degree programs, institutional context of degree programs, and academic components of degree programs.

Findings produced by the survey point out that the definition of adult varies among institutions, but the most common characteristics used to define adults are those 22 years or older, who are self-directed, have mature decision-making ability, have a primary role that is other than full-time student, and have worked for a specific number of years.

Baccalaureate degree programs designed for adults generally facilitate access through flexible time schedules. These range from evening and weekend offerings to a variety of combinations of day, evening, and weekend programming. One-third of the programs surveyed operate on a combined day/evening schedule, another one-third combine day/evening and weekend schedules, and the remainder operate exclusively on weekends or in the evenings. Grade point average is the most common requirement for admission. Other criteria were reported as becoming more common: autobiographical essays, statements of educational goals, and portfolios of prior learning. One-third of the adult programs have no residency requirement, but the two-thirds that do are flexible and adaptable to the situation
of adults with other full-time role responsibilities (Eldred and Marienau, 1979).

This survey revealed that of the 137 adult baccalaureate degree programs in 40 states, two-thirds are offered by established private institutions. Enrollment in the adult programs generally ranges from 100 to 500 students. Some programs affiliate with others in consortium arrangements at local, state, or regional levels primarily to expand program offerings to students. Tuition accounts for about 90% of the funding in 50% of the programs, most of which are located at private colleges. Programs that receive 100% funding from the host institution are usually a part of public institutions.

Academically, the typical degree programs for adults are designed to provide a broad liberal education in areas such as humanities, fine arts, communications, social sciences, and natural sciences. The survey revealed that 15 different degrees are offered, but the Bachelor of Science and Bachelor of Arts degrees are most common. The programs use a variety of learning modes: group learning, independent study, documented prior or experiential learning, and formal college courses (Eldred and Marienau, 1979).

This survey pointed out the changing role of faculty in adult degree programs. The new role is characterized by interaction with adult students and advisors, mentors, learning facilitators or consultants. This trend was characteristic of 66% of the non-traditional program in Ruyle's and Geiselman's (1974) national survey of
colleges and universities. Likewise, both studies concluded that evaluation of the wide variety of learning, evaluation, and credentialing opportunities provided by non-traditional programs is a problem issue which has not yet been satisfactorily resolved.

This study indicated that a major emphasis of the majority of programs is to extend to the adult student the opportunity to assume a relatively large part of the design, direction, and components of their individual program. In only one-third of the programs surveyed does the faculty design the curriculum; in another one-third faculty design the general distribution requirements, while the students assumes the responsibility for designing the major area of study; and in the remaining one-third of the programs, adult students are allowed the freedom to design individual programs of study.

It appears that the majority of adult baccalaureate programs reviewed in Eldred's and Marienau's (1979) survey view the role of the adult in the educational process in a way which is similar to the views of Knowles (1970) and Cross (1978). Knowles theorizes that in an educational environment which shows appreciation for the characteristics of a mature adult, the student would be encouraged to become an active participant pursuing knowledge, rather than a passive recipient of knowledge. Cross (1978) views the mature adult as a "self-planned learner" who makes his or her own decisions about learning goals and is able to select from a variety of materials and resources those that best fit his or her own goals (p. 4).
Approximately 90% of the programs surveyed by Eldred and Marienau (1979) incorporate a diversity of adult learning experiences similar to the adult baccalaureate program model described by Houle (1973). This suggests that external degree non-traditional models are being implemented and, to a limited extent, the growth of adult degree programs are evidence that the needs of adults require a different kind of education.

Aslanian and Brickell (1980), in a national study sponsored by the College Board, interviewed approximately 2,000 adults 25 years of age and older. The central question they asked was "what causes adults to learn" (p. 3). They concluded that adult learning is triggered by specific life events which occur at transitional points in people's lives. The major triggers or catalysts for bringing adults into a learning experience are in rank order of frequency: career, family, health, religion, citizenship, art, and leisure. Comparing adults who actively participated in learning over the previous year with those who did not, Aslanian and Brickell concluded that those who are more likely to be learners than non-learners are younger; better educated; of high incomes; employed; in professional or technical work or business fields; single; white, oriental, American Indian or Hispanic; living in urban areas; living in the Pacific Coast states; or female with children.

Aslanian and Brickell's conclusions support the theoretical concepts of life stage theorists. Gould's "transitions" (1978),
Levinson's "marker events" (1978), and Havinghurst's "developmental tasks" (1953) are concepts which identify life transitions as major periods of change which bring about the need for new learning. Thus, in contrast to the conceptual orientation of humanist educators (Rogers, 1969; Maslow, 1976), who view learning as an intrinsic part of human nature, Aslanian's and Brickell's findings (1980) support the theoretical developmental position that the life stages or transitions in people's lives are acted upon by environmental challenges to bring about change and new learning efforts.

In a national study for the College Board, Kimmel (1976) found that 42% of adult students are in the 25-34 year-old age group. He reported that 17% of adults from families with incomes of $15,000 or more are involved with educational activities, whereas only eight percent of the adults from families with incomes under $10,000 participated in educational activities. This research also confirmed findings from other national studies (Johnstone and Rivera, 1965; Carp et al., 1974; Aslanian and Brickell, 1980) that show that the more success a person has in the educational system, the more likely he or she will seek further education as an adult. An additional finding, reflecting a consensus in the literature on adults, is that more men (50%) than women (43%) participate in adult education for occupationally-related reasons (Kimmel, 1976).

Anderson's and Darkenwald's (1979) national study of the demographic characteristics of adults provides a profile of participants
and potential participants in adult education. Many of their findings are highly consistent with other national studies (Johnstone and Rivera, 1965; Carp et al., 1974; Kimmel, 1976; Aslanian and Brickell, 1980). In addition, Anderson and Darkenwald (1979) concluded that the demographic characteristics of adults who participate in part-time educational activity at colleges and universities are in many ways similar to adults who pursue non-collegiate adult education. They found that generally adults involved in education are: better educated, younger, more likely to be employed, and more likely to pursue education for job related reasons. More adults in college programs already hold degrees, compared with participants in other forms of adult education who are likely to hold only a high school diploma. Additionally, being female, having a full-time job, and living in the West are characteristics of the highest percentage of adult college students.

The national studies of the general demographic educational characteristics of adults provide a relatively clear profile of who the participants and non-participants are. Table 2 was developed to clarify and summarize a general demographic profile of adult participants and non-participants in all forms of adult education. It is based on the national research studies discussed in this section of the literature review.

The following section of the literature review focuses on the special characteristics of adult students in college and university degree programs.
TABLE 2
DEMOGRAPHIC PROFILE OF MAJOR CHARACTERISTICS OF ADULT EDUCATIONAL PARTICIPANTS AND NON-PARTICIPANTS IN ALL FORMS OF ADULT EDUCATION

<table>
<thead>
<tr>
<th>Variables</th>
<th>Participants</th>
<th>Non-Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>35 and under</td>
<td>36 and over</td>
</tr>
<tr>
<td>Education</td>
<td>High school diploma or more</td>
<td>Less than a high school diploma</td>
</tr>
<tr>
<td>Socioeconomic Level</td>
<td>Middle or upper class</td>
<td>Lower class</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Employed full-time</td>
<td>Unemployed or employed part-time</td>
</tr>
<tr>
<td>Occupation</td>
<td>Professional, technical, manager</td>
<td>Farmers, laborers, service workers</td>
</tr>
<tr>
<td>Marital Status</td>
<td>No differential</td>
<td>No differential</td>
</tr>
<tr>
<td>Race</td>
<td>White</td>
<td>Hispanic, Black</td>
</tr>
<tr>
<td>Population Setting</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Educational Interests</td>
<td>Career then personal knowledge</td>
<td>Personal knowledge then career</td>
</tr>
<tr>
<td>Interest by Sex:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Job related</td>
<td>Job related</td>
</tr>
<tr>
<td>Female</td>
<td>Personal knowledge and curiosity</td>
<td>Personal knowledge and curiosity</td>
</tr>
<tr>
<td>Barriers to Learning</td>
<td></td>
<td>Cost, time, geographic</td>
</tr>
</tbody>
</table>

(Note: This table was compiled from the national studies reviewed in Section 2 of the Literature Review.)
Numerous studies have investigated the similarities and differences among adult students and typical-age students in college and university undergraduate environments.

Sturgis (1979), in a doctoral dissertation, and Kuh and Sturgis (1980), in a published report of the findings, examined adult and typical-age college student environmental perceptions at two traditional midwestern universities: a large public research university and a small midwestern state university. Typical-age students were defined as 18 to 22 years of age, and adult students were defined as 25 years of age and older. The perceptions of the college environment of the sample were examined using the College and University Environment Scale (CUES).

Results from the study pointed out that adults at both institutions had significantly lower scores than those of typical-age students in two areas: community and awareness. Adult students perceived their campus environment as lacking support and group oriented behavior. For adults at each campus, the environment was perceived as not encouraging self-understanding and reflective behavior. In comparing adult perceptions at one university with those at the other university, older students at the smaller institution perceived their campus to be significantly higher in practicality, community, and propriety. Thus, the adults at the smaller campus
viewed their environment as more orderly, friendly, cohesive, and considerate than adults at the larger institution.

Among major demographic differences revealed by the study were that adult students were more likely to be married and live off campus and less likely to participate in co-curricular activities. Adult students at the large university were more active in cultural and academic affairs than adults at the smaller institution, or than typical-age students at either institution. The dominant reason for attending college among typical-age students at the small and larger universities was instrumental career preparation, whereas adult students at the respective institutions were more interested in learning more about themselves and studying a specific field of knowledge (Strugis, 1979; Kuh and Sturgis, 1980).

Kuh and Ardaiolo (1979) compared demographic characteristics of first-year adult students (23 years of age and older) from two types of campuses: residential and commuter, with typical-age freshmen (17-20 years of age) from a residential campus. The study sought to find how adult students and typical-age students from their respective college campuses compared with regard to: expressed reasons for attending college, type and degree of participation in extra-curricular activities, and educational aspirations.

Three-quarters of the adults at the commuter campus were preparing for a better job, compared with 40% of the residential adult students, and 51% of the typical-age group. Thirty-five percent of the adult students at the residential institution were in college to
pursue a particular field of study, compared with 18% of the adult students at the commuter campus. Twenty-seven percent of the typical-age freshmen at the commuter campus indicated they were in college to pursue a particular field. The adult students at the residential campus tended to participate in extra-curricular activities more than commuter campus adults, but not as often as typical-age students.

The age range (23-52 years of age) and mean age (29.8) of the adults at the commuter campus was greater than the age range (23-32 years of age) and mean age (27.1) of adult students at the residential campus. Commuter campus, adults worked an average of 28.8 hours per week, compared with adults at the residential campus who averaged 22.1 hours of work per week. Twenty-seven percent of the adults at the residential campus were undecided about their intended major field, in contrast to seven percent of the adults at the commuter campus and six percent of the typical-age freshmen.

The findings of Kuh and Ardaio (1979), Sturgis (1979), and Kuh and Sturgis (1980) indicated adult students differ in a variety of ways from typical-age students, and also suggest that adult students at different size traditional campuses differ from one another in demographic variables, educational and co-curricular activities and interests, and perceptions of the college environment.

Peabody and Sedlacek (1982) investigated the attitudes of 215 freshman undergraduate students toward adult undergraduates. Younger students responded negatively to older students in four of ten
"close" socializing situations. In the remaining less intimate academic and social situations, younger students expressed little concern about older students. Peabody and Sedlacek suggest that mutual understanding between older and younger students is important to the well being of both groups of students. Interaction between the older and younger students might be facilitated through mutual participation in workshops and orientation sessions designed to identify and resolve problem areas (Peabody and Sedlacek, 1982).

Laverenz (1981), in a nine institution study comparing college correspondence students to students studying in conventional campus environments, found significant differences appearing between the two groups on all variables. Correspondence students were significantly older than the more numerous typical-age conventional campus college students. Most (55%) correspondence students were seniors, compared with 20.1% typical-age seniors. Typical-age conventional campus students were equally likely to be male or female, while female correspondence students outnumbered male students by a two to one margin. Approximately twice as many correspondence students were married as were typical age college students. Laverenz's research demonstrated significant population differences between correspondence students and students in traditional campus programs, and recommended policy adjustments and further research to create an environment for the correspondence student that would enable them to feel more a part of the university community.
Gerster (1980) researched the differences in perception of the academic environment among adult students (24 years of age and older) and typical-age undergraduates (23 years of age or younger). Of the three academic elements selected for the study, autonomy, affiliation, and instructor support, adult students scored significantly higher in autonomy and instructor support, while typical-age undergraduates were higher in their perception of affiliation. The findings of Gerster (1980) are consistent with previous research findings (Sturgis, 1979; Kuh and Sturgis, 1980) which concluded that adult students did not perceive the traditional college environment as supportive of group interaction or group-oriented behavior.

Erickson (1968) conducted a study at Michigan State University which attempted to learn more about adult students 26 years of age and older. Responses to his questionnaire found that 72% of the adults were male, and largely from the middle class, and 75% reported previous college experience. The majority of adult male students stated practical, career-related reasons for attending college, and women rated intellectual curiosity, increased self-understanding, and career-related reasons as major factors influencing their decision to enroll in college. Most adults chose a lecture format and frequent exams as their preferred choice of instruction.

Yates (1978), utilizing the CUES instrument, compared the perceptions of the college environment of four selected groups of students at Oregon College of Education. The groups included older
full- and part-time students, and younger full- and part-time students. Older students perceived the campus environment as more scholarly, polite, considerate, and conventional than did younger students. Additionally, older students felt the college environment offered less community and friendliness than did younger students. Interestingly, younger part-time students felt less campus morale (a feeling of friendliness and supportiveness) than all other groups.

It appears that differences between adult students and typical-age students on traditional college and university campuses are relatively well documented by research. Although there are demographic, life stage, and perceptual differences between adult and typical-age college students, demographic, lifestage, and perceptual differences also exist among adults. Thus, adult college students do not appear to be a cohesive, homogeneous group.

**Socioeconomic and Motivational Characteristics of Adult Students in Undergraduate College Settings**

A number of studies which focus on the socioeconomic and motivational characteristics of adults in the undergraduate college setting provide a clearer conceptualization of the adult student. As part of the Carnegie Commissions Explorations in Non-Traditional Study, Cross and Jones (1972) investigated major barriers which limit access to higher educational opportunity for adults. The six categories of barriers discussed were: geographic, credit
accumulation, scheduling, financial, and restricted definition of education.

Cross' and Jones' study provides insight into the reasons why traditional institutions of higher education service a relatively narrow base of adults. Houle (1973) suggests that as the various non-traditional external degrees for adults continue to be implemented and alternative forms of higher education become more common, a broader adult constituency may develop.

Motivational characteristics of adult students have been a subject of increasing interest among researchers in adult education. Boshier (1971; 1973; 1976; 1977), through extensive investigation into Maslow's (1954) and Houle's (1961) concepts of motivation, growth and learning, developed a model of the motives for adult participation in education. Through extensive interviews with 22 continuing learners, Houle (1961) concluded that adults could be grouped into three types of motivational orientations: goal oriented, activity oriented, and learning oriented. Houle (1961) points out that "an adult's reason for learning may encompass all three, but the central emphasis of each subgroup is clearly discernable" (p. 15-16).

Boshier (1971; 1973) conducted research utilizing the Educational Participation Scale (EPS), an instrument developed from Houle's theoretical model of adult learner types (1961) and Maslow's hierarchial concept of deficiency-growth motivation in human beings (1954). After administering the instrument to several
samples of adult students, Boshier's research (1971; 1973; 1976) culminated in a 1977 investigation of 242 respondents in a Vancouver, Canada adult evening class. Replacing Maslow's terminology of deficiency motivation and growth motivation (1954) with the synonyms "life-change" and "life-space" motivation, respectively, Boshier theorized (1977) that adults measuring high in life-change orientation are participating in adult education largely to attempt to satisfy the lower-order needs on Maslow's hierarchy while those measuring high in life-space orientation are participating in adult education, not because of the need to survive and acquire utilitarian knowledge, but for expression and self actualization motivation.

Boshier (1977) found that life-space motivation was negatively associated with age. Young participants were significantly more inclined to enroll because of external expectations and less inclined to enroll for cognitive interests. Additionally, the findings showed that life-space motivation was positively associated with educational attainment, previous participation in adult education, occupation status, and social participation. Interestingly, in the latter instance, the relationship was the reverse of the hypothesized direction.

The findings from Boshier's (1971) New Zealand study (1971) were examined in a cross-cultural comparison study by Morstain and Smart (1974). The EPS was administered to a sample of 648 adults enrolled in part-time course work at Glassboro State College.
Substantial similarity in factor patterns were found across the two samples. The results of Morstain's and Smart's study (1974) provided cross-cultural validity to Boshier's factor analytic exploration of the EPS instrument (1971).

Morstain and Smart (1977), in a follow-up study utilizing motivational measures from their earlier (1974) sample of part-time adult evening students at Glassboro State College, produced five distinct types of adult learnings. These were non-directed, social, stimulation-seeking, career-oriented, and life-change. Several distinct results were found when an analysis was made according to the variables of sex, age, educational attainment, and family income. Approximately 75% of the stimulation-seeking learners were female, compared with 25% for males. The researchers suggested that this type of learner attached the greatest importance to escaping from boredom either in one's personal or occupational life. The result, which showed career-oriented learners to be younger and generally 30 years of age or less, is corroborated by other studies (Carp et al., 1974; Johnstone and Rivera, 1965; and Aslanian and Brickell, 1980). Morstain's and Smart's research revealed adult learners in each of the five typologies were from the middle class.

Wolfgang and Dowling (1981) investigated differences in adult students (23 years of age and older) and typical-age students (18 to 22 years of age) at the undergraduate level at Ohio State University. The six motivational factors utilized by Morstain and Smart (1974) were used in this study. Adult students had signifi-
cantly different scores than typical-age students on three of the six motivational factors. Adults were higher than typical-age students on cognitive interest (life-space motivation), and lower than typical-age students on forming relationships and meeting external expectations (life-chance motivation). There were no significant differences between age groups for the factors of social welfare, professional advancement, and escape stimulation, all external life-chance motivating factors. Previous studies (Johnstone and Rivera, 1965; Morstain and Smart, 1971; Carp et al., 1974; Boshier, 1977; Kuh, 1979) tend to conclude that expressive, life-space, less pragmatic or utilitarian orientations are characteristics common to older students in a number of settings.

Grabowski (1972) analyzed statistical clusters which emerged from the administration of the Reasons for Educational Participation Scale (REP) to 269 adults enrolled in the directed-study bachelor's degree program at Syracuse University. His findings revealed a seventh cluster, the desire to study alone. Women showed a significantly greater tendency than men to enroll in the directed-study degree program. There was a high relationship between women's desire to study alone and their desire to know. Younger male and female respondents showed a significantly greater tendency to enroll for the desire to reach a personal goal. This finding was inconsistent with other research on younger adult students (Carp et al., 1974; Morstain and Smart, 1977), but may have been a bias resulting from the self-directed context of the study. Those with relatively
higher incomes were significantly more motivated to participate to reach a personal goal, compared to those with relatively low level incomes who were significantly motivated by the desire to reach a social goal.

Penn (1977) collected responses from a college-wide sample of adult students (25 years of age and over) at Oregon State University (OSU). Forty-eight percent of the adult undergraduates stated occupational advancement as their primary reason for attending college, and 40% stated self-improvement as their primary reason for enrollment. Thirty percent of all adult students chose to attend OSU for convenience. Self-improvement and the university's reputation each received 20% of the responses. Thirty-eight percent of the adults cited role adjustment problems as their major concern, while academic adjustment was indicated by 12% of the respondents.

Of the total sample, 73% of the adults had or were experiencing some type of adjustment difficulties. Seventy-four percent of the adults did not participate in student groups, representing a non-participation rate of 64% for full-time adult students and 87% for those attending part-time. Eighty-seven percent of the full-time adults and 54% of the part-time adults expressed satisfaction with student services (Penn, 1977).

Several findings from studies (Yates, 1978; Sturgis, 1979; Kuh and Ardaio, 1979; Gerster, 1980) of adults in traditional undergraduate settings are consistent with Penn's. Most adults reviewed in traditional college settings felt they were not an integral part
of the college community. The traditional campus environment seems to lack a sense of support, and adults generally do not perceive themselves as social participants in the college environment. Older adults appear to be motivated relatively equally by 'life-space' knowledge orientations, and 'life-chance' practical career-related orientations as compared with typical-age students, who are generally seeking a college education primarily for practical, instrumental career related reasons.

Weathersby (1977) examined Goddard College's Adult Degree Program, exploring the relationship between enrollment in adult degree programs and developmental and adaptive tasks of successive life periods. Similar to Aslanian and Brickell (1980), she concluded that life transitions bring about a readiness factor in adults' demand for education. She concluded that perhaps, by assessing the proper form of educational intervention, life transitions can be facilitated.

Adult Women in College and University Undergraduate Settings

The enrollment patterns of adult females, as full-time and part-time participants in institutions of higher education, has increased at an unprecedented rate. The National Center for Educational Statistics (1980) projects that by 1988 almost 11 times as many adult women will be enrolled in colleges and universities (3,188,000) as were enrolled in 1968 (289,000). This compares to a doubling of adult male enrollments during the same time period. By
1988 it is projected that 3,402,000 adult male students will be enrolled in higher education, compared with 3,188,000 adult female students (NCES, 1980).

Appropriately, adult women students in the higher education setting have become a focus of recent research. Title and Denker (1977) made a selected review of the literature and concluded that adult women differ from men in their multi-role involvement with family, employer, and college and concluded that women face unique problems as they enter the higher education setting.

Reehling (1980), in a five year longitudinal study of 323 adult college women, found that 41.3% had accomplished their degree objectives, compared with a 70% eventual completion rate for all age male and female students who enter college in the U.S. (Pantages and Creedon, 1978). The educational motivation of three-fourths of those who persisted throughout the study had become internal. Self-improvement was the motivation indicated by most of thepersisters, which differed markedly from their initial job-related reasons for enrolling. Fewer than 40% of those who accomplished their educational goal cited work or careers as their main motivation.

McCrea (1979) hypothesized that economic motivation underlies the decision of adult women returning to college. Of the sample of 1,765 women 25 years of age and older, personal satisfaction was the most important reason given by 43% but, when separated by age group, younger adult women were more motivated to enroll for employment reasons and older women for personal satisfaction. However, it
appears that there was an inconsistency between age cohort respondents' reason for enrolling and choice of major. Twenty-three percent of the older women were enrolled in business administration, compared with 14% for younger women. Older women are less likely to choose liberal arts (35%) than younger women (39%). Baker (1977), sampling 1,649 undergraduate adult women at three state universities, found the motives for enrollment in order of importance were: to gain personal satisfaction; to earn a degree; to obtain intellectual stimulation; and to increase potential income.

Marple (1976) found older adult women to be significantly different than younger adult undergraduate women on the California Personality Inventories, Psychological Mindedness Scale. Older women indicated a higher degree of interest and response to inner needs, motives, and experiences in others. Older women also scored significantly higher than younger women on the responsibility, socialization, and achievement via independence and autonomy scales.

A theme in recent literature on adult female students entering or reentering college is the psychological and sociological problems they may face. Lance, Lourie, and Mayo (1977) sampled 583 reentry adults and found that adult female students, more than adult male students, express guilt for spending family money, guilt over neglect of their children, guilt over pursuing their goals, guilt with spouse and friends over reentry, and fear of a dulled memory.

Johnson, Wallace and Sedlacek's (1979) study of undergraduate adult men and women examined demographic differences between the
sexes. They found the average returning woman is in the upper-middle class, has a family, typically works few or no hours at a paid job, and has been away from school for several years. The average returning man is younger, less financially secure, married but without children, has had a shorter break in his education, and works more hours at a paid job. The authors suggest that these demographic differences might provide insight into why returning adult women are frequently found to have different educational orientations than adult male students and typical college-age students.

Summary

This chapter reviewed three topical areas: a historical condensation of the expansion of educational opportunities for adults in America; a review of the types of non-traditional external degree programs designed for adults; and a discussion of the special characteristics of adult students, with particular emphasis on the literature pertaining to adult students in undergraduate college and university degree programs.

Historically, adults in America acquired education through formal, informal and self-taught means. Traditional colleges and universities focused their services on adolescent and post-adolescent youth. The passage of the Land Grant Act (1862) marked the beginning of the extension of higher education's services to adults. The advent of the elective system introduced flexibility into the
college curriculum and was an important event facilitating the future development of extension college courses and, eventually, non-traditional external degree programs for adults.

Responding to rapid changes in 20th century society, adults have recently dramatically increased their participation in higher education. The expansion of external degree programs and the increase in the amount of research on adult students in higher education settings is modest evidence that adults have attracted the attention and interest of higher education program planners and policy makers.

Recent research has identified a general demographic profile of the adult as a learner (Table 2, p. 55). However, research findings on adult students in college and university settings suggest that the traditional day time program and environment is often not accessible and perhaps not suitable for many adults.

Investigations into the more subtle educational motives, interests, needs, perceptions and life transitions of adult college students have only begun to develop an understanding of these characteristics. Although it seems reasonable to assume that adult students in relatively select homogeneous college and university environments would be a relatively cohesive group with consistent identifiable traits, research has found that a variety of sub-groups frequently appear. The varying motives, interests, environmental perceptions and educational orientations of adult students in different life stages make generalizations about adult students
difficult. Men and women of different ages, socioeconomic levels, and life situations often possess contrasting educational characteristics. Cross (1981) suggests that "no single profile can be regarded as representative of the adult learner, even when one looks at the small group of adults who choose to pursue academic credit" (p. 77).

Presently many colleges and universities are evaluating and adapting programs in an innovative effort to develop sound educational opportunities for adult students. The expanding number and variety of educational programs to serve adults is indicative of American higher education efforts to accommodate many of the special characteristics of the adult student. However, further research needs to be done to clarify remaining uncertainties about the characteristics of this new population so that institutions of higher education can develop purposes and programs of optimum benefit to the adult student and the institutions' future.
CHAPTER III

PROCEDURES AND METHODOLOGY

This chapter presents the procedures and methods of this investigation. For clarity of presentation, this chapter has been divided into seven sections:

1. design of the study,
2. a description of the program settings,
3. a description of the population and sample,
4. a description of the instrumentation,
5. data collection,
6. statistical treatment of the data, and
7. the hypotheses tested.

Design of the Study

This study attempted to determine the presence or absence of differences of adult students' educational orientations and environmental relationship perceptions of the college environment according to their enrollment in three contrasting liberal arts baccalaureate programs. These programs were the traditional Liberal Arts program (T) at Oregon State University, the Off-Campus Degree Liberal Studies program (OCD) at Linfield College, and the Lifelong Learning Liberal Arts program (LL) at Marylhurst College for Lifelong Learning. The research design employed in this study was a descriptive three-
institution field study. According to Kerlinger (1973, p. 406), field studies have three purposes:

1. to discover significant variables in the field,
2. to discover relationships among variables, and
3. to develop the groundwork for future studies that will lead to a more systematic and rigorous hypothesis testing.

The design of this study and the hypotheses to be tested are constructed to accomplish the purpose of field research as suggested by Kerlinger (1973).

**Program Setting**

In order to systematically examine the proposition that adult students' educational orientations and perceptions of the college environment differ according to the type of program in which they are enrolled, it was necessary to select contrasting program types. The criteria for selection was based upon Valley's (1972) and Houle's (1973) descriptions of differing models of external baccalaureate degree programs for adults and Apps' (1981) description of the traditional internal degree. The three liberal arts baccalaureate programs selected were judged to closely approximate three relatively contrasting baccalaureate degree models: Oregon State University's College of Liberal Arts represents Apps' (1981) traditional (T) internal degree model; Linfield College's Off-Campus Degree (OCD) liberal studies program represents Houle's (1973) Adult Degree model, one form of non-traditional external degree program; and Marylhurst
College of Lifelong Learning (LL) liberal arts program represents another form of external degree, Houle's (1973) assessment model. Adult baccalaureate students from these contrasting liberal arts programs participated in the study. The characteristics, policies, purposes, and philosophies of the respective programs reveal sharp contrasts. The adult student's perception of these contrasts formed an important focus of this study. A fuller sense of the characteristics and purposes of the three liberal arts programs is provided in Appendix A.

Instrumentation

Two standardized instruments and a demographic questionnaire were utilized for the collection of data. The following discussion describes the instruments' purposes, formats, reliability and validity, scales, and a profile of the mean score responses of the program respondents. To facilitate their administration, these instruments were combined into the Adult Learner Survey (See Appendix B for the Adult Learner Survey).

Student Orientations Survey (SOS)

The Student Orientation Survey, Form E (SOS) (Morstain, 1976) is an 88-item research inventory designed to assess college students' expressed educational orientations. The SOS provides a means of identifying students' general orientations toward various philosophies, purposes, and processes related to a college education. The
inventory format is a four-point, Likert type scale which measures educational orientations among ten scales. Only six scales were used for this study. Each scale is based on eight questions. The range of possible scores on the educational orientation variables was from 8 to 32. Morstain's (1976) second order factoring of the six scales formed two typological groups: a general preparatory typology, and a general exploratory typology. The preparatory typology is measured by the mean group scores of the achievement, assignment learning, and assessment scales. The exploratory typology is measured by the mean group scores of the inquiry, independent study, and interaction scales. Students who achieve relatively high mean scores on the combined scales of achievement, assignment learning, and assessment represent a preparatory typological profile. Students who achieve relatively high mean scores on the combined scales of inquiry, independent study, and interaction represent an exploratory typological profile. Those students whose scores on the preparatory and exploratory scales are about the mean are classified as relatively undifferentiated (Morstain, 1976).

According to Morstain (1976), students with preparatory typological profiles could be characterized as interested in learning to achieve practical, goal-oriented outcomes. They prefer relatively structured learning arrangements and value evaluation by those in authority. Students with exploratory typological profiles could be characterized as interested in learning for the sake of knowing. They prefer unstructured courses in which they can set their own
standards. They value interaction and a coequal role in course decisions with faculty. The six scales which constitute the preparatory and exploratory educational orientation typologies utilized in this study follow.

Description of the Preparatory Scales

Scale 1. Achievement (ACH)

This scale measures the degree to which students are: oriented toward the achievement of a priori goals, i.e., usually a career in particular or success in general; the acquisition of specific skills or credentials; and the satisfaction of receiving external rewards. Students who identify with the content of these items have practical, goal-oriented outlooks and tend to gauge various aspects of the college experience in terms of their future usefulness.

Scale 2. Assignment Learning (AL)

The students who agree with a high portion of the items on this scale report that they learn best by meeting specific, clear-cut formal requirements. Their mode of learning is linear, i.e., they like to master specific blocks or units of knowledge sequentially.

Scale 3. Assessment (AS)

Evaluation by those in authority seems to be quite important to students who score high on this scale. Grades and examinations are valued by these students because they provide not only some measure of their abilities, but also some incentive for using those abilities.

Description of the Exploratory Scales

Scale 4. Inquiry (Inq.)

"Learning is its own reward" is the expressed motivation of the students who respond positively to most of the items on this scale. They concur with statements which stress the value of
insight, the perception of relationships, and knowing how to learn. They express curiosity about many things and appear to enjoy the satisfaction of inquiry whether or not it brings with it any other reward.

Scale 5. Independent Study (IS)

The items on this scale help to identify students who work best on their own. They prefer informal, unstructured courses in which they can set their own goals and standards and pursue their own interests. These students appear to place a high value on freedom and independence.

Scale 6. Interaction (Int.)

An egalitarian attitude towards faculty members characterizes the students with a high score on this scale. These individuals see students as fully competent to share education decision making with faculty. In this connection they express the belief that students should participate with faculty in planning courses and academic programs (Morstain, 1976).

Internal consistency estimates of scale homogeneity were derived through a calculation of coefficient alpha, a measure of internal consistency. The coefficient alpha for the six SOS scales was: Achievement (.72), Assignment Learning (.75), Assessment (.74), Inquiry (.74), Independent Study (.80), Interaction (.82) (Morstain, 1976). These estimates were based on undergraduates in the SOS-E national norm group (N=3,806) (Morstain, 1976). The SOS instrument is presented in Appendix B.

College Student Experiences (CSE)

The College Student Experiences questionnaire (CSE) (Pace, 1979) is divided into five sections: background information of the student, college activities, opinions about college, the college
environment, and estimates of gains. Only the college environment scales were utilized in this study; the eight rating scales measure the students' perceptions of the college environment. Four of the scales are related to various aspects of the academic environment. On these the student is asked to rate along a seven point Likert-type scale the emphasis they perceive the college places on: the development of academic, scholarly, and intellectual qualities; the development of esthetic, expressive, and creative qualities; being critical, evaluative and analytical; and the development of vocational and occupational competence. The four remaining scales refer to relationships among people at the college. These scales measure the student's perception of: relationships with students, student groups, and activities; relationships with faculty members; relationships with administrative offices and officials; and general style of operation as an organization (Pace, 1979). A high rating on the seven point scale indicates that the student perceives the college as placing strong emphasis on that quality. A low rating indicates that the student perceives the college as placing a weak emphasis on the characteristic being rated.

The psychometric properties of the CSE include data from 40 colleges and universities and 10,156 students (Pace, 1981). Composite distribution ratings of the scales demonstrated a high degree of discriminating ability. National means score comparisons (N=10,156) range from 6.2 to 3.6 (See Appendix C for national inter-institutional normative mean score comparisons). This instrument was
selected because it attempts to obtain a description of the college environment utilizing variables judged to measure the diversity of the program environments of this study. The CSE instrument is presented in Appendix B.

**Demographic Questionnaire**

In addition to the SOS and Environmental Perception scales of the CSE, a brief informational questionnaire was administered (See Appendix B). This questionnaire was designed to obtain the following demographic characteristics of the sample respondents: type of institution, age group, sex, class standing, enrollment status, living arrangement, number of years of full-time employment experience, and number of years of previous college experience.

**Population and Sample**

The population of the study consisted of a stratified random sample of adult students enrolled Spring Term, 1982, in three different types of liberal arts baccalaureate programs: Oregon State University's Liberal Arts College (T); Linfield College's Off Campus Degree Program (OCD); and Marylhurst's College for Lifelong Learning Liberal Arts Division (LL). The in-house populations of adult students were unequal in size. According to Van Dalen (1966), if a sample, by chance, has an undue proportion of one type of unit in it, an investigator may use a stratified random sampling to increase precision and to gain a representative sample. Therefore, the popu-
lation sample of the programs was controlled for by choosing a strati-
tified random sample from each program.

The sample in the study was drawn from lists made available by: the Registrar at Oregon State University, the Dean of Continuing Education and OCD Programs at Linfield College, and the Dean of Students at Marylhurst College. Of the 1,963 students of all ages enrolled in the liberal arts program at Oregon State University Spring Term 1982, 509, or 26%, were adult students 22 years of age and older as of December 31, 1981. The OCD program provided a list of 146 adult students actively enrolled in all OCD courses Spring Term 1982. Of these, 128, or 88% were enrolled in the liberal studies degree program. At Marylhurst College 332 adult students were enrolled Spring Term 1982, in the liberal arts program. This represented 45% of the 744 degree and non-degree enrollees in all programs at Marylhurst College.

According to Berg (1982), for this study, a sample distribution should be sought from each institution which would yield sufficient observations to provide statistical variability, better estimates of group comparison, and an accurate representation of the normal curve. According to Downie and Heath (1974), a sample size of at least 30 is needed if the sampling distribution of the mean is to accurately represent the normal curve. Kerlinger (1973) states that if samples are drawn from a population at random, the means of the samples will tend to be normally distributed,"..." and the shape and kind of distribution of the original population makes no difference" (p.
Therefore, to ensure a sufficient sample size, one that would represent a normal population distribution, the following random sample was chosen to represent the population of the three programs of the study. A random sample was drawn of 150 adult student liberal arts majors from Oregon State University. This represents 29.4% of the total population of 509 adult students in the T program. The random sample selected at the OCD liberal studies program consisted of 64 adult students, or 50% of the 128 adult participants. A random sample of 100 adult liberal arts students at the LL program was chosen. This represented 30.1% of the total population of 332 adult students in the LL program. A larger percentage of the population sample was randomly drawn from the OCD program to assure the opportunity of achieving a sufficient number of observations, as recommended by Downie and Heath (1979), for statistical comparison. Table 3, p. 83, presents a comparison of the stratified random sample distribution by program.

Collection of the Data

A stratified random sample of 314 adult students from the T, OCD, and LL liberal arts baccalaureate programs was selected from a population of 969 adults who met the criteria for participation in this study. This represented 32.4% of the total eligible adult population. A computerized random sample of 150 adult students or 29.4%, was drawn from the 509 adult students enrolled in the T program. Utilizing Kerlinger's (1973) random number sampling technique,
64 (50%) adult students were selected from a total of 128 OCD liberal studies adult students. One-hundred, or 30.1%, of the 332 eligible adult students at the LL program were selected for the study utilizing Kerlinger's (1973) random number sampling technique.

Sample respondents' home addresses were obtained, and official approval to proceed with the mailing of the Adult Learner Survey was granted from the program directors at each institution. The questionnaires, accompanied by a letter of introduction, instructions for completion of the questionnaire, and a stamped, self-addressed return envelope, were mailed to the sample respondents' residence during the third week of May, 1982. Ten days after the questionnaires were mailed to the respondents, a reminder post card was sent to those who had not returned the questionnaire. The original letters of introduction and reminder post cards are presented in Appendix D.

Usable responses were those which met the following criteria. Questionnaires that did not meet this criteria were rejected:

1. All items on the questionnaire must have been answered by the respondents according to instruction.
2. Questionnaires missing one or more responses were not used.
3. Questionnaires with one or more multiple answers for any response were not used.

Adult students at the T program returned 84 usable responses, for a 65% return rate. OCD program adults returned 39 usable responses, for a 60.9% return rate. Adult students at the LL program
returned 54 usable responses, for a 54% return rate. This was a usable return rate of 177 responses or 56.3% of the sample. The distribution of the stratified random sample and the number of usable responses of adult students from the three programs is presented in Table 3.

A numerical frequency count was performed for each of the eight demographic variables. The results are presented in Table 4, p. 85.

TABLE 3

DISTRIBUTION OF STRATIFIED RANDOM SAMPLE BY PROGRAM

<table>
<thead>
<tr>
<th>Program (Program)</th>
<th>Adult Student Enrollment</th>
<th>Sample Size Selected</th>
<th>Usable Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>T</td>
<td>509</td>
<td>150</td>
<td>29.4</td>
</tr>
<tr>
<td>OCD</td>
<td>128</td>
<td>64</td>
<td>50.0</td>
</tr>
<tr>
<td>LL</td>
<td>332</td>
<td>100</td>
<td>30.1</td>
</tr>
<tr>
<td>Total</td>
<td>969</td>
<td>314</td>
<td>33.0&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Percent of total adult student enrollment.

<sup>b</sup>Percent of usable responses.

As Table 4 indicates, five adult age groups were used. These groups are based on Gould's (1978) developmental stage research.

According to Gould (1978), there are five transitional stages beyond the age of 21 in the adult life span. Adults in the respective
### TABLE 4

DEMOGRAPHIC VARIABLES OF SAMPLE RESPONDENTS BY PROGRAM

<table>
<thead>
<tr>
<th>Variable</th>
<th>T</th>
<th>OCD</th>
<th>LL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-28</td>
<td>70</td>
<td>83.3</td>
<td>7</td>
</tr>
<tr>
<td>29-35</td>
<td>8</td>
<td>9.6</td>
<td>12</td>
</tr>
<tr>
<td>36-42</td>
<td>4</td>
<td>4.7</td>
<td>11</td>
</tr>
<tr>
<td>43-49</td>
<td>2</td>
<td>2.4</td>
<td>7</td>
</tr>
<tr>
<td>50 and over</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>40.5</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>50</td>
<td>59.5</td>
<td>33</td>
</tr>
<tr>
<td><strong>Class Standing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>6</td>
<td>7.1</td>
<td>2</td>
</tr>
<tr>
<td>Sophomore</td>
<td>8</td>
<td>9.6</td>
<td>3</td>
</tr>
<tr>
<td>Junior</td>
<td>16</td>
<td>19.0</td>
<td>15</td>
</tr>
<tr>
<td>Senior</td>
<td>54</td>
<td>64.3</td>
<td>19</td>
</tr>
<tr>
<td><strong>Academic School</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal arts</td>
<td>84</td>
<td>84.0</td>
<td>-</td>
</tr>
<tr>
<td>Liberal studies</td>
<td>-</td>
<td>--</td>
<td>39</td>
</tr>
<tr>
<td><strong>Enrollment Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>77</td>
<td>91.7</td>
<td>17</td>
</tr>
<tr>
<td>Part-time</td>
<td>7</td>
<td>8.3</td>
<td>22</td>
</tr>
<tr>
<td><strong>Living Arrangement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuter</td>
<td>10</td>
<td>11.9</td>
<td>39</td>
</tr>
<tr>
<td>On-Campus Resident</td>
<td>12</td>
<td>4.2</td>
<td>-</td>
</tr>
<tr>
<td>Off-Campus Resident</td>
<td>62</td>
<td>73.8</td>
<td>-</td>
</tr>
<tr>
<td><strong>Mean Number of Years of Full-Time Employment Experience</strong></td>
<td>2.8</td>
<td>-</td>
<td>9.3</td>
</tr>
<tr>
<td><strong>Mean Number of Years of Previous College Experience</strong></td>
<td>4.1</td>
<td>-</td>
<td>4.9</td>
</tr>
</tbody>
</table>

*Age group figures represent percent of the respective program sample.*
of the T program respondents lived in off-campus residences, and the remaining adult students either commuted (11.9%) or lived on campus (4.2%). OCD and LL program respondents averaged approximately four times more full-time work experience than their younger counterparts at the T program. The range of the previous number of years of full-time employment experience was: T program, 0-20 years; OCD program, 0-39 years; and the LL program, 0-42 years. The mean number of years of previous college experience for adult students for each program was in excess of four years. The range of the number of years of previous college experience was; T program, 0-8 years; OCD program, 2-13 years; LL program, 1-17 years.

**Statistical Treatment of the Data**

The raw data from the SOS, CSE Environmental Perception scales and the demographic questionnaire were transferred to data processing cards, and numerical frequency counts were run for all respondents. Four different procedures were used to analyze the data gathered for this study. Each hypothesis and the corresponding statistical procedure(s) used to test for significance is listed below:

- **H_{1a}; H_{1b}**: one-way Analysis of Variance (ANOVA) with t-test (LSD Procedure)
- **H_{2a}; H_{2b}**: one-way Analysis of Variance with t-test (LSD Procedure)
- **H_{3a}; H_{3b}**: one-way Analysis of Variance with Duncan's multiple range test and t-test (LSD Procedure)
- **H_{4}**: Pearson Product Moment Correlation
H₅: Pearson Product Moment Correlation
H₆: Pearson Product Moment Correlation
H₇: Pearson Product Moment Correlation

A .05 significance level was used for all tests.

Description of Statistical Models

One-way Analysis of Variance (ANOVA)

A one-way ANOVA statistical procedure is used to test for significant differences between the means of two or more groups on a single dependent variable. An ANOVA permits a decision-maker to conclude whether or not all the means of the sample being studied are equal based upon the degree of variability of the sample data. The F ratio is the statistic resulting from the ANOVA procedure. The F ratio compares the variance of the mean to the overall variance of the sample. It tells the researcher whether the differences that separate the groups are greater than the differences that exist within the groups. For example, an F ratio of 10 tells the decision-maker that the differences separating the groups are 10 times greater than the random differences existing within the groups. For the purpose of this study, if the computed F ratio is greater than the tabular F at the .05 level of significance, a statistically significant difference exists among the means.

t-test (LSD Procedure)

The t-test, or t-ratio, is a method of testing the hypothesis of difference when only two groups are being used. It permits
the decision maker to measure the difference between paired samples
and to make an inference about the population from which they were
drawn. In this research it was used to determine whether a signifi-
cant difference exists between two sample means.

Duncan's Multiple Range Test

In cases where more than two group means are involved, one-way
ANOVA by itself does not suggest to the researcher which of the
group's means are significantly different from the others. The mul-
tiple range test is designed to aid the investigator to determine
exactly where the significant differences lie after a significant F-
ratio has been obtained. This procedure may be likened to several t-
tests applied to the data following a significant F-ratio. Indi-
vidual t-tests, however, are inappropriate to use in this situation
because they would act to inflate the probability level. It is this
inflation that is taken into account by the multiple range test. In
effect, the use of a multiple range test adjusts for the chance
factor that one of the given series of t-tests would be significant
by chance. Duncan's multiple-range test was used to test the sta-
tistically significant differences between ordered means.

Pearson Product Moment Correlation Coefficient

The Pearson "r", or product-moment correlation, is a statistical
test used to test the hypothesis of association. A primary purpose
of the Pearson "r" is to determine if a linear relationship exists
for two sets of data. It is useful in determining how sets of data vary, or do not vary, together. When two sets of scores vary together (covary) there will exist a positive relationship. If there is a positive relationship, the Pearson "r", also tells the strength of that relationship. The value of "r" ranges from +1.00, down through zero, to -1.00. The farther "r" is from zero, whether in a positive or negative direction, the stronger the relationship. The following standards are used for interpreting the strength of the correlation (Courtney and Sedgwick, 1974).

<table>
<thead>
<tr>
<th>Correlation Value</th>
<th>Approximate Descriptive Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than .20</td>
<td>slight, almost negligible relationship</td>
</tr>
<tr>
<td>.20 - .40</td>
<td>low correlation; definite but small relationship</td>
</tr>
<tr>
<td>.40 - .70</td>
<td>moderate correlation; substantial relationship</td>
</tr>
<tr>
<td>.70 - .90</td>
<td>high correlation; marked relationship</td>
</tr>
<tr>
<td>.90 - 1.00</td>
<td>very high correlation; very dependable relationship</td>
</tr>
</tbody>
</table>

**Hypotheses of the Study**

The liberal arts programs selected for this study were judged to represent close approximations of three contrasting baccalaureate degree granting delivery service models. A central thesis of this study was that selected educational orientations and perceptions of the college environment of adult liberal arts majors enrolled in the
Three contrasting programs would be predictably different according to program type. The following research hypotheses were proposed to test this thesis:

**H₁a:** The mean score of adult students' preparatory educational orientations will be statistically significantly higher in the T program than in the OCD program.

**H₁b:** The mean score of adult students' preparatory educational orientations will be statistically significantly higher in the OCD program than in the LL program.

**H₂a:** The mean score of adult students' exploratory educational orientations will be statistically significantly higher in the LL program than in the OCD program.

**H₂b:** The mean score of adult students' exploratory educational orientations will be statistically significantly higher in the OCD program than in the T program.

**H₃a:** The mean score of adult students' educational relationship perceptions will be statistically significantly higher in the LL program than in the OCD program.

**H₃b:** The mean score of adult students' educational relationships perceptions will be statistically significantly higher in the OCD program than in the T program.

**H₄:** There is a direct (positive) relationship between adult students' achievement orientations and academic-scholarly-intellectual environmental perceptions in the three programs.

**H₅:** There is a direct (positive) relationship between adult students' inquiry orientations and academic-scholarly-intellectual environmental perceptions in the three programs.

**H₆:** There is a direct (positive) relationship between adult students' interaction orientations and student, faculty, and administrative
environmental relationship perceptions in the three programs.

H7: There is a direct (positive) relationship between adult students' independent study orientations and academic-scholarly-intellectual environmental perceptions in the three programs.
CHAPTER IV

PRESENTATION OF THE DATA

This section of the study presents the results of the data analyses. The main objectives of this study were: to determine if the preparatory and exploratory educational orientations of adult students differed according to their enrollment in three contrasting liberal arts baccalaureate programs; and to determine if the college environmental relationship perceptions of adult students differed according to their enrollment in three contrasting liberal arts baccalaureate programs; and to determine if there was a positive relationship between selected adult student educational orientations and perceptions of their respective college environments.

For purposes of clarity, this chapter is organized into four sections. The first section identifies the means and standard deviations of adult student responses to the SOS and CSE Environmental Perception scales, according to program. The second section presents the hypotheses tested. Each hypothesis is specified, followed by a presentation of the data, a rationale for accepting or rejecting the hypothesis, and a discussion of the decision. In all analyses, a probability level of .05 is required for significance. The third section presents a conceptual model which compares, according to program, selected data gathered from this study. The fourth section summarizes the results.
Two instruments were used to measure the educational orientations and college environmental perceptions of adult respondents at the three programs. These instruments were the Student Orientations Survey (SOS) and the College Student Experiences Environmental Perception scales (CSEEP). The mean scale scores of adult respondents were then computed according to program of enrollment. The relatively high mean SOS scale scores of the achievement (23.4), assignment learning (24.3), and assessment orientation (21.1) of adult respondents at the OCD program contrasted sharply with those of adult students at the T and LL programs. Contrastingly, the OCD adult students achieved relatively low mean scores on the inquiry (22.6), independent study (19.5), and interaction orientation (20.7). Table 5, p. 94, presents the SOS means and standard deviations by program.

The adult respondents' CSEEP scale scores at the LL program were relatively higher than those of adult respondents at the T program. With the exception of the esthetic scale, the mean scores of adult respondents at the OCD program were similar to those of the LL program respondents. Table 6, p. 95, presents the CSEEP means and standard deviations by program.

Findings Relative to the Hypotheses Under Investigation

Hypotheses 1a;1b
TABLE 5
SOS MEANS AND STANDARD DEVIATIONS BY PROGRAM

<table>
<thead>
<tr>
<th>Program</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement Orientation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>21.214</td>
<td>3.719</td>
</tr>
<tr>
<td>OCD</td>
<td>23.385</td>
<td>3.484</td>
</tr>
<tr>
<td>LL</td>
<td>21.500</td>
<td>2.919</td>
</tr>
<tr>
<td><strong>Assignment Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>22.083</td>
<td>2.721</td>
</tr>
<tr>
<td>OCD</td>
<td>24.282</td>
<td>3.486</td>
</tr>
<tr>
<td>LL</td>
<td>21.056</td>
<td>2.949</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>18.048</td>
<td>3.686</td>
</tr>
<tr>
<td>OCD</td>
<td>21.000</td>
<td>3.960</td>
</tr>
<tr>
<td>LL</td>
<td>18.037</td>
<td>3.731</td>
</tr>
<tr>
<td><strong>Inquiry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>23.893</td>
<td>2.900</td>
</tr>
<tr>
<td>OCD</td>
<td>22.564</td>
<td>3.515</td>
</tr>
<tr>
<td>LL</td>
<td>24.870</td>
<td>3.274</td>
</tr>
<tr>
<td><strong>Independent Study</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>21.988</td>
<td>3.107</td>
</tr>
<tr>
<td>OCD</td>
<td>19.513</td>
<td>2.855</td>
</tr>
<tr>
<td>LL</td>
<td>22.093</td>
<td>3.098</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>22.762</td>
<td>3.149</td>
</tr>
<tr>
<td>OCD</td>
<td>20.744</td>
<td>3.408</td>
</tr>
<tr>
<td>LL</td>
<td>22.352</td>
<td>3.048</td>
</tr>
<tr>
<td>Program</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Academic, Scholarly, Intellectual</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>4.964</td>
<td>1.265</td>
</tr>
<tr>
<td>OCD</td>
<td>5.641</td>
<td>1.088</td>
</tr>
<tr>
<td>LL</td>
<td>5.704</td>
<td>1.110</td>
</tr>
<tr>
<td><strong>Esthetic, Expressive, Creative</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>4.214</td>
<td>1.529</td>
</tr>
<tr>
<td>OCD</td>
<td>4.949</td>
<td>1.317</td>
</tr>
<tr>
<td>LL</td>
<td>6.204</td>
<td>.919</td>
</tr>
<tr>
<td><strong>Critical, Evaluative, Analytical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>4.798</td>
<td>1.511</td>
</tr>
<tr>
<td>OCD</td>
<td>5.308</td>
<td>1.151</td>
</tr>
<tr>
<td>LL</td>
<td>5.693</td>
<td>1.353</td>
</tr>
<tr>
<td><strong>Vocational and Occupational</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>4.417</td>
<td>1.499</td>
</tr>
<tr>
<td>OCD</td>
<td>5.051</td>
<td>1.683</td>
</tr>
<tr>
<td>LL</td>
<td>4.889</td>
<td>1.423</td>
</tr>
<tr>
<td><strong>Students, Student Groups, and Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>4.376</td>
<td>1.606</td>
</tr>
<tr>
<td>OCD</td>
<td>5.667</td>
<td>.982</td>
</tr>
<tr>
<td>LL</td>
<td>5.796</td>
<td>1.250</td>
</tr>
<tr>
<td><strong>Faculty Members</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>5.393</td>
<td>1.299</td>
</tr>
<tr>
<td>OCD</td>
<td>6.077</td>
<td>.900</td>
</tr>
<tr>
<td>LL</td>
<td>6.389</td>
<td>.998</td>
</tr>
<tr>
<td><strong>Administrative Offices and Officials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>3.452</td>
<td>1.820</td>
</tr>
<tr>
<td>OCD</td>
<td>5.359</td>
<td>1.513</td>
</tr>
<tr>
<td>LL</td>
<td>5.611</td>
<td>1.309</td>
</tr>
<tr>
<td><strong>Operation as an Organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>3.369</td>
<td>1.503</td>
</tr>
<tr>
<td>OCD</td>
<td>5.333</td>
<td>1.199</td>
</tr>
<tr>
<td>LL</td>
<td>5.907</td>
<td>1.321</td>
</tr>
</tbody>
</table>
H1a: The mean scores of adult students' preparatory educational orientations will be statistically significantly higher in the T program than in the OCD program.

H1b: The mean scores of adult students' preparatory educational orientations will be statistically significantly higher in the OCD program than in the LL program.

These hypotheses predict directional differences among adult students' mean preparatory educational orientation scores according to the type of liberal arts baccalaureate program in which they were participants. It was expected that statistical comparison of adult student preparatory mean scores would reveal significant high to low differences. The highest mean score was expected from adult students in the T program, followed by adult students in the OCD and LL programs, respectively.

The mean group preparatory scores for adult respondents from each program were computed by dividing the sum of the group scores on the achievement, assignment learning, and assessment scales by the number of scores. A one-way analysis of variance was performed for the mean preparatory scores of the adult student sample from the respective programs. Although statistically significant differences occurred, the F ratio does not specify which of the three sample preparatory means differ significantly from one another. The result of the one-way analysis of variance is shown in Table 7.

Comparison of a priori high to low preparatory orientation program ordering with the computed high to low ordering of the mean preparatory scores indicated that only the OCD and LL programs
achieved the ordering hypothesized. The T program did not. Thus $H_{1a}$

**TABLE 7**

**ANALYSIS OF VARIANCE OF THE THREE
SAMPLE MEAN PREPARATORY GROUP SCORES**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>198.0324</td>
<td>99.0162</td>
<td>15.010*</td>
<td>.0000</td>
</tr>
<tr>
<td>Within groups</td>
<td>174</td>
<td>1147.8546</td>
<td>6.5969</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>1345.8870</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .0001$

was rejected and $H_{1b}$ was tested for significant mean differences. Table 8 presents the predicted program ordering and computed mean preparatory score ordering of adult respondents at the three programs. To determine whether the difference between the OCD program and the LL program was statistically significant, a t-test was performed on the respective preparatory means. The computed t-ratio of 1.14 was compared with the difference of 2.69 between the OCD and LL preparatory sample group mean scores. The difference was greater than the computed t-ratio at the .05 level of confidence.
TABLE 8

COMPARISON OF THE HYPOTHESED HIGH TO LOW PROGRAM ORDERING
AND COMPUTED MEAN SCORE ORDERING FOR
PREPARATORY EDUCATIONAL ORIENTATIONS BY PROGRAM

<table>
<thead>
<tr>
<th>Hypothesized Program Ordering</th>
<th>Computed Program Ordering</th>
<th>Prep. X's</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>OCD</td>
<td>22.89</td>
</tr>
<tr>
<td>OCD</td>
<td>T</td>
<td>20.45</td>
</tr>
<tr>
<td>LL</td>
<td>LL</td>
<td>20.20</td>
</tr>
</tbody>
</table>

*the computed sample mean preparatory score at the T program did not result in the order hypothesized.

Therefore, the preparatory means of adult students in the OCD and LL programs differed significantly from one another in the direction hypothesized and H₁b was retained. The result of the t-test is presented in Table 9.

TABLE 9

MEAN SAMPLE PREPARATORY GROUP SCORES ACCOUNTING FOR
SIGNIFICANT DIFFERENCE DETERMINED BY T-TEST

<table>
<thead>
<tr>
<th>Program</th>
<th>Preparatory Xs</th>
<th>Program Differences (Subtracted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCD</td>
<td>22.89</td>
<td>2.69*</td>
</tr>
<tr>
<td>LL</td>
<td>20.20</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
Discussion

$H_{1a}$ stated that the mean preparatory educational orientation score of adult respondents in the T program would be significantly higher than that of adult respondents in the OCD program. $H_{1a}$ was rejected because the results revealed the mean preparatory score of OCD respondents was higher than that of the T program respondents. This result may be ascribed to the OCD program's consistent emphasis and environmental reinforcement of practical adult delivery service modes of operation. It is possible that the OCD program's flexible class schedule structure, decentralized administrative organization, and relatively liberal admissions and residency requirements reinforce a practical education orientation among its adult participants. Contrastingly, the T program's comparatively rigid class schedule structure, centralized administrative organization, and relatively stringent admissions and residency requirements may not reinforce a distinct educational orientation among its participants.

$H_{1b}$ was retained. Although many of the delivery services of the LL and OCD programs are similar, the express philosophy of the LL program emphasizes two objectives: academic accomplishment and developmental growth. The latter component, actuated through the required Life Planning Seminars and counseling and instructional activities, contrasts with the OCD program's central focus: the development of a practical program delivery service approach which facilitates the academic accomplishment of adults. Perhaps this
academic focus reinforces OCD program adult students' preparatory orientation.

Hypotheses 2a;2b

$H_{2a}$: The mean scores of adult students' exploratory educational orientations will be statistically significantly higher in the LL program than in the OCD program.

$H_{2b}$: The mean scores of adult students' exploratory educational orientations will be statistically significantly higher in the OCD program than in the T program.

These hypotheses predict directional differences among adult students' mean exploratory educational orientation scores according to the type of liberal arts baccalaureate program in which they were participants. It was expected that statistical comparison of adult student exploratory mean scores would reveal significant high to low differences. The highest mean score was expected from adult students in the LL program, followed by adult students in the OCD and T programs, respectively.

The mean group exploratory scores for adult respondents from each program were computed by dividing the sum of the group scores on the inquiry, independent study, and interaction scales by the number of scores. A one-way analysis of variance was performed for the mean preparatory scores of the adult student sample from the respective programs. Although statistically significant differences occurred, the F ratio does not specify which of the three sample exploratory
means differ significantly from the others. The result of the one-way analysis of variance is shown in Table 10.

### TABLE 10

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>126.7584</td>
<td>63.3792</td>
<td>11.280*</td>
<td>.0000</td>
</tr>
<tr>
<td>Within groups</td>
<td>174</td>
<td>977.6308</td>
<td>5.6186</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>1104.3892</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .0001

Comparison of the *a priori* high to low exploratory orientation program ordering with the computed high to low ordering of the mean exploratory scores indicated that only the LL and OCD programs achieved the ordering hypothesized. The T program did not. Thus, $H_{2b}$ was rejected and $H_{2a}$ was tested for significant mean differences. Table 11 presents the predicted program order and computed mean exploratory score ordering of adult respondents at the three programs.

To determine whether the variance between the LL exploratory sample mean and the OCD exploratory sample mean was statistically significant, a t-test was performed on the respective exploratory mean scores. The computed t-ratio of .89 was compared with the difference of 2.16 between the LL and OCD exploratory sample group
TABLE 11

COMPARISON OF THE HYPOTHESES HIGH TO LOW PROGRAM ORDERING AND COMPUTED MEAN SCORE ORDERING FOR EXPLORATORY EDUCATIONAL ORIENTATIONS BY PROGRAM

<table>
<thead>
<tr>
<th>Hypothesized Program Ordering</th>
<th>Computed Program Ordering</th>
<th>Expl. $\bar{X}$'s</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL</td>
<td>LL</td>
<td>23.10</td>
</tr>
<tr>
<td>OCD</td>
<td>$T^a$</td>
<td>22.88</td>
</tr>
<tr>
<td>$T$</td>
<td>OCD</td>
<td>20.94</td>
</tr>
</tbody>
</table>

$^a$The computed sample mean exploratory score at the $T$ program did not result in the order hypothesized.

mean scores. The difference was greater than the computed t-ratio at the .05 level of confidence. Therefore, the exploratory means of adult students in the LL and OCD programs differed significantly from one another in the direction hypothesized and $H_2a$ was retained. The result of the t-test is presented in Table 12.

TABLE 12

MEAN SAMPLE EXPLORATORY GROUP SCORES ACCOUNTING FOR SIGNIFICANT DIFFERENCE DETERMINED BY T-TEST

<table>
<thead>
<tr>
<th>Program</th>
<th>Exploratory $\bar{X}$'s</th>
<th>Program Differences (Subtracted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL</td>
<td>23.10</td>
<td></td>
</tr>
<tr>
<td>OCD</td>
<td>20.94</td>
<td>2.16*</td>
</tr>
</tbody>
</table>

*p < .05
Discussion

$H_{2a}$ was retained because the mean educational orientation score of adult respondents in the LL program was significantly higher than that of adult respondents in the OCD program. This result is consistent with the developmental philosophy expressed in the literature of the LL program. Contrastingly, the OCD program literature emphasizes a program philosophy oriented to the practical needs of the working adult population.

$H_{2b}$ was rejected because the exploratory mean score of T program respondents did not meet the order hypothesized. Two possible interpretations for the rejection of $H_{2b}$ are:

1. The T program does not attract adult students with an exploratory orientation because its program philosophy and environmental characteristics may not attract adult students who have an exploratory educational orientation.

2. The T program environment is designed to serve a heterogeneous mix of adult students. The diversity of T program clientele, and delivery service format may not lend themself to the reinforcement of an exploratory educational orientation among its participants.

Hypotheses 3a;3b

$H_{3a}$: The mean scores of adult students' educational relationship perceptions will be statistically significantly higher in the LL program than in the OCD program.
H₃b: The mean scores of adult students' educational relationship perceptions will be statistically significantly higher in the OCD program than in the T program.

These hypotheses predict directional differences among adult students' mean educational relationship perceptions according to the type of liberal arts baccalaureate program in which they were participants. It was expected that statistical comparison of adult student educational relationship mean scores would reveal significant high to low differences. The highest mean score was expected from adult students in the LL program followed by adult students in the OCD and T programs, respectively.

The mean group educational relationship scores for adult respondents from each program were computed by dividing the sum of the group scores on the three scales which measure a college student's relationship with other students, student groups, activities, faculty members, and administrative offices and officials by the number of scores. A one-way analysis of variance was performed for the mean educational relationship perception scores of the adult student sample from the respective programs. Although statistically significant differences occurred, the F ratio does not specify which of the three sample educational relationship perception means differ significantly from the others. The result of the one-way analysis of variance is shown in Table 13.

Comparison of the a priori high to low educational relationship perception program ordering with the computed high to low ordering
TABLE 13

ANALYSIS OF VARIANCE OF THE THREE SAMPLE MEAN EDUCATIONAL RELATIONSHIP PERCEPTION GROUP SCORES

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>67.7648</td>
<td>33.8824</td>
<td>34.710*</td>
<td>.0000</td>
</tr>
<tr>
<td>Within groups</td>
<td>174</td>
<td>169.8523</td>
<td>.9762</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>237.6171</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .0001

of the mean educational relationship perception scores indicated that the three programs achieved the ordering hypothesized. Table 14 presents the predicted program order and computed mean educational relationship score ordering of adult respondents at the three programs.

TABLE 14

COMPARISON OF THE HYPOTHESIZED HIGH TO LOW PROGRAM ORDERING AND COMPUTED MEAN SCORE ORDERING FOR EDUCATIONAL RELATIONSHIP PERCEPTIONS BY PROGRAM

<table>
<thead>
<tr>
<th>Hypothesized Program Ordering</th>
<th>Computed Program Ordering</th>
<th>ERP X'sa</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL</td>
<td>LL</td>
<td>5.93</td>
</tr>
<tr>
<td>OCD</td>
<td>OCD</td>
<td>5.70</td>
</tr>
<tr>
<td>T</td>
<td>T</td>
<td>4.61</td>
</tr>
</tbody>
</table>

aEducational Relationship Perceptions. Sample means.
To determine whether the variance between ordered pairs of educational relationship perception sample means of the three programs were statistically significant, a multiple range test was performed on the respective exploratory mean scores. The computed multiple range value of .37 was compared with the mean difference of 2.3 between the LL and OCD educational relationship perception sample group mean scores. The difference was less than the computed multiple range value. Therefore, there was no significant difference at the .05 level of confidence between the mean educational relationship scores of adults in the LL and OCD programs. This required the rejection of hypothesis H3a. However, the difference of 1.09 between the OCD and T program educational relationship mean scores was greater than the computed multiple range value. Therefore, a significant difference was found at the .05 level of confidence between the mean educational relationship perception scores of adult students in the OCD and T programs, and H3b was retained. The results of the multiple range test are presented in Table 15.

TABLE 15

<table>
<thead>
<tr>
<th>Program</th>
<th>Educational Relationship Perception X's</th>
<th>Program Differences (Subtracted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL</td>
<td>5.93</td>
<td>.23</td>
</tr>
<tr>
<td>OCD</td>
<td>5.70</td>
<td>1.09*</td>
</tr>
<tr>
<td>T</td>
<td>4.61</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
Discussion

H₃a was rejected because multiple range test results revealed that LL program respondents' mean educational relationship score was not significantly higher than that of OCD respondents. Since no statistically significant difference was found to exist, a possible explanation may be that even though the OCD and LL programs have differing objectives, their philosophies and delivery services are focused on the adult student and, thus, are perceived by adult participants as part of an educational relationship environment conducive to their needs.

H₃b was retained because the educational relationship perception score of adult respondents in the OCD program was significantly higher than that of adult respondents in the T program. It appears that the OCD program, which focuses its philosophy and delivery services exclusively toward adult students, creates an educational relationship environment that is perceived more favorably than the T program, which does not focus its philosophy or delivery services on adult students.

Analyses of Selected Demographic Variables

Further one-way analyses of variance tests were performed for the preparatory orientation, exploratory orientation, and educational relationship perception scales in an attempt to explore comparisons among selected demographic characteristics of adult respondents. A review of the literature on adult learning, and an analysis of the
datum indicated further test of significance on selected demographic variables might yield significant differences for the preparatory educational typology, exploratory educational typology, or the college environment educational relationship perceptions of adult students at the three programs. The demographic variables tested were: age group, number of years of full-time employment experience, and sex.

Age Group Analyses of Adult Students' Preparatory Orientations, Exploratory Orientations, and Educational Relationship Mean Scores

The adult age group divisions used in these analyses were derived from Gould's (1978) adult life stage research. The age groups used in this study were: 22-28, 29-35, 36-42, 43-49, and 50 and over. These stages represent distinct psychological transitions in the adult developmental process (Gould). One-way analyses of variance tests were computed for the preparatory orientation, exploratory orientation, and educational relationship perception mean scores for the combined sample of adult students. In only one instance, the educational relationship perception scale, were statistically significant differences found to exist. The computed F-values and levels of significance are summarized in Table 16.

Multiple range analysis of the ordered mean educational relationship perception scores indicated that the mean scores of adult students in the two younger adult age groups differed significantly at the .05 level. The youngest adult age group, those 22-28 years of
age, achieved the second lowest mean score of 5.0455, and the largest mean difference of .6898. This was greater than the multiple range

TABLE 16

F-RATIOS AND LEVELS OF SIGNIFICANCE FOR PREPATATORY ORIENTATION, EXPLORATORY ORIENTATION, AND EDUCATIONAL RELATIONSHIP PERCEPTION MEAN SCORES FOR ADULT RESPONDENTS BY AGE GROUPS

<table>
<thead>
<tr>
<th>Scale</th>
<th>F Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory</td>
<td>1.710</td>
<td>.1348</td>
</tr>
<tr>
<td>Exploratory</td>
<td>.814</td>
<td>.5224</td>
</tr>
<tr>
<td>Relationship</td>
<td>13.249*</td>
<td>.0000</td>
</tr>
</tbody>
</table>

*p < .0001

The 29-35-year-old age group had the lowest educational relationship perception mean score of 4.5517, and a mean difference of .4948. This was greater than the computed multiple range value of .2086 and statistically significant at the .05 level. Interestingly, the three oldest age groups achieved the highest educational relationship mean scores, and no statistically significant difference at the .05 level was found between them. Table 17 presents the results of Duncan's Multiple Range Test.

The data suggest that the two youngest adult age groups perceive their peers, the faculty, and administration as less supportive than do adults of the three older age groups. Since 65.5%, or 78 of 119 adult students from the two youngest age groups, attended the T program, a one-way analysis of variance was performed to determine if
a statistically significant difference in educational relationship perceptions existed when adult students' intra-program mean scores were tested according to age groups. No statistically significant difference was found at the $p < .05$ level. This finding suggests that perhaps differences related to age rather than differences in the nature of the respective programs may attribute to the lower mean educational relationship perception scores of the 22-28 and 22-35 year old age groups. Table 18 presents the F-ratios and levels of significance.

TABLE 17

MULTIPLE RANGE TEST FOR ADULT RESPONDENT AGE GROUP EDUCATIONAL RELATIONSHIP PERCEPTION MEAN SCORES

<table>
<thead>
<tr>
<th>Age Group</th>
<th>ERP $\bar{X}$'s$^a$</th>
<th>Differences (Subtracted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 and over</td>
<td>5.8696</td>
<td>0.0220</td>
</tr>
<tr>
<td>43 - 49</td>
<td>5.8476</td>
<td>0.1123</td>
</tr>
<tr>
<td>36 - 42</td>
<td>5.7353</td>
<td>0.6898*</td>
</tr>
<tr>
<td>22 - 28</td>
<td>5.0455</td>
<td>0.4948*</td>
</tr>
<tr>
<td>29 - 35</td>
<td>4.5517</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

$^a$Educational relationship perception sample means.

Discussion

Additional analysis tested adult respondents from the five age groups to determine if significant differences existed for either the preparatory orientation, exploratory orientation, or educational
relationship mean scores. No significant age group difference was found for the preparatory or exploratory educational orientation mean scores.

However, significant age group differences were found for the educational relationship mean scores of adult respondents. The two youngest age groups of adults (22-28 and 29-35 years of age), perceived the college environment as significantly less supportive and less open than adults in the 36-42 year old age group. No significant college environment relationship perception differences were found between adult students in the three older age groups (36-42, 43-49, and 50 years of age and older).

TABLE 18

<table>
<thead>
<tr>
<th>Program</th>
<th>ERP a</th>
<th>F Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>ERP</td>
<td>1.196</td>
<td>.3198</td>
</tr>
<tr>
<td>OCD</td>
<td>ERP</td>
<td>1.583</td>
<td>.2012</td>
</tr>
<tr>
<td>LL</td>
<td>ERP</td>
<td>2.417</td>
<td>.0773</td>
</tr>
</tbody>
</table>

*Educational Relationship Perception

Analyses of Adult Student Preparatory Orientations, Exploratory Orientations, and Educational Relationship Perceptions by Length of Full-Time Employment Experience

One-way analyses of variance were performed for the preparatory orientations, exploratory orientations, and educational relationship
perceptions of adult respondents to determine if there were statistically significant differences in mean scores according to the number of years of previous full-time employment experience. Three employment experience age groups were used: 1-5, 6-11, and 11 and over. Only the educational relationship perception mean scores resulted in a significant difference. The computed F-ratios and their level of significance are summarized in Table 19.

TABLE 19

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory</td>
<td>1.139</td>
<td>.3229</td>
</tr>
<tr>
<td>Exploratory</td>
<td>.507</td>
<td>.6036</td>
</tr>
<tr>
<td>Relationship</td>
<td>8.443*</td>
<td>.0003</td>
</tr>
</tbody>
</table>

*P < .05

A multiple range test was conducted to determine which of the educational relationship perception mean scores of the three employment experience groups accounted for the significant F-ratio. Table 20 summarizes the multiple range test results.

The computed multiple range value of .2513 was significantly less than the mean score difference between adult students with 6-10 years of full-time employment experience and adults with 1-5 years
of full-time employment experience. This result suggests that the mean score of adult students with 1-5 years of full-time employment experience was significantly lower at the .05 level than adult students with 6 to 10 years of full-time employment experience. No significant difference was found between the two age groups (6 - 10 and 11 years and older) with more full-time employment experience.

TABLE 20

MULTIPLE RANGE TEST OF ORDERED MEAN SCORES FOR EMPLOYMENT EXPERIENCE AGE GROUPS

<table>
<thead>
<tr>
<th>Number of Years Full-Time Employment Experience</th>
<th>Educational Relationship Perception X's</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years and over</td>
<td>5.7519</td>
<td>.0257</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>5.7262</td>
<td>.7304*</td>
</tr>
<tr>
<td>1 - 5 years</td>
<td>4.9958</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

Discussion

Additional analysis tested adult respondents according to length of full time employment experience to determine if significant differences existed for either the preparatory orientation,
exploratory orientation, or educational relationships mean scores. No significant difference was found for the preparatory and exploratory educational orientation mean scores.

However, adults with less full-time employment experience (1-5 years) perceived the educational relationship perceptions of the college environment as significantly less supportive and open than adults with six to ten years of full-time employment experience. No significant difference was found between adults with six to ten years and eleven or more years of full-time employment experience.

**Analyses of Adult Student Preparatory Orientations, Exploratory Orientations, and Educational Relationship Perceptions by Sex**

One-way analyses of variance were performed for the preparatory orientations, exploratory orientations, and educational relationship perceptions of adult respondents to determine if there were statistically significant differences in mean scores according to respondents' sex. Only the educational relationship perceptions resulted in a significant difference. The mean score for females of 5.4560 was statistically significantly higher than the 4.8440 educational relationship perception mean scores for males at the .0017 level. This indicates that females, who comprised 72.7% of the adult student sample, perceived the college environment as significantly more supportive, encouraging, and considerate than the male respondents. Table 21 presents a summary of the one-way analysis of variance.
Discussion

Additional analysis tested adult respondents according to sex to determine if significant differences existed for either preparatory orientation, exploratory orientation, or educational relationship mean scores. No significant difference was found for the preparatory or exploratory mean scores. However, adult females perceived the educational relationship environment as significantly more supportive and open than adult males.

TABLE 21

<table>
<thead>
<tr>
<th>Sex</th>
<th>ERP $\bar{x}$'s</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.8440</td>
<td>10.911*</td>
<td>.0017</td>
</tr>
<tr>
<td>Female</td>
<td>5.4560</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In testing Hypotheses 4, 5, 6, and 7, selected educational orientation measures were matched with selected environmental perception measures. Some of the SOS and CSEEP scales were not analogous. However, based on a review of the literature and a comparison of the instrument scales, it was thought that selected educational orientation characteristics might be roughly associated
with some of the environmental perception scales. These scales were matched in hypotheses four through seven.

\( H_4 \): There is a direct (positive) relationship between adult student achievement orientation and academic-scholarly-intellectual perceptions of the college environment in the three programs.

It was expected that positive coefficients of correlation ("r") would be achieved by adult students at the three programs when achievement orientation was matched with academic-scholarly-intellectual environmental perceptions of adult students at the three programs. Adult students in the OCD liberal studies program achieved a moderate correlation coefficient of .4050 at the .005 level of significance. This indicated a substantial positive relationship between the matched sets of scores. Liberal arts adult students at the T program achieved a positive correlation coefficient of .2807 at the .005 level of significance. This indicates a definite, but small relationship between the matched sets of scores. Although T and OCD program respondents achieved a significant positive correlation coefficient, adult students in the LL program did not. Therefore, the fourth hypothesis was rejected. The correlation coefficients and their levels of significance are summarized in Table 22.
TABLE 22

CORRELATION COEFFICIENTS AND LEVELS OF SIGNIFICANCE OF ADULT STUDENTS' ACHIEVEMENT ORIENTATION AND ACADEMIC-SCHOLARLY-INTELLECTUAL PERCEPTIONS OF THE COLLEGE ENVIRONMENT BY PROGRAM

<table>
<thead>
<tr>
<th>Program</th>
<th>Correlation Coefficient (r)</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>+ .2807</td>
<td>.005*</td>
</tr>
<tr>
<td>OCD</td>
<td>+ .4054</td>
<td>.005*</td>
</tr>
<tr>
<td>LL</td>
<td>- .0408</td>
<td>.385</td>
</tr>
</tbody>
</table>

*Significant at the $p < .005$ level.

Discussion

$H_4$ was rejected because of the three programs; T, OCD, and LL, only adult respondents in the T and OCD identified a significant positive correlation when achievement orientation was matched with adult students' academic-scholarly-intellectual perceptions of the college environment. This result implies that T and OCD adult participants' preference for accomplishing specific goals is positively related to their perceptions of the academic-scholarly-intellectual environment. Contrastingly, LL program participants, who show a dominant exploratory educational orientation, do not perceive an emphasis in their college environment on academic-scholarly-intellectual activities.

$H_5$: There is a direct (positive) relationship between adult student inquiry orientation and academic-scholarly-intellectual environmental perceptions in the three programs.
It was expected that positive coefficients of correlation would be achieved by adult students in the three programs when inquiry orientation was matched with academic-scholarly-intellectual environmental perceptions. Adult students in the LL program achieved a small, but significant positive correlation coefficient; however, adult respondents at the OCD and T programs did not. Since adult respondents in only one of the three programs achieved the predicted significant positive correlation coefficient, Hypotheses H5 was rejected. The correlation coefficients and their levels of significance are summarized in Table 23.

**TABLE 23**

<table>
<thead>
<tr>
<th>Program</th>
<th>Correlation Coefficient (r)</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>-.0897</td>
<td>.209</td>
</tr>
<tr>
<td>OCD</td>
<td>.1300</td>
<td>.215</td>
</tr>
<tr>
<td>LL</td>
<td>.2697</td>
<td>.024*</td>
</tr>
</tbody>
</table>

* p < .024

Discussion

H5 was rejected because of the three programs; T, OCD, and LL, only the LL program adult respondents identified a significant positive correlation when the educational orientation scale scores which identify a student's desire to learn for the sake of learning
(inquiry orientation) were matched with their academic-scholarly-intellectual perceptions of the educational environment. This result is consistent with the exploratory educational orientation of adult participants in the LL program. It implies that adult students with a relatively strong exploratory educational orientation perceive the academic-scholarly-intellectual environment of the LL program as positively related to their desire to learn for the sake of learning.

H6: There is a direct (positive) relationship between adult student interaction orientation and student, faculty, and administrative environmental relationship perceptions in the three programs.

It was expected that positive coefficient correlations would be achieved by adult students in the three programs when interaction orientation was matched with the academic, scholarly, and intellectual environmental perceptions of adult students in the three programs. As the data in Table 24 indicates, the only significant positive correlation coefficient was achieved by T program adult students interaction orientation with student relationships perceptions. This result was a low correlation coefficient of .2157 at the .024 level of significance. Since adult students in the OCD and LL programs did not achieve significant positive correlation coefficients for the hypothesized matched sets of scores, Hypothesis 6 was rejected.
Discussion

$H_6$ was rejected because only T program adult respondents identified a significant positive correlation when the educational orientation scale scores, which identify a students preference for an equalitarian relationship with faculty (interaction orientation), were matched with their perception of relationship with faculty. No significant positive correlation was found for adult respondents in the three programs when interaction orientation was matched with perceptions of relationships with students or administration. Considering the relatively low administrative environmental perception mean score of T program participants, it may be that T

| TABLE 24 |

<table>
<thead>
<tr>
<th>Program</th>
<th>Variable</th>
<th>Correlation Coefficient (r)</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>INT or W/St RLT</td>
<td>.2156</td>
<td>.024*</td>
</tr>
<tr>
<td>T</td>
<td>INT or W/Fac RLT</td>
<td>-.1536</td>
<td>.082</td>
</tr>
<tr>
<td>T</td>
<td>INT or W/AdmRLT</td>
<td>-.3026</td>
<td>.003*a</td>
</tr>
<tr>
<td>OCD</td>
<td>INT or W/StRLT</td>
<td>-.1598</td>
<td>.166</td>
</tr>
<tr>
<td>OCD</td>
<td>INT or W/FacRLT</td>
<td>-.4653</td>
<td>.001*b</td>
</tr>
<tr>
<td>OCD</td>
<td>INT or W/AdmRLT</td>
<td>-.0531</td>
<td>.374</td>
</tr>
<tr>
<td>LL</td>
<td>INT or W/St RLT</td>
<td>-.0452</td>
<td>.373</td>
</tr>
<tr>
<td>LL</td>
<td>INT or W/FacRLT</td>
<td>.0534</td>
<td>.351</td>
</tr>
<tr>
<td>LL</td>
<td>INT or W/AdmRLT</td>
<td>.1437</td>
<td>.150</td>
</tr>
</tbody>
</table>

*p < .024

aThe r was statistically significant, but not in the direction hypothesized.

bThe r was statistically significant, but not in the direction hypothesized.
program respondents' higher mean score for the variable perception of relationships with students was an important factor contributing to this positive relationship.

H7: There is a direct (positive) relationship between adult student independent study orientations and academic-scholarly-intellectual environmental perceptions in the three programs.

It was expected that positive coefficients of correlation would be achieved by adult students in the three programs when independent study orientation was matched with academic-scholarly-intellectual environmental perceptions. Adult students at the LL program achieved a positive correlation coefficient of .2552 at the .031 level of significance. No statistically significant correlation at the .05 level was found for the T and OCD program adult students. Since the hypothesized correlation was only achieved at the LL program, and not achieved at the T and OCD programs, H7 was rejected. The correlation coefficient and the level of significance are summarized in Table 25.

**TABLE 25**

<table>
<thead>
<tr>
<th>Program</th>
<th>Correlation Coefficient (r)</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>-.1534</td>
<td>.082</td>
</tr>
<tr>
<td>OCD</td>
<td>.1964</td>
<td>.115</td>
</tr>
<tr>
<td>LL</td>
<td>.2552</td>
<td>.031*</td>
</tr>
</tbody>
</table>

*p < .031*
Discussion

H7 was rejected because of the three programs; T, OCD, and LL, only adult respondents in the LL program identified a significant positive correlation between the matched sets of scores. This result is consistent with the exploratory educational orientation of adult participants. It implies that adult students with a relatively strong exploratory educational orientation perceive the academic-scholarly-intelectual environment of the LL program as positively related to their preference for informal, unstructured courses.

Conceptual Model of Selected Program Delivery Services, Requirements, and SOS and CSE Environmental Perception Results of Adult Student Respondents

The conceptual model presented in Figure 4 was developed to summarize, clarify, and compare selected data gathered from this study. The three components of the model represent:

1. A compilation of major program delivery services and requirements common to one or more of the three programs of the study (See Appendix A for a narrative summary of each program),

2. The dominant education orientation typological classification for each program, based on responses to the SOS, and

3. The mean sample college environmental perception scores for each program, based on responses to the CSE Environmental Perception inventory.

A comparison of the selected delivery service modes of operation presented in Figure 4 indicates there are as many categories in which
Figure 4. A Conceptual Model of T, OCD, and LL Programs: Selected Delivery Service Modes of Operation; Dominant Adult Student Educational Orientation Typology; and Sample Mean College Environmental Perceptions.
the programs are similar as there are categories of differences. Similar instructional alternatives and assessment and evaluation procedures exist in each program. Differences in selected delivery service modes of operation exist in the five categories of: class scheduling, administrative organizational style, program philosophy, admissions requirements, and residency requirements. In all but two instances, where differences do exist (admissions requirements), it is the T program which differs from the OCD and LL programs.

Three educational orientation typological preferences were found to characterize adult students in the three programs. Adult students in the T program were found to be relatively undifferentiated. They did not indicate a strong preference for either a preparatory or exploratory educational orientation preference. LL adult respondents were found to have a relatively exploratory educational orientation preference.

The eight adult student CSEEP mean scale scores for respondents in the LL and OCD program were comparatively higher than those of adult students in the T program. This was particularly apparent on the scales which identify the mean scores for relationships with administrative officers and officials and general style of operation as an organization. It may be that the low mean scores of T program respondents on these two scales is related to the centralized administrative and organization style found only in the T program.
Summary

The preparatory and exploratory educational orientation scales of the SOS were found to discriminate between adult respondents in two of the three programs. As hypothesized, adult students in the OCD program had a significantly higher mean preparatory orientation score than adults in the LL program. Adult students in the T program did not achieve the order hypothesized.

As hypothesized, adult students in the LL program achieved a significantly higher mean exploratory orientation score than adults in the OCD program. Again, adult students did not achieve the order hypothesized. Thus, the preparatory and exploratory orientations of adults differed as hypothesized for two of the three programs of this study; the OCD and LL programs.

As hypothesized, the educational relationship perception mean scores of the CSE were found to discriminate significantly between adult respondents in the OCD and T programs. The ordered mean educational relationship perception score of adult students in the LL program was not significantly higher than the educational relationship perception score for adults in the OCD program. Analyses of selected demographic characteristics revealed that the two youngest age groups of adults (22-28 and 29-35 years of age) perceived the college environment as significantly less supportive and open than adults in the 36-42 year old age group. No significant difference was found between the 36-42, 43-49, and 50 years of age and older groups. Likewise, adults with less full-time employment experience
(1-5 years) perceived the college environment as significantly less supportive and open than adults with six to ten years of employment experience. No significant difference was found between adults with 6-10 and those with 11 or more years of full-time employment experience. Females perceived the college environment as significantly more supportive and open than males.

Adults in the T and OCD programs achieved a significant positive relationship between achievement orientation and academic-scholarly-intellectual environmental perceptions. Inquiry orientation was significantly positively related to academic-scholarly-intellectual, environmental perceptions only for adults in the LL program. T program adult students' interaction orientation was found to be significantly positively correlated to relationship perceptions of other students. Only adult students in the LL program achieved a significant positive relationship between independent study orientation and academic-scholarly-intellectual environmental perceptions.

The conceptual model of T, OCD, and LL programs summarizes and compares selected data gathered from this study. It shows that:

1. There are as many categories of delivery service modes of operation in which the programs are similar as there are categories of differences,

2. Each of the three programs have adult respondents with different educational orientation typological profile preferences, and
3. The eight mean CSEEP scale scores of adult students in the T program are relatively lower than those of adult students in the OCD and LL programs.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter V is organized into three sections: Summary, Conclusions, and Recommendations. The summary provides a brief recapitulation of the first four chapters. The conclusions section provides an interpretation of the findings and a discussion of the program implications. The chapter will conclude with a section of recommendations based on the findings of this investigation. Two types of recommendations are provided: program recommendations and recommendations for further research.

Summary

Interest in adult students' educational orientations and educational perceptions of the college environment in a period of rapidly increasing adult enrollment in higher education led to the initiation of this study. A number of innovative baccalaureate degree models largely designed to serve the interests and needs of adults have been implemented. Two of the three contrasting liberal arts baccalaureate programs selected for this study, Linfield College's Off-Campus Degree Liberal Studies program, and Marylhurst College for Lifelong Learning's Liberal Arts program, are conceptually related to two differing adult baccalaureate external degree models, Houle's (1973) Adult Degree and Assessment Degree models, respectively. The third,
Oregon State University's Liberal Arts baccalaureate program, approximates the traditional baccalaureate degree model described by Apps (1981). Adult students in all three baccalaureate programs were selected for this study.

In the last two decades most studies of adult baccalaureate students involved adults enrolled in relatively traditional baccalaureate settings. Little was done to examine adult students in "non-traditional" college or university settings.

The purpose of this study was to provide program planners, administrators, and adult educators in higher education institutions with information about the educational orientations and perceptions of the college environment of adult students in contrasting program settings. It was anticipated that this information might enhance the effectiveness of program planners, administrators, and adult educators as facilitators of adult baccalaureate students' educational experience.

Design of the Research

Adult students from Oregon State University's Liberal Arts Program (T), Marylhurst College for Lifelong Learning's Liberal Arts Program (LL), and Linfield College's Off-Campus Liberal Studies Program (OCD) were included in the sample. For the purpose of this investigation, adult students were defined as individuals 22 years of age and older, enrolled Spring Term of 1982 as full- or part-time...
baccalaureate degree candidates at one of the three institutions of this study.

Three data collection instruments were combined to form the Adult Learner Survey. Form E of the Student Orientations Survey (SOS) was used to identify adult students' educational orientations. The Environmental Perception scales of the College Student Experiences questionnaire (CSE) were used to assess adult students' perceptions of the college environment. A demographic questionnaire designed specifically for this study was used to elicit descriptive data about the students.

Objectives of the Study

The specific objectives of this investigation were:

1. To identify the educational orientations of adult students in three contrasting liberal arts baccalaureate programs: T, OCD, and LL.

2. To identify college environmental perceptions of adult students in the three contrasting liberal arts baccalaureate programs.

3. To determine if significant differences existed in adult students' preparatory and exploratory educational orientations in the three contrasting liberal arts baccalaureate programs.

4. To determine if significant differences existed in adult students' educational relationship perceptions in the three contrasting liberal arts baccalaureate programs.

5. To determine if positive relationships existed between selected educational orientations and college environmental perceptions of adult students in the three contrasting liberal arts baccalaureate programs.
Hypotheses of the Study

To meet the purpose of this investigation the following research hypotheses were tested:

$H_{1a}$: The mean score of adult students' preparatory educational orientations will be statistically significantly higher in the T program than in the OCD program.

$H_{1b}$: The mean score of adult students' preparatory educational orientations will be statistically significantly higher in the OCD program than in the LL program.

$H_{2a}$: The mean score of adult students' exploratory educational orientations will be statistically significantly higher in the LL program than in the OCD program.

$H_{2b}$: The mean score of adult students' exploratory educational orientations will be statistically significantly higher in the OCD program than in the T program.

$H_{3a}$: The mean score of adult students' educational relationship perceptions will be statistically higher in the LL program than in the OCD program.

$H_{3b}$: The mean score of adult students' educational relationship perceptions will be statistically significantly higher in the OCD program than in the T program.

$H_{4}$: There is a direct (positive) relationship between adult students' achievement orientations and academic-scholarly-intellectual environmental perceptions in the three programs.

$H_{5}$: There is a direct (positive) relationship between adult students' inquiry orientations and academic-scholarly-intellectual environmental perceptions in the three programs.
H6: There is a direct (positive) relationship between adult students' interaction orientations and student faculty, and administrative environmental relationship perceptions in the three programs.

H7: There is a direct (positive) relationship between adult students' independent study orientations and academic-scholarly-intellectual environmental perceptions in the three programs.

Treatment of the Data

The SOS, the Environmental Perception inventory of the CSE, and a demographic questionnaire were mailed in May, 1982 to a stratified random sample of 314 adult students at the three programs of the study. Usable responses returned by the sample respondents were: T program, 84 responses for a 56% return rate; OCD program, 39 responses for a 60.7% return rate; and the LL program, 54 responses for a 54% return rate.

SOS answer sheets were scored according to the mean scoring guidelines suggested by Morstain (1976). The CSE College Environmental Perception scales also were scored by the mean scoring method. In order to provide general descriptive information about the respondents, a frequency analysis was performed for each demographic variable.

One-way Analysis of Variance, Duncan's Multiple Range Tests, and t-tests (LSD Procedure) were applied in testing the first three hypotheses and selected demographic variables. Pearson Product Moment Correlations were applied in testing the final four hypotheses.
Conclusions

The first three hypotheses addressed the differences among adult students' preparatory and exploratory educational orientations, as well as the differences in their perceptions of the educational relationship perceptions of the college environment at the three programs of the study. The remaining four hypotheses examined positive relationships between selected educational orientations and perceptions of the college environment of adult students within their respective programs. The major conclusions of this study were:

1. There was a significantly higher preparatory educational orientation mean score for adult students in the OCD program than adult students in the LL program.

2. There was a significantly higher exploratory educational orientation mean score for adult students in the LL program than adult students in the OCD program.

3. There was a significantly higher educational relationship perception mean score for adult students in the OCD program than adult students in the T program.

4. There was a significantly positive relationship between adult students' achievement educational orientation and academic-scholarly-intellectual environmental perceptions in the T and OCD programs.

5. There was a significantly positive relationship between adult students' inquiry educational orientation and academic-scholarly-intellectual environmental perceptions in the LL program.

6. There was a significantly positive educational relationship between adult students' interaction orientation and educational relationship perceptions with other students in the T program.
6. There was a significantly positive relationship (cont.) between adult students' interaction educational orientation and educational relationship perceptions with faculty in the OCD program.

7. There was a significant positive relationship between adult students' independent study educational orientation and academic-scholarly-intellectual environmental perceptions in the LL program.

Discussion of the Descriptive Findings

A review of the related literature revealed a need to examine the characteristics of adult baccalaureate degree students within a more systematic framework. This research attempted to do precisely that. A primary aim was to gain a better understanding of adult undergraduate participants' educational orientations and perceptions of the college environment at three contrasting liberal arts baccalaureate degree programs. The following discussion is presented according to the objectives as originally outlined in the research:

Objective 1. To identify the educational orientations of adult students in three contrasting liberal arts baccalaureate programs.

Adult respondent mean scores for the six SOS scales, which comprise the preparatory and exploratory educational orientation typology, are reported according to the program in Table 5, p. 94, and profiled on Figure 5. As Figure 5 indicates, sharp contrasts in profile patterns were reported by adult students in the OCD, LL, and T programs. The three scales which comprise the preparatory educational orientation: achievement, assignment learning, and
Figure 5. Plot of Means of Educational Orientations by Program

- Traditional program
- Off Campus Degree Program
- Lifelong Learning Program
assessment educational orientations, show a distinctly higher preparatory profile pattern for adult students at the OCD program than for adult students in the LL and T programs. By contrast, the three scales which comprise the exploratory educational orientation: inquiry, independent study, and interaction educational orientation, show an opposite profile pattern. Adult students in the LL and T programs achieved relatively high exploratory scale scores and adult students in the OCD program achieved distinctly lower exploratory scale scores. Adult students in the T and LL programs achieved relatively similar results, relatively low scores on the preparatory scales and high scores on the exploratory scales.

These profiles imply OCD students valued learning for practical, goal-oriented outcomes (achievement orientation) to a greater degree than for the intrinsic joy of learning as its own reward (inquiry orientation). Adults in the T and LL programs appear less concerned with the practical results of their education and expressed a dramatically higher interest in learning for its own reward than adult students in the other program. Contrasted with the results from the other educational orientation scale scores, adults in the T and LL programs have a relatively strong dislike for evaluation by those in authority (assessment orientation) and a fairly strong preference for learning for its own reward (inquiry orientation).

Contrasting patterns resulted between the assignment learning orientation and independent study orientation scales, as well as the assessment orientation and interaction orientation scales. OCD
adults expressed preference for an educational process structured and administered with regular class assignments and examinations (assignment learning orientation), while T and LL program adults seem to have preferred informal, unstructured courses in which they had the opportunity to set their own goals and standards and pursue their own interests (independent study orientation).

Interestingly, the assessment orientation scores of adults in the T and LL programs were relatively low. This intimated that adults in the T and LL programs did not place a high regard on evaluation by those in authority. However, on the contrasting scale (interaction orientation), a more positive response was provided by adults in the T and LL programs. Adults, particularly in the T program, perceived themselves as fully competent to share educational decision making with faculty. It appears that adults in all three programs were inclined to prefer the idea that they should participate with faculty in planning courses and academic programs, but were not allowed to be involved in that process to a satisfactory degree.

The descriptive profiles of adult students in the three programs appear to denote contrasting educational orientations on a number of scales. Moreover, a pattern seems to be exhibited by the scale scores that indicates OCD adults have comparatively opposite responses than T and LL program adults on most scales that constitute the preparatory and exploratory educational typology. Adults at the T program reported a relatively less differentiated profile. It
appears that either the T program philosophy, delivery service modes of operation, or the relatively heterogeneous nature of the larger university influence T program adult students to modify their educational orientation profile.

Objective 2. To identify selected college environmental perceptions of adult students in three contrasting liberal arts baccalaureate programs.

Adult respondent mean scores for the eight CSEEP scales, which comprise the College Environmental Perceptions of adult students at the three programs, are reported in Table 6, p. 95, and profiled on Figure 6, p. 139. As Figure 6 indicates, the sharpest contrasts of college environmental perceptions resulted between the relatively high profile scores of the LL program and the comparatively low perception scale ratings of the T program respondents. The scales include a wide range of college environmental perceptions and without exception, the profile pattern of adult students in the LL and OCD programs suggested that they perceived the college environmental qualities measured by the scales more favorably than adults in the T program. Similarly, with the exception of the vocational-occupational competence scale measure, the overall profile score pattern of adults in the LL programs was slightly higher than adults in the OCD program. However, the profile patterns reported reveal that the environment at both the LL program and the OCD program may be more responsive to particular adult student development needs than the environment at the T program. Although there are some policies and
Figure 6. Plot of Means of College Environmental Perceptions by Program

- Traditional program
- Off Campus Degree Program
- Lifelong Learning Program
delivery services at the OCD and LL programs that differ from one another, the adult student focus of their policies and programs are perceived more positively than at the T program.

The strikingly high perceptual profile of the LL program is consistent with the personal humanistic developmental approach expressed in the philosophy and objectives of the LL program. In contrast, the T program focuses instruction toward the improvement of skills in research, effective writing, and oral expression. Although these seem to be appropriate mediums for the development of esthetic, expressive, and creative qualities, it may be that the curricular-instructional focus is directed toward, or more sensitive to the esthetic, expressive, and creative needs of typical-age students, who represent the great majority of liberal arts undergraduates at Oregon State University. Gould (1978) suggests that the developmental stages of adults beyond 18-22 years of age frequently have a component which requires the need for individuals to question their lives, their personal worth, and their commitments. This contrasts with the dominant transitional theme of gaining independence, common to individuals 18-22 years-of-age (Gould, 1978).

As was evidenced by the educational orientation measures, the OCD program consistently enrolled adults with the highest practical orientations. Consistent with these profile scores, the OCD adults perceive the vocational-occupational competence emphasis of their program environment to be slightly higher than that of the LL and T programs. The profile homogeneity indicated by the OCD adult
participants' high practical educational orientation scores and relatively strong vocational-occupational competence perceptions of the college environment suggested a dominant pragmatic value system unique to adult students at that program.

A major objective of the LL program is to provide a developmental environment which encourages open and supportive relationships among and between students, faculty, and administrators. Evidence that this objective is being realized is indicated by the high scores obtained by adult students in the LL program on the four educational relationship scales.

The pattern of scores of adults in the OCD program closely follows the profile of the LL program. This suggests that the OCD adult students, faculty, and administrators are a composite group, mutually sensitive and responsive to the relationship needs and experiences shared in a program designed specifically for adults. This profile indicates the OCD program is responsive to adult students and offers a relationship environment which the adults value and rate highly.

The low administrative and organizational scores achieved by adult students in the T program suggest that the T program provides an environmental relationship structure which is not conducive to relationship interaction between adult students and administrators and the operational style of the college. This suggests that adult students in the T program perceive the college policies, procedures, rules, and regulations as more remote and impersonal. By contrast,
the OCD and LL programs perceive the operation and organization of their college as relatively open, flexible, adaptive, and consistent. The concept of flexibility and adaptability of administrative and organizational policy and procedure are central to the Adult Baccalaureate Degree Model and the Assessment Model (Houle, 1973) to which the OCD and LL programs are respectively related. Perhaps the administrative and organizational perception profiles of adult students at the OCD and LL external degree programs are a reflection of the success of the implemented models.

Using a general descriptive profile makes it difficult to draw conclusions about student perceptions of the environment in the T program. It is not clear whether these scores are a function of the traditional program model (Apps, 1981) employed, personal characteristics of the students, faculty or administrators within the program, or some broader perception of the total university environment which may have been projected on or by T liberal arts program adult students.

Discussion of the Findings Relative to the Hypotheses

Objective 3: To determine if significant differences existed in adult students' preparatory and exploratory orientations in three contrasting liberal arts baccalaureate programs.

Based on the statistical analyses applied to the data, the preparatory educational orientations of adult students in the OCD
program contrasted significantly with those of adult students in the LL program. The mean preparatory score of adult students in the OCD program was significantly higher than that of the adults in the LL program. This indicated that OCD adult students had more desire to acquire practical knowledge, skills, vocations, and social status than adult students in the LL program. Adult students in the T program did not achieve the order hypothesized. It was hypothesized that T program adults would report the highest preparatory educational orientation; however, they achieved a mean score between that of the OCD and LL programs. It is possible that T program adult students did not achieve the order hypothesized because the philosophy and delivery services of the T program does not emphasize, and thereby reinforce a specific orientation among its program participants. Rather, it serves a relatively diverse mix of college students who represent: typical age and older adults, different life situations, and different developmental stages. It is also possible that an important function of the other colleges at Oregon State University is to provide a practical education, and the liberal arts college thereby represents a counterpoint to this practical orientation, thus moderating the expected preparatory student orientation.

By contrast, the mean exploratory scores of the adult students in the LL program were significantly higher than those of the adult students in the OCD program. This indicates that adult students in the LL program valued college for the opportunities it affords for
exploring one's interests, ideas, and personal identity. It was hypothesized that T program adult students would report the lowest exploratory educational orientation of the three programs. However, they did not achieve the order hypothesized. T program respondents achieved a mean exploratory educational orientation score between the LL program and OCD program respondents. It is possible that adult students in the T program did not achieve the lowest exploratory orientation mean score because:

1. the T program's midpoint maybe a function of its not attempting either the preparatory or exploratory extreme emphasis, thereby averaging out,
2. other aspects of the T program such as size and variety of subject offerings may draw an artifactual mix of orientation types,
3. the practical nature and function of the larger university may not have a strong influence on the exploratory educational orientations of the T liberal arts program students, or
4. the T liberal arts delivery services, such as a relatively rigid class scheduling system, and central campus location, may not attract adults with an exploratory educational orientation.

It appears that while college is most highly valued by adults at the OCD program for its preparatory function, it is most highly valued by adult students at the LL program for its exploratory
possibilities. This is consistent with Morstain's (1976) typology. Students who achieve relatively high preparatory orientations tend to achieve relatively low exploratory orientations, and those who achieve relatively high exploratory orientations tend to achieve relatively low preparatory orientations. Alternately, once in a program with a particular emphasis, it becomes clear that the opposite cannot operate simultaneously.

These findings are, in part, consistent with Houle's (1961) research, which suggests there are three types of adult learners: goal, activity, and learning oriented. While only related to two of Houle's three-part typology - goal (preparatory) and learning (exploratory) oriented - the results of this study differentiated between two contrasting types of adult students, preparatory and exploratory, according to program type. Specifically, it predicted the programs which had the dominant educational orientation adult student typology, based on the characteristics of two models of baccalaureate programs for adults.

It is possible that these findings may be the result of a predisposition adult students have to either a dominant preparatory or exploratory view of the purpose of a college education. Therefore, they might enroll in programs they believe express values congruent with their educational orientation preference. For example, the nature of the OCD adult baccalaureate liberal studies program may be viewed by adults as providing a practical liberal arts education. Thus, it would attract adult students who value the practical
qualities offered by this program. By contrast, the nature of the LL liberal arts program may be viewed by adults as providing exploratory possibilities through its educational delivery service format. Thus, it would attract adult students who value the exploratory qualities of a liberal education offered by this program.

To determine if other factors may have contributed to adult student preparatory and exploratory educational orientation differences, selected demographic variables including age group, sex, and length of full-time work experience were tested. None of the demographic variables tested were found to be significant for either the preparatory or exploratory typologies. This was somewhat inconsistent with the previous findings about adult students within the college setting (Boshier, 1977; Morstain and Smart, 1977; Penn, 1977; Sturgis, 1979). These studies indicated that older adults appear to be equally motivated by practical and expressive educational orientations, but found younger adults to be generally seeking a college education primarily for practical, instrumental, career related reasons. However, all of the studies were done in relatively traditional college settings. Therefore, it appears that the descriptive nature of two of the three programs of this study was more influential than the demographic variables of age group, sex, and length of previous full-time employment experience in differentiating adult student preparatory and exploratory educational orientations.

Objective 4. To determine if significant differences existed in adult students' educational relationship perceptions of the college environment in three
contrasting liberal arts baccalaureate programs.

Based on the data generated in this research, the mean college environmental relationship perception score of adult students in the OCD program was significantly higher than the mean score of adult students in the T program. No significant difference was found between adults in the LL and OCD programs. Although the mean college environment relationship perception score of adult students in the LL program was not significantly higher than the mean score of adult students in the OCD program, their similarly high mean scores and the pattern of overall high college relationship perception scale scores indicated that conclusions regarding adults in the OCD program may be applicable to adults in the LL program. The findings appear to have revealed that the OCD and LL programs are very supportive, understanding, and adaptable to adult student educational relationship needs compared with the T program. These results may have several possible interpretations:

1. The OCD and LL programs have designed and implemented programs for the educational, developmental, and life situation needs of adults and, thus, are perceived as supportive by their adult students.

2. Traditional baccalaureate programs have historically been designed to serve typical college age students and may not adequately serve the educational, development and life situation needs of adults. Therefore, the T program may not be perceived by adult students as supportive.

3. The OCD and LL adult students are older, have more full-time employment experience, and may be richer in life experience than the younger T program adults.
4. The great majority of students in the T program are typical-age students. This age difference may be a factor which prohibits adult students in the T program from interacting with other students and, thus, prevents adult students from perceiving a supportive relationship with typical age students.

5. The OCD and LL programs have substantially smaller enrollments than the T program. This may contribute to a more personal environment, resulting in high adult student educational relationship perceptions of their respective college environments.

An analysis of differences in educational relationship perceptions beyond the original hypotheses revealed that significant differences were found when the environmental relationship perception measure was tested according to age groups, sex, and length of previous full-time work experience. The 22-28 and 29-35-year-old adult students were found to be significantly lower in mean score educational relationship perception than the 36-42-year-old age group. No significant difference was found between the 36-42, 43-49, and 50 years of age and older groups. Approximately twice as many adult students in the two younger age groups (22-28 and 29-35 years of age) were enrolled in the T program than were the same age groups for the combined OCD and LL program adult respondents. These findings revealed that the two younger age groups had significantly lower mean college environment educational relationship perception scores than the next oldest age group (36-42 years of age). Therefore, it is possible that:
1. younger adults are inclined to perceive the educational relationships of the college environment less favorably than older adults;

2. younger adults have unmet expectations about college environmental relationships;

3. the T program structure does not provide the environmental relationship climate expected by adult students at the T program;

4. older adults' expectations about the relationships within the college environment are relatively harmonious with the relationship environment of the college; or

5. the OCD and LL programs provide a relationship environment adapted to the needs of the older adult student.

Interestingly, T program adult respondents' relatively high interaction orientation scores achieved a low, but positive relationship when matched with college environmental perceptions of relationships with other students. This suggests the relatively low overall college environmental relationship perception mean scores of adults in the T program may have been attributable to other factors. The college environmental perception profile (Figure 5, p. 140) indicates that T program adult students' environmental perceptions of administrative and organizational operation may have been more influential factors contributing to the low overall environmental relationship perception mean score of adult students in the T program than T program respondents' college environmental perceptions of other students or faculty members. Studies by Penn (1977), Brooks (1978), Sturgis (1979), and Gerster (1980) of adult students in traditional college and university settings indicate that adult
students in a variety of age group combinations perceive the traditional college environment as relatively inflexible and nonsupportive of group interaction or group behavior, compared with typical age students. Findings from this study provide additional evidence to support the contention of the Carnegie Commission (Rudolph, 1977), and of adult educators such as Valley, (1972), Houle (1973), Cross, (1979), and Apps (1981), that T college programs do not meet a number of the educational and personal needs of adults.

Females achieved a significantly higher mean educational relationship perception score than males. The OCD and LL program sample had approximately 75% females, while the T program had the highest proportion of males (40.5%) of the three programs. Perhaps the predominance of female adult students at the OCD and LL programs contributed to the significantly higher educational relationship perception score achieved at the OCD program. Possible explanations may be that reentry women work together to facilitate their changing role status, or that program characteristics such as an adult centered program philosophy and flexibility and convenience of class schedules and locations better meet the needs of re-entry women.

As the National Center for Educational Statistics (1980) points out, women are increasingly seeking opportunities in higher education. Perhaps in external degree programs such as the OCD and LL programs they find an environment which they perceive as recognizing their educational and personal needs. Also, reentry-female peers may interact to create a supportive, friendly environment which
facilitates the accomplishment of their new educational opportunities.

Adults with 1-5 years of previous full-time employment experience achieved a significantly lower educational relationship perception score than adult students with 5-10 or 11 years or more of full-time employment experience. It may be that full-time employment experience is related to an individual's ability to establish and maintain positive relationships with the various people and administrative and organizational structures within the college environment. This evidence appears to support Knowles' (1970) contention that the translation of adult life experiences into the educational environment contributes to the formation of unique adult learners who enter educational experiences with personal and educational needs different from those of post-adolescent youth. This difference in adults' developmental and experiential base may be reflected in their role relationship perceptions within the college environment.

These findings suggest that, in addition to program enrollment, age group, sex, and length of full-time employment experience, there may be other factors which contribute to differences found in adult students' college environmental relationship perceptions.

Objective 5. To determine if positive relationships existed between selected educational orientations and college environmental perceptions of adult students in three contrasting liberal arts baccalaureate programs.
Only the LL program respondents achieved a significantly positive correlation on two of the four relationships tested. These were: inquiry orientation with academic-scholarly-intellectual college environmental perceptions and independent study orientation with academic-scholarly-intellectual college environmental perceptions. The correlation coefficients were relatively low for the respective positive relationships; however, it appears that the LL respondents' preference to learn for the sake of learning had a definite, but small, influence on their academic-scholarly-intellectual college environmental perceptions. Similarly, LL adult students' preference for unstructured, informal courses appears to have had a definite but small, influence on their academic-scholarly-intellectual college environmental perceptions. The positive relationships achieved by the LL respondents may have reflected the LL program's philosophy and program structure, which attempts to encourage educational situations that are innovative and adaptable to various forms of questioning and self-directed study. Additionally, inquiry and independent study orientation are two of the three component scales of the exploratory educational orientation typology. Therefore, the significant positive correlation coefficients of adults at the LL program between: (a) inquiry orientation and academic-scholarly-intellectual college environmental perceptions on the one hand and (b) independent study orientation and academic-scholarly-intellectual college environmental perceptions suggest there may be a significant
positive relationship among LL adult respondents between academic-
scholarly-intellectual college environmental perceptions and -
exploratory educational orientations.

By contrast, T and OCD program adult students achieved signifi-
cant positive correlations when achievement orientation was matched
with academic-scholarly-intellectual college environmental percep-
tions. The low and moderate positive correlations achieved in the T
and OCD programs, respectively, suggest that the practical
orientation of adult students in the T and OCD programs may influence
their academic-scholarly-intellectual perception of the college
environment. However, the LL program did not achieve a positive
correlation. Additionally, achievement orientation is one of the
three component scales of the preparatory educational orientation
typology. Therefore, the significant positive correlation
coefficients of adult students in the T and OCD program between
achievement orientation and academic-scholarly-intellectual college
environmental perceptions raise the possibility that there may be a
significant positive relationship among adult respondents at the T
and OCD programs between: academic-scholarly-intellectual college
environmental perceptions and preparatory educational orientations.

For the correlations matching adult students' interaction or-
ientations with selected college environmental relationship percep-
tions, adult students from the T program achieved a significant
positive association when interaction orientation was correlated with
environmental perceptions of relationships with fellow students.
This reveals that a low, but significant, relationship exists between T program adult respondents' relatively strong preference for an egalitarian relationship with faculty and their environmental perceptions of student participatory interaction. This finding intimates that T program adult students may find their program environment more conducive to interaction with other students than with faculty or administrative officials or offices.

Summary of the Findings

This study was concerned with whether the educational orientations of adult students participating in three contrasting models of liberal arts baccalaureate programs conformed to an a priori assignment of contrasting baccalaureate programs. These findings revealed that in two programs, OCD and LL, which represent close approximations of Houle's (1973) Adult Baccalaureate Model and Assessment Degree Model, respectively, the adult participants had predictable high to low preparatory and exploratory educational orientation typologies. This indicates that the instructional methods and curricular form and content of the OCD and LL programs may be congruent with the expressed typological educational orientations of adult degree students.

At the OCD liberal studies program, adult students have a preference for preparatory, practical goal oriented and career-related instruction and curricular content. They tend to be product oriented and value a college education primarily for its pragmatic
and utilitarian purpose. They prefer more formal, structured teacher-student relations and faculty involvement in shaping the nature of their educational experience.

Adult students in the LL program have a preference for exploratory, process-oriented instructional and curricular content. They view the value of a college education for its personal and intellectual sharing, growing, and discovery process. They prefer studying independently and desire an active role in the educational decision-making process.

The findings indicate that adult students in the T liberal arts baccalaureate degree program, a program which closely approximates Apps' (1981) traditional program model, have a relatively undifferentiated educational orientation profile. Program participants did not express a distinct preference for either a preparatory or an exploratory educational orientation. Likewise, they did not express a distinct preference for an instructional or a curricular approach that reflects these respective educational orientation typologies. Although T program adult students were younger, represented by more males, and had fewer years of previous full-time employment experience than participants in the OCD and LL programs, comparisons of these variables with preparatory and exploratory educational orientations did not show any distinctions among adult participants.

It should be noted that there may be other variables within each program, or the larger institutions, or within the adult students themselves that may have influenced the program selection process.
The relatively less differentiated profile of the liberal arts adult students in the T program may be related to the setting, it being a practical, vocationally-oriented State University environment. Thus, adult students with an exploratory educational orientation may not find reinforcement for that orientation in the larger, practically oriented State University. It would be speculative to suggest that adult students' educational orientation typological preference was a dominant causal factor in participants' selection of the respective programs. It may be that the formulation of adult student orientations follows exposure to the program. These findings only indicate which adult student educational orientation typological preference is dominant at the three contrasting programs of this study.

Concerning the question of whether the differing college environmental relationship perceptions of adult students participating in the three contrasting liberal arts baccalaureate programs conformed to an a priori assignment of contrasting baccalaureate programs, it was found that in two programs, OCD and T, the participants had predictably high to low college environmental relationship perceptions. This suggests that the environmental relationship constructs of the OCD and T programs may be a dominant factor in the environmental relationship perceptions of adult students at the OCD and T programs. Additionally, the similarly high mean college environment educational relationship perception of adult students in the LL program, with that of adults in the OCD program,
illustrates that the environmental relationship constructs of each program are sensitive to and congruent with the personal relationship needs of their adult student participants.

This finding was in striking contrast with the relatively low college environmental relationship perceptions of adult students in the T program. The relatively low environmental relationship perception of adult students in the T program is consistent with that detected in previous research of adult students in relatively traditional baccalaureate settings. Studies by Penn (1977), Brooks (1978), Sturgis (1979), Kuh and Ardaioio (1979), and Gerster (1980) found that adults in traditional colleges and universities generally perceived the college environment as nonsupportive, inflexible, and not conducive to group interaction. These findings support the contention of the Carnegie Commission (1971) and adult educators such as Knowles (1970), Valley (1972), Houle (1973), Winn (1980), Cross (1981), and Apps (1981) that traditional baccalaureate programs do not meet many of the educational, developmental, and personal needs of adult students.

The program findings from this research suggest:

1. The differing educational philosophies and practices represented by the OCD and LL programs may be important factors in attracting the participation of adult students with contrasting preparatory and exploratory educational orientations.

2. The adult student focus of the OCD and LL programs appear to be reflected in adult students' relatively favorable perceptions of the educational relationships in their respective college environments.
3. Adult students in the T program perceived the students, faculty and administrators as placing less emphasis on adult student relationships than did adults in OCD or LL programs.

Adult students enrolled in three differing forms of undergraduate liberal arts baccalaureate programs had relatively different educational orientations. Adults in the OCD program were found to have a dominant preparatory orientation with a low exploratory orientation. Contrastingly, adults in the LL program were found to have a dominant exploratory orientation with a low preparatory orientation. For the preparatory and exploratory analysis, adults in the T program were found to have less differentiated orientations than OCD and LL adults. Thus, both the preparatory and exploratory typological analyses resulted in a midpoint measure for T program adults. This result was not expected. It was not clear whether this was (a) a function of the T program, (b) a predisposition of adult students prior to enrollment in the T program, (c) a modifying influence of the larger practical oriented state university, or (d) a combination of these and other variables.

Additionally, adult students' perceptions of the college environment were different at the three programs. Adult students in the T program perceived the students, faculty, and administrators as placing less emphasis on adult student educational relationships than did adults at the OCD and LL programs. The low T program adult student educational relationship perception was expected. The relatively higher OCD and LL educational relationship perceptions of
their respective colleges may be (a) a function of the OCD and LL adult student centered philosophies and delivery services, (b) a result of a difference in the level of expectations of the adult students enrolled in the T program compared with those of adults in the OCD and LL programs, (c) a result of differences in adult student perception rather than differences in actual program philosophy and delivery services.

Recommendations

Program Recommendations

Based on analyses of the data provided by this study, it appears that adult baccalaureate students are not a homogeneous group. Certain adult student educational orientation typologies are prevalent in differing types of programs. Additionally, adult students' perceptions of the college environment are different at selected programs. It appears that these differences are at least in part a function of the contrasting program models employed by the three programs of this study. The following program recommendations are offered for consideration to the programs of this study, and to other programs that approximate the respective models represented by these programs:

1. To optimize the distinctive qualities of their programs and to attract adult students who are compatible with their philosophy and delivery service format, administrators should attempt to emphasize the positive qualities perceived by present and prospective adult students. This could be done
through program brochures, mailing of flyers, college catalogs, orientation sessions, and recruitment.

2. The term "adult student" should appear in the nomenclature of the traditional liberal arts program. Many of the services and programs offered by the T program are intended for students of all ages. Communication of their availability to adult students participating in the T program may positively influence their perception of the college environment.

3. The LL and OCD programs should communicate to prospective adult students the apparent orientations of the respective exploratory and preparatory philosophies and program delivery services. This information would provide the adult student with a clearer idea of the objectives of the program and facilitate adult students' selection of a program compatible with their educational and personal needs.

4. Literature on the T liberal arts program should communicate to the adult students a realistic perception of what the program can and cannot offer.

5. Educational and personal interaction policies and procedures should be implemented by administrators, faculty, and staff of the T program to ensure that their program environment be perceived as supportive by adult students.

6. T program administrators, faculty, and staff might become more accessible to adult students.

7. The T program should provide alternative times for activities such as registration, program changes, advising, counseling, department club meetings, and class offerings. These could be made available at times or during special time sequences that make them more accessible to adult students.

8. The present counseling, advising and instructional procedures and theories of education and human development, appropriate for the typical-age student at the T program, should be reoriented to incorporate the diverse developmental stages and life experiences of adult students.
9. Special training workshops need to be implemented at the T program to provide administrators, faculty and staff with sufficient knowledge and skills to adequately relate professionally with adult students.

10. The T program should develop a medium, such as workshops, to promote the joint interaction of adult students, administrators, faculty, staff, and typical college-age students.

11. The T program should implement adult student orientation sessions to clarify policies, procedures, and services of the liberal arts college and university.

12. The recruitment and orientation literature of the T liberal arts program and the university should clarify the policies, procedures, and services available to adult students.

13. The T liberal arts college should coordinate with other colleges, and the administration of the university, policies and procedures which aim toward the development of an integrated systematic plan for the enhancement of adult students' college experiences.

14. Traditional and innovative baccalaureate programs that, in the future, plan to serve adult students would benefit from a general program evaluation.

Recommendations for Further Study

The following research recommendations are based on the findings of this study:

1. Longitudinal research is needed to determine if the educational orientations of adult students are constant over time. For example, do adult students' educational orientations change between the time of initial program entrance and graduation, or beyond graduation to later developmental stages?

2. Longitudinal research is needed to determine if a college education received as an adult changes the recipients' educational orientations and professional and social roles.
3. Longitudinal research is needed to determine if adult student perceptions of the college environment change between the time of initial program entrance to degree completion.

4. Further research should be done with adult students enrolled in differing types of adult baccalaureate programs to identify and determine if the educational orientations and perceptions of the college environment differ from those of adult students in this study.

5. Studies should be done to compare adult students' educational orientations with other psychological measures. For example, do adult students with a preparatory educational orientation have a life chance psychological motivation, and do those with an exploratory educational orientation have a life space psychological motivation?

6. Studies should be done to compare the level of educational satisfaction with adult student educational orientation preference.

7. Research is needed to identify differences in educational orientations and perceptions of the college environment of adult students who persist and of those who withdraw from college.

8. Further research should be done to extensively identify and compare the demographic differences of adult students who participate in the differing forms of baccalaureate degree programs.

9. Studies should be done to compare the educational orientations and perceptions of the college environment of adult students in the differing forms of baccalaureate programs to those of administrators, faculty, and staff at the respective programs to determine the degree of congruence between them.

10. Studies should be done to determine if female adult students in the differing baccalaureate degree programs perceive the college environment differently than males.

11. The perceived lack of relationship support by adult students at the T program is poorly understood. Further research is needed to determine whether this
lack of support is a product of the staffs' lack of understanding of the adult students' academic and developmental needs, the failure of the staff to adequately inform adult students of the services being provided, or a failure of adult students to accurately perceive the relationship and support systems available to them. It is also possible that adult students at the T program do not desire or need such support. To adequately address this issue, the underlying dynamics which generate this perceptual lack of support needed to be understood. In all likelihood, the T program adult students' low environmental relationship perceptions of the college is an interaction of two or more of the variables mentioned. Further research should focus on providing additional information useful in clarifying this issue. Several converging experiments could be conducted which would clarify this complex issue.

12. Further research should be done to determine whether the college environmental perception differences of adult students in the three programs accurately represent differences in actual program modes of operation and delivery services or simply differences in adult student perception.

13. An experimental research design should be implemented to identify causal factors which may have contributed to the college' environmental relationship differences of the three programs.

The expansion of educational opportunities for adults has extended into a variety of differing and innovative higher education baccalaureate programs. The heterogeneous makeup of the "new student" population has raised and will continue to raise a number of questions about the role of higher education institutions serving adults.


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APPENDICES
APPENDIX A

CHARACTERISTICS AND PURPOSES OF THE THREE LIBERAL ARTS PROGRAMS OF THE STUDY
Oregon State University, established in 1968, is the oldest of nine members of the Oregon State System of Higher Education. It is a land grant co-educational university located in Corvallis, Oregon, a city of 41,000 people about 80 miles south of Portland in the central Willamette Valley. The university is predominantly a residential campus with a total enrollment of 17,682 students at the undergraduate, masters and doctoral levels.

General admissions requirements for entrance to the undergraduate college satisfy entrance requirements to the Liberal Arts College. Oregon residents must be graduates of accredited high schools and have a minimum GPA of 2.75. The ACT or the SAT is required and freshmen are admitted to all quarters. The university has an early admissions program in which credit may be earned through the College Level Exam Program (CLEP), and Advanced Placement (AP).

The university offers a wide range of baccalaureate, master and doctoral degrees, however, the College of Liberal Arts offers the baccalaureate degree. Undergraduate liberal arts programs are provided in 16 departmental majors leading to a Bachelor of Arts degree or a Bachelor of Science degree in Liberal Arts. Credit is earned
primarily through daytime central campus classroom instruction. Non-traditional forms of credit such as CLEP, Cooperative Work Study and independent study are presently used with discretion. Other forms of non-traditional study are presently being investigated. Daytime advising is provided for all students. Academic advisors offer assistance to students: in selecting courses by providing information and explanations about educational policies, procedures, requirements, and opportunities, and through assisting students toward development of a personal education plan.

A student must earn 192 quarter hours to graduate, of which 60 must be upper division. All liberal arts students must take a minimum of 67 quarter hours of distribution requirements. The purpose of these distribution requirements is to expose the liberal arts student to a broad program of studies outside a major area. Liberal arts students must complete 45 hours of general education requirements. Academic majors generally must complete between 45 and 58 quarter hours of course work in their major area of study. No sequence selected to fulfill major field requirements may be used to fulfill distribution requirements. The remaining quarter hours are electives.

The College of Liberal Arts attempts to facilitate students' education as contrasted to training. This is accomplished through the improvement or mastery of skills in the students' intellectual areas of interest. Students are exposed to academic situations permitting them to learn, develop, and master skills in research,
analysis, effective writing, and oral expression. It is the belief of the College of Liberal Arts at Oregon State University that these skills are needed in the world of work and social intercourse. A main purpose of the College of Liberal Arts is to emphasize learning how to learn, how to assimilate new information, how to communicate, and thus how to successfully meet the changing demands that occur throughout one's professional and personal life.

The T program at Oregon State University shares some similarity of educational purpose with the OCD and LL programs. However, a number of T program characteristics such as: entrance and graduation requirements, time schedules, administrative procedure, educational delivery services, class location, advising system, and program philosophy contrast greatly with the OCD program, and radically with the LL program.

Linfield Colleges Off Campus Degree
Liberal Studies Program (OCD)

Linfield College, founded in 1849, is one of the oldest private liberal arts colleges in the West. It is affiliated with the American Baptist Church. The campus of this co-educational institution is located 38 miles southwest of Portland, in McMinnville, a community of 12,000 people. The daytime college is predominantly a residential campus with an undergraduate enrollment of 904 students. The college is proud of its liberal arts tradition, believing that
the skills necessary for survival with quality in a rapidly changing world are acquired through an integrated study of the arts, humanities, and sciences.

The Off Campus Degree Program (OCD) is hosted by Linfield College. The OCD program was established in 1975 and currently has an enrollment of 146 adult baccalaureate degree students. The purpose of the OCD program is to provide a comprehensive program of courses, independent study, prior learning assessment, and student services, primarily to working adults seeking to earn a bachelor's degree in liberal studies at times and locations convenient to them.

According to a program brochure provided by the OCD program entitled A Degree for Working Adults, the program is a composite of:

- courses that are designed, through content and structure, to meet the needs of adult students;
- students with a background of practical experience who share the desire to earn a degree from a reputable college;
- faculty members who are sensitive to the expectations and commitment the adult learners share; and
- administrators who are responsive to the special needs of adult learners.

The OCD program offers two degrees: a BS in Management and a BA in Liberal Studies. Only the students enrolled in the liberal studies program were included in this study. The OCD program consists of four terms, a 13-week Fall and Spring semester, and an eight-week Winter and Summer semester. Adults generally enter the program after completing 60 term hours at Linfield or other
accredited institutions of higher education. Entrance requirements include a completed application and transcripts of academic work completed elsewhere. Admission standards are consistent with current daytime college policy on transfer admission. A 2.0 GPA is required of transfer applicants. Application for admission may be made at any time during the year, and students may begin classes before applying for admission, or while waiting for their application to be evaluated (Linfield College Catalog, 1981).

Credit may be earned through off-campus classroom instruction presently offered at four locations: Astoria, Eugene, Salem, and metropolitan Portland. Generally these classes are offered in the evening and on weekends. Of the 125 semester hours needed for the degree, 95 semester hours may be earned through Prior Learning Experience (PLE) before starting the degree program. PLE may be earned through portfolio assessment, course challenge examinations, standardized examinations such as the CLEP series, tutorials, and independent study. Four OCD community representatives coordinate PLE college credit. In addition, credit and even an entire undergraduate degree may be earned through the National University Consortium for Telecommunications in Teaching (NUC) (National University Consortium). These courses are designed around a directed study method that takes into account the responsibilities of typical working adults with a family.

Included in the educational philosophy which guides the liberal studies OCD program is the belief that an educated person has a
foundation of knowledge and skills in the liberal arts which he/she continues to strengthen throughout his/her life. The OCD program attempts to provide its liberal studies students with a balance of theory and practice, and to provide the best opportunity possible to enable them to reach their fullest academic potential (A Degree for Working Adults).

An apparent contrast in program definition between the OCD and T programs is the conscious effort of the OCD program to target the logistic, academic, administrative, and educational needs of adults, while the T program assumes that adult students will adapt to the design and requirements of its program. The third program of this study, Marylhursts' College for Lifelong Learning (LL), provides a further contrast in its attempt to design an academic and developmental environment for a wide range of adult needs.

Marylhurst College for Lifelong Learning
Liberal Arts Program (LL)

Marylhurst College for Lifelong Learning is an independent co-educational liberal arts college located in Lake Oswego, about 10 miles from Portland. The college was founded as Saint Mary's Academy and College in 1873 when the Sisters of the Holy Names received a charter from the State of Oregon to grant degrees. A Christian view of humanity and a deep desire to serve others remains an important part of the philosophy of Marylhurst, which was the first liberal arts college for women in the Northwest. Its 1981-82 enrollment was
744 adult students, of whom 332 were degree seeking, and 412 were non-degree seeking. The students range in age from 18 to 75 and the average age is 37 years (Marylhurst 1982 Institutional Self Study, 1982).

In 1974, Marylhurst made the transition from traditional education to become the first non-traditional co-educational college for lifelong learning in Oregon. The liberal arts divisions was created in 1978. Central to the mission of the college is its dedication to meeting the educational needs of people throughout their lives. A number of options for earning academic credit as well as non-academic credit are provided. Classes are held in the evenings, on weekends, and in spaced modules, as well as during the day.

The LL program has a broad and flexible open admissions policy. A high school diploma or the equivalent is required. Admissions are made on a rolling basis, and there is no deadline. A Life Planning Center offers value-oriented, personalized, interdisciplinary seminars to assist adults in evaluating their personal and career directions and re-entry into education. Liberal Arts students are required to take the Life Planning Center's "Living Issues in the Eighties" (LIFE) residential seminar as partial fulfillment of the institutional graduation requirement.

The average Marylhurst adult arrives with approximately 90 college credits; therefore, the general education requirements are frequently fulfilled before they enter. This allows the student to enter directly into upper division courses; however, these courses
may have been taken years earlier when the student had a different educational goal in mind. Thus the courses fulfill the distribution requirements, but may not have relevance to his/her present degree needs. The LIFE seminar requirement helps the student refocus his/her educational goals (Marylhurst 1982 Institutional Self Study, 1982).

The college confers the BS, Ba, and BM degrees. A minimum of 180 quarter hour credits, including 60 upper division credits and a minimum of 40 Marylhurst credits, are required for graduation. Baccalaureate programs are offered with Designed majors or Individualized majors. Designed majors are required to take a distribution of 48 quarter hours selected from four subject areas, and 35 hours of a major problem area core. Individualized majors enable students, in conjunction with an advisor, to develop flexible degree programs based on their choice of educational theme, life problem, or goal. The Individualized major is unique to the liberal arts division.

Marylhurst provides an education program which acknowledges both the special strengths and unique problems of the adult student. Adult students at Marylhurst are frequently experience rich and theory poor, thus "the curriculum attempts to create an explicit relationship between skills and knowledge and to provide guidance for students integrating learning from the past into new perspectives" (Marylhurst Institutional Self Study, 1982, p. 66).

Students may select different educational alternatives depending upon their needs and the demands of their major and degree
These options include:

**Marylhurst course work** - the most traditional alternative, with courses taught at the Marylhurst central campus.

External course work - courses taken at other accredited institutions as part of an ongoing degree, or at external campus sites at the Oregon Graduate Center in Beaverton, the Paulist Center in Portland, and Tektronix in Wilsonville.

**Independent studies/internships** - Independent study involves research and/or internships initiated and designed by a student in cooperation with a qualified instructor. Course challenges or waivers may be requested.

**Prior Learning Experience Program** - Up to 90 quarter hours of credit toward a baccalaureate degree at Marylhurst may be awarded to the extent that the prior learning is at a level equivalent to education offered at Marylhurst.

**Credit by examination.** Programs which make it possible for individuals to obtain course credit on the basis of test scores. CLEP and ACT-PEP scores are accepted.

Marylhurst College is concerned with facilitating the full development and total well being of each student. The primary educational concern of the Liberal Arts Division is the development and implementation of a value-oriented program which enables students to comprehend and enrich their contributions as responsible participants and leaders in a rapidly changing environment (The Marylhurst Experience, 1980).
APPENDIX B

ADULT LEARNER SURVEY
Colleges differ from one another in the extent to which they emphasize or stress various aspects of students' development. Thinking of your own experience at this college, to what extent do you feel that each of the following is emphasized? The responses are numbered from 7 to 1, with the strongest emphasis being a 7 and the weakest emphasis a 1. Please circle the number which best indicates your impression for each item below.

1. Emphasis on the development of academic, scholarly, and intellectual qualities . . .
   Strong emphasis: 7 6 5 4 3 2 1

2. Emphasis on the development of esthetic, expressive and creative qualities . . .
   Strong emphasis: 7 6 5 4 3 2 1

3. Emphasis on being critical, evaluative, and analytical . . . . . . . . . . .
   Strong emphasis: 7 6 5 4 3 2 1

4. Emphasis on the development of vocational and occupational competence . . . . .
   Strong emphasis: 7 6 5 4 3 2 1

The next four ratings refer to relationships among people at the college. Again, thinking of your own experience, how would you rate these relationships on the following seven-point scales? Please circle one number for each item.

5. Relationships with other students, student groups and activities:
   Friendly, Supportive, Sense of Belonging . . . . 7 6 5 4 3 2 1 . . Sense of alienation
   Competitive, Uninvolved, Remote, Discouraging, Unsympathetic

6. Relationships with faculty members:
   Approachable, Helpful, Understanding, Encouraging 7 6 5 4 3 2 1 . . Unsympathetic
   Remote, Discouraging, Flexible, Open, Adaptive, Considerate

7. Relationships with administrative offices and officials:
   Approachable, Helpful, Open-minded . . . . 7 6 5 4 3 2 1 . . Bound by regulations
   Rigid, Resistant, Remote, Difficult

8. General style of operation as an organization, i.e., college policies, procedures, rules and regulations, etc:
   Flexible, Open, Adaptive, Considerate . . . 7 6 5 4 3 2 1 . . Impersonal, Discouraging
   Remote, Difficult
# Students Orientation Survey

The following statements express a variety of educational views and opinions. Some may be overstated, others understated. Please read the statements quickly and indicate if you strongly disagree (SD), disagree (D), agree (A), or strongly agree (SA) with each. Circle the number that best represents your first impression.

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. I learn best when the instructor's lecture closely follows the assigned readings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>10. I am primarily interested in a specialized area of learning that relates directly to my intended career</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>11. I prefer graded courses to pass/fail courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>12. Instead of taking a regular course, I would rather have an individually-tailored &quot;learning contract&quot; with a faculty member.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I spend a lot of time just thinking about how things I have learned go together</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Teachers and students should be equals in designing courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>15. Fraternities, sororities, and other social groups are an important part of college life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. Most of our public officials are committed to resolving the basic issues facing us today</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I would rather spend an evening with a friend or two than attend a planned social function</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. College students should become meaningfully involved in correcting the injustices of our society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. I learn best when a subject is presented in a neat, orderly sequence</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>20. There is nothing like the mastery of particular skills in college to assure one of a rewarding career</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. Teachers are the only ones who should critically judge a student's work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. I like courses in which I can do independent projects and original research</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. When I come across a subject that's interesting to me, I frequently follow it up at great length</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. Faculty should decide what subjects are important for students to know</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25. Students who participate in campus organizations and social groups usually have lots of friends and really make the most of their college years</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26. I'd prefer to maintain a fairly neutral position on controversial issues and keep a &quot;clean&quot; record</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27. I seldom attend the meetings of campus organizations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. College students who get involved in social and political matters could put that time to better use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29. Lectures are the best way to learn because they pinpoint what is important for students to know</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30. Obtaining a degree is one of my least important reasons for going to college</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. Grades are helpful because they let you know where you stand</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. Often I learn more from studying along my own lines than through completing required material</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. I would like to study the relationships between several fields rather than learning many facts about just one area</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. The faculty should determine how courses are to be organized</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. I think college activities and groups do a lot to help students develop more school spirit and loyalty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>36. Campus protests are self-defeating because they give the college or university a bad name</td>
<td>1</td>
<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>37. I prefer an event that just happens to one which is planned</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. Students should postpone any effort to reform society until after they graduate from college</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. I like courses in which my teachers give explicit instructions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. More college courses should be geared to the kind of job a student wants after college</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. In the ideal college or university, there would be no grades</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. An academic program is best carried out through an independent study program with some faculty supervision</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
43. I consider many viewpoints on a given topic and think about what if anything they all have in common.  
44. Students should be encouraged to propose and develop courses and receive academic credit for them.  
45. Joining campus groups can be quite useful in terms of a future career.  
46. I think all the talk about the "problems of our society" is blown out of proportion.  
47. I do not especially care for formal dinners, formal dances and other such occasions.  
48. Realistically, students can do little to bring about changes in our society.  
49. College students need a lot of academic guidance so they get started on the right foot.  
50. By deciding early on a major in college, I can concentrate on taking the courses I need to complete the requirements.  
51. Final examinations are not a very adequate measure of the learning which has taken place in a course.  
52. I prefer classroom assignments where topics and approach, etc., are left up to me.  
53. The main reason I am in college is not so much to learn useful information as to acquire insight into the nature of things.  
54. Students should participate significantly in determining the nature and format of their academic program.  
55. Extra-curricular activities such as clubs, interest groups, etc., are an important aspect of college for me.  
56. Generally, the police in this community are doing a good job and deserve student support.  
57. Large-scale campus events are usually quite impersonal.  
58. I am not especially interested in hearing political speakers who come to the campus.  
59. An academic program is best organized into formal courses, with regular class assignments and examinations.  
60. A high grade-point average and a fine record of accomplishments are worth the necessary hard work.  
61. Without grades, I would find it difficult to assess my intellectual abilities.  
62. Assignments usually do not give me enough freedom and I would prefer that they be less structured.  
63. I like to discuss various philosophical and theoretical issues with faculty and other students.  
64. There is a body of knowledge to be learned, and the faculty is more competent than the student to direct the student's course of study.  
65. Active alumni generally render a great service to a college or university.  
66. In a democratic society, the majority can usually be counted on to make the right decisions.  
67. Most college groups tend to be too structured for me.  
68. I would support and participate in a student lobby group which works for socio-political change off-campus.  
69. I do my best work when I know what I am supposed to do.  
70. Learning how to make a good living is sufficient reason for going to college.  
71. A student's grade is a pretty good indicator of what he has gotten out of a course.  
72. The teacher who wants students to do their best should allow them to pursue their own interests.  
73. I enjoy starting with a topic and digging into every conceivable phase or aspect of that topic.  
74. Students have the interest and ability to plan undergraduate programs in cooperation with faculty.  
75. Belonging to an organization makes it much easier to meet people.  
76. The society that tries to change too fast is headed for real trouble.  
77. Careful planning is extremely important to the success of a social event.  
78. I am very interested in issues of a social or political nature.  
79. The best way to learn something is to complete course assignments and do the required reading.
80. One should study as much as possible in order to learn a great deal about his major or career field.

81. If there weren't any pressure on me to get good grades, I might slack off in my academic courses.

82. I would like to have an independent study experience which would involve off-campus study.

83. I like to study a given theory or new "discovery" and consider what implications it may have for the future.

84. Students should be involved with faculty in establishing degree and graduation requirements.

85. Intercollegiate athletics are an unimportant and irrelevant aspect of college life.

86. Most of our public agencies are responsive to the needs of its citizenry.

87. Organized groups tend to get in the way of spontaneous friendships.

88. During college I expect to participate in some form of volunteer community service.

**Demographic Questionnaire**

Finally, a few questions about yourself.

89. What is your sex? (Circle one number)
   1. Male
   2. Female

90. What was your class standing at the beginning of this term or semester?
   1. Freshman
   2. Sophomore
   3. Junior
   4. Senior
   5. Graduate student
   6. Other (Specify ________)

91. Are you a full-time or part-time student?
   1. Full-time
   2. Part-time

92. What is your age?
   1. Under 22
   2. 22-27
   3. 28-34
   4. 35-44
   5. 45 and over

93. Do you: (Circle one number)
   1. Live in a residence hall on campus
   2. Live in an apartment/off campus co-op or in a private home
   3. Live in a fraternity or sorority
   4. Commute from your own or your parents' home

94. Please give your major program of study, i.e. sociology, art, etc. ________ Major Program

95. Is your program in: (Circle one number)
   1. Liberal Arts
   2. Liberal Studies
   3. Music
   4. Interdisciplinary Studies
   5. (Other)

96. How many years, altogether, have you attended any college or university? ________ Total number of years

97. And, how many total years of full-time employment experience have you?
   ________ Total years full-time employment experience

98. Finally, is there anything else you would like to say about your college experience?

THANK YOU FOR YOUR COOPERATION!
APPENDIX C

COLLEGE STUDENT EXPERIENCES NORMATIVE MEANS
AND STANDARD DEVIATIONS FOR
PERCEPTIONS OF THE COLLEGE ENVIRONMENT
# College Student Experiences Normative Means and Standard Deviations for Perceptions of the College Environment

<table>
<thead>
<tr>
<th>Ratings of the College Environment</th>
<th>Doctoral Universities</th>
<th>Comprehensive Univ/Colleges</th>
<th>Liberal Arts I</th>
<th>Liberal Arts II</th>
<th>Total All Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTELLECTUAL EMPHASIS</strong></td>
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<tr>
<td>7 (strong emphasis)</td>
<td>29</td>
<td>11</td>
<td>28</td>
<td>46</td>
<td>16</td>
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<tr>
<td>6</td>
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<td>1 (weak emphasis)</td>
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<tr>
<td><strong>Mean</strong></td>
<td><strong>5.7</strong></td>
<td><strong>5.0</strong></td>
<td><strong>5.6</strong></td>
<td><strong>6.2</strong></td>
<td><strong>5.3</strong></td>
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### Ratings of the College Environment

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| **VOCATIONAL EMPHASIS**   | 7 (strong emphasis) | 16      | 12             | 10             | 7                | 11               | 10             |
| 6                         | 22        | 25      | 21             | 21             | 13               | 24               | 20             |
| 5                         | 21        | 27      | 23             | 23             | 16               | 20               | 23             |
| 4                         | 15        | 20      | 13             | 22             | 18               | 18               | 20             |
| 3                         | 11        | 10      | 8              | 13             | 10               | 10               | 13             |
| 2                         | 7         | 2       | 3              | 3              | 11               | 2                | 5              |
| 1 (weak emphasis)         | 1         | 2       | 1              | --             | 1                | 1                | 1              |
| **Mean**                  | 4.2       | 4.9     | 4.6            | 3.8            | 4.9              | 4.9              | 4.5            |
| **S.D.**                  | 1.7       | 1.4     | 1.5            | 1.7            | 1.4              | 1.4              | 1.6            |
### Ratings of the College Environment

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### Ratings of the College Environment

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| **OPERATIONAL STYLE** |                       |                            |                |                |                   |
| 7 (flexible, open)    | 3                     | 5                          | 4              | 6              | 5                 |
| 6                  | 12                    | 16                         | 16             | 22             | 19                |
| 5                  | 21                    | 26                         | 23             | 28             | 25                |
| 4                  | 26                    | 27                         | 27             | 23             | 25                |
| 3                  | 17                    | 14                         | 13             | 12             | 13                |
| 2                  | 13                    | 9                          | 11             | 6              | 9                 |
| 1 (remote, difficult) | 9                     | 4                          | 6              | 3              | 6                 |
| **Mean**            | 3.8                   | 4.3                        | 4.1            | 4.6            | 4.3               |
| **S.D.**            | 1.5                   | 1.5                        | 1.5            | 1.4            | 1.5               |
APPENDIX D

LETTERS OF INTRODUCTION AND POST CARD REMINDERS
May 14, 1982

Dear Adult Learner,

I am writing to ask for your participation in a study about older college students. This study is designed to learn more about adult learners' educational orientations and perceptions of the college environment. It is being conducted with the official consent of Oregon State University's Adult Education Department.

As a doctoral student at Oregon State University, I recognize the investment of time, energy, and money that most adults make in attending college. The questionnaire I am asking you to complete is an important part of my thesis project. It will take approximately 30 minutes of your time to complete. The information you provide will enable us to better understand the educational views and attitudes of Oregon State University's adult undergraduates.

Since you have been selected from a small, but representative sample of learners from Oregon State University's Liberal Arts College, your response is essential to the success of the study. There is no way we can substitute for the answers you provide. You will note that your questionnaire is numbered. This is so we may send reminders to those who have not completed their questionnaire.

I would appreciate your cooperation in returning the questionnaire in the enclosed metered, self-addressed envelope by May 28, 1982. If you have any questions about the study, please phone me (752-4797).

Thank you for your time and cooperation.

Sincerely,

Richard J. Skwarek

Enclosures
May 14, 1982

Dear Adult Learner,

I am writing to ask for your cooperation in a study about older college students. This study is designed to learn more about adult learners' educational orientations and perceptions of the college environment. The administration of Linfield Colleges' Off-Campus Degree Program supports this study and requests your cooperation in it.

As a doctoral student at Oregon State University, I recognize the investment of time, energy, and money that most adults make in attending college. The questionnaire I am asking you to complete is an important part of my thesis project. It will take approximately 30 minutes of your time to complete. The information you provide will enable us to better understand the educational views and attitudes of Linfield Colleges' Off-Campus Degree adult students.

Since you have been selected from a small but representative sample of learners from Linfield, your response is essential to the success of the study. There is no way we can substitute for the answers you provide. You will note that your questionnaire is numbered. This is so we may send reminders to those who have not completed their questionnaire.

I would appreciate your cooperation in returning the questionnaire in the enclosed metered, self-addressed envelope by May 28, 1982. If you have any questions about the study, please phone me (752-4797).

Thank you for your time and cooperation.

Sincerely,

Richard J. Skwarek

Enclosures
May 14, 1982

Dear Adult Learner,

I am writing to ask for your cooperation in a study about older college students. This study is designed to learn more about adult learners' educational orientations and perceptions of the college environment. The administration of Marylhurst College of Lifelong Learning supports this study and requests your cooperation in it.

As a doctoral student at Oregon State University, I recognize the investment of time, energy, and money that most adults make in attending college. The questionnaire I am asking you to complete is an important part of my thesis project. It will take approximately 30 minutes of your time to complete. The information you provide will enable us to better understand the educational views and attitudes of Marylhurst Colleges' adult undergraduates.

Since you have been selected from a small but representative sample of learners from Marylhurst, your response is essential to the success of the study. There is no way we can substitute for the answers you provide. You will note that your questionnaire is numbered. This is so we may send reminders to those who have not completed their questionnaire.

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Thank you for your time and cooperation.

Sincerely,

Richard J. Skwarek

Enclosures
Dear Adult Learner,

Recently I mailed you a questionnaire requesting your participation in a study about adult learners' views and orientations toward education. At present I have not received your response.

Your response is essential to this study. As I stated previously, you are one of a small number of adults carefully chosen to represent Oregon State University's adult learners. I would appreciate your taking the time to complete the questionnaire and mail it in the previously enclosed self-addressed, metered envelope.

Please mail your response before May 28, 1982. If you have any questions, please call me at (752-4797). Thank you very much.

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