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ABSTRACT

This survey compared the learning of occupational skills in a junior college and nearby technical institute to determine if differences in environmental press for different types of students might cause one setting to be more effective than the other. Freshmen entering business administration, electrical technology, nursing, and secretarial science curricula at the two schools were surveyed during their orientation week and 18 months later. Findings indicate that entering freshmen had: (1) similar demographic characteristics; (2) much the same expectations for environmental press; (3) highly similar personality profiles; and (4) similar levels of dogmatism. Demographic characteristics of freshmen who subsequently dropped out did not differ significantly from those who continued; however, institutional environmental press did differ, with support of intellectual pursuits and adult treatment of students being greater in the junior college. Based on the above, there was no clear indication that either type of institution was more effective for a specific type of student. In addition, while students had a choice between two different intellectual but similar non-intellectual climates, selective sorting based on personality-need profiles did not occur in terms of attraction to one institution or the other. (J0)

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Final Report

Project No. 8-B-007
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A Comparison of
Environmental Press
and Selected Characteristics of
Students
at a
Community College and Technical Institute

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New Brunswick, New Jersey
May, 1970

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The responsibility for the final report rests solely with the author.

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SUMMARY

Purpose

The purpose of this exploratory-descriptive survey was to ascertain whether there were discernible differences in the environmental press of a community college when compared with a technical institute which make each a more effective setting for different types of students to learn occupational competencies. The specific questions directing the inquiry were: 1) What differences exist in the environmental press of a community college as compared to a technical institute? 2) What significant differences and relationships exist between selected personality characteristics of students within given curricula in each institution, environmental press, and successful completion of program?

Method

A community college and technical institute having occupational programs in the same four areas and located within thirty miles of each other served as the locale of the study. The two institutions were chosen for the high degree of similarity of demographic characteristics of the geographical areas served.

Freshmen entering the business administration, electrical technology, nursing, and secretarial science curricula at the two schools were surveyed in September during orientation week. Eighteen months later, students still enrolled in the four curricula at each school were surveyed and completed the same questionnaire and inventories. During the 18 month period, students dropping out of the programs were so identified.

The questionnaire completed elicited data pertaining to demographic characteristics of students and family; attitudes of reference group members; questions to ascertain present-future orientations; expectations, preferences, perceived chances of attaining these; Reissman's scale of commitment to occupational advancement; Rokeach's Dogmatism scale; and William's Job Preference Inventory to measure risk-taking propensities within a job context. Inventories, available through commercial firms, were the Sterns College Characteristics Index, a measure of environmental press; Sterns Activity Index, measure of personality need factors related to press factors; and the Allport-Vernon-Lindsey Study of Values, which measures dominant motives in personality.

Over 75 percent of the freshmen in the four curricula in the two schools responded. The total number was 304 at the community college and 487 at the technical institute. Over 70 percent of freshmen in each of the four curricula responded. Forty-five percent (68) of students enrolled at the community college in the fourth term and 67 percent (192) of technical institute fourth term students responded.

Data were analyzed using proportional variations, mean scores, chi square, product-moment correlations, and t-tests to test for statistical significance where viewed of value. Findings are reported in terms of comparisons between freshmen in each school; freshmen in the same curriculum; freshmen in different curricula within each school; responses as freshmen compared to responses as fourth-term students among curricula within each school and between each school; responses of freshmen dichotomized on the basis of dropping out or continuing in programs; and pre-test, post-test analysis for nearly identical groups, members of which had provided data a second time as fourth term students.

Findings

Demographic

Freshmen entering the community college and technical institute had much the same demographic characteristics. Over 90 percent were 25 years of age or less; slightly over 1/2 were men; over 95 percent in each curriculum except nursing at the community college were single; approximately 3/4 were from families where the breadwinner was employed in sales, clerical, skilled, semi-skilled and unskilled occupations; about 70 percent reported highest level of parents' education was high school or less; over 80 percent reported approval of parents and friends regarding choice of school.

Approximately 46 and 66 percent of freshmen at the community college and technical institute respectively subsequently dropped out of the occupational programs, in which they were initially enrolled, prior to the fourth term. The difference between the two institutions was statistically significant beyond the .01 level.

Scholastic aptitude appeared to be slightly more related to dropping out or continuing at the technical institute than at the community college but in neither case was it significantly related. Men were disproportionately represented among drop-outs. Differences attained statistical significance for the technical institute.

Drop-outs did not differ significantly from freshmen who continued in socioeconomic status or attitudes of parents and friends toward choice of school.

Environmental Press and Personality Need Factors

Freshmen entering the two schools had much the same expectations for environmental press. Descriptions of press by fourth term students indicated that the community college and technical institute did differ in the nature of press. The community college was described consistently as having an intellectual climate more supportive of intellectual pursuits than the technical institute and of treating students more like adults. The disparity between expectations for press and experience with press was generally greater for technical institute students.

Personality need profiles of freshmen showed a high degree of similarity for all respondents irrespective of school. Variations did occur between students in various curricula. A comparison of freshmen personality need profiles with profiles of fourth term students indicated considerable stability over time.

Freshmen who subsequently dropped out did not differ significantly in their expectations for environmental press from freshmen who continued. Personality need profiles showed that those dropping out were consistently lower in intellectual interests and motivation than those who continued. Differences however did not attain statistical significance. Educability scores of freshmen dropping out were not significantly lower than those of comparison groups.

Belief Systems

Freshmen in the two schools were very similar in level of dogmatism with mean scores of 156 and 157. Freshmen who dropped out did not differ significantly from freshmen who continued. Fourth term technical institute students had consistently lower mean dogmatism scores than they had as freshmen and lower than fourth term community college students. Mean scores of the nurse and secretarial science students at the community college decreased, while those for business administration and electrical technology students increased slightly.

Values

Mean scores on the theoretical, economic, aesthetic, social, political and religious scales on the Study of Values were with few exceptions within the normative range for both freshmen and fourth term students. Minimal

variations occurred between students in the two schools. Variations did occur between curricula and generally showed choice of curricula to be more influential in values than choice of school.

Vocational Values

Present-Future Orientations: Over 60 percent of freshmen described planning for 3-5 year period. Slightly larger proportions of freshmen who dropped out reported "no plans" than did those who continued.

Over 75 percent referred to occupational goals and/or educational goals. Variations did occur between curricula. Variations between schools were slight.

The proportions of freshmen expecting and preferring occupational advancement through more education were higher than the proportions as fourth term students. Slightly over 1/4 of fourth term students were in this category.

Generally freshmen who later dropped out did not differ from those who continued. For drop-outs from the community college, however, whereas over 1/3 expected a job consistent with the curriculum, less than 1/4 preferred a job consistent with the curriculum.

The large majority of all respondents were optimistic about attaining expectations and preferences though slightly less optimistic about the latter. Fourth term students tended generally to be more optimistic than freshmen. Freshmen who dropped out were not less optimistic than those who continued.

Valuing Occupational Advancement: For approximately 80 percent of students, health, family and friends were quite competitive with occupational advancement. Leisure time was quite competitive with advancement for close to 80 percent of fourth term students.

Small differences were consistently in the direction of larger proportions of community college freshmen and fourth term students valuing occupational advancement than of technical institute freshmen and fourth term students. Variations did occur between curricula. Small differences were in the direction of freshmen who left curricula at the community college having larger proportions committed to occupational advancement than of freshmen who remained. This was not found for the technical institute. Variations between institutions for freshmen and fourth term students were reversed when pre-test data were compared with post-test data for nearly identical groups.

Risk-Taking as a Component of Advancement: Community college and technical institute students did not differ significantly in mean risk-taking scores. Nor did freshmen who subsequently dropped out differ from those who continued. Variations between curricula showed secretarial science students to be consistently lower in risk-taking propensities.

For the smaller populations for whom pre-test and post-test data were available, on the occupational advancement and risk-propensity measures, changes from the pre-test to the post-test were in the direction of larger proportions of fourth term technical institute students being more committed to occupational advancement and preferring the type of job situation typically viewed as associated with job advancement.

Conclusions

Measures of environmental press and selected personality needs were applicable and did record variations in press and student populations in occupational curricula in two year institutions.

Results did not clearly indicate that the community college setting or technical institute setting was more effective for specific types of students and less so for others seeking to learn occupational competencies.

CHAPTER I

A STUDY OF PRESS AND STUDENTS OF OCCUPATIONS IN A COMMUNITY COLLEGE AND A TECHNICAL INSTITUTE

Introduction

Background

Educators have become increasingly aware of the importance of the physical and social environments in facilitating or impeding the achievement of educational objectives. Awareness is not the same as a precise understanding of the dynamics of interaction between personalities and environments in educational settings as these relate to learning.

Pressures from population increases and demands for more knowledgeable and skilled workers have produced a period of expansion in the number and types of educational institutions. Expansion has been combined with some pointed questions about the effectiveness of educational programs at all levels. Although assessments of effectiveness are most frequently thought of in terms of formal instruction, some attention is being directed to the larger context or environment of the institution as well.

Vocational-technical education has been included in the expansion of and the assessments of programs designed to prepare youth for work. At the post-secondary level, technical institutes and community colleges are two settings for occupational programs, with the latter type of institution expanding rapidly. It was in the context of these converging concerns and interests, that the major purpose of this project was formulated.

Purpose

The purpose of this study was to ascertain whether there were discernible differences in the environmental press in a community college when compared with that of a technical institute which make each a more effective setting for different types of students to learn occupational competencies.

The specific questions to be answered by the study were: 1) What are the differences in environmental press of a community college as compared to a technical institute?, and 2) What are the significant differences and

relationships that exist between selected personality characteristics of students within specific curricula in each institution, environmental press and successful completion of the program?

As an exploratory descriptive study, the project was a feasible undertaking within the resources allocated largely because of the work of George Stern and C. Robert Pace. Stern and Pace in collaboration and in independent studies developed measures of college environments. Stern using Murray's need-press conceptualization developed The Activities Index composed of 300 items corresponding to behavioral manifestations of personality needs. Items in the measure of environmental press correspond to conditions likely to facilitate or impede expression of the personality needs. (Stern, 1963). In the process of developing the two measures, students from thirty-two four-year colleges and universities were involved. (Stern, 1962). Findings derived from a comparison of a number of colleges which had relevance for this study were:

1. Students or professionals in the same field have need profiles that differ significantly from those of students or professionals in other fields...
2. Profiles describing the expected press obtained from incoming freshmen at the same college are highly consistent with one another regardless of the high school backgrounds of these incoming students...
3. Freshmen press profiles describing the expected college press stress intellectual activities at an unrealistically high level as compared with senior press profiles from the same institution...
4. Students enrolled in the same institution have needs scale scores significantly more alike than students at different institutions...
5. Students describe their own institutions in terms of press scale scores that are significantly more alike than are the corresponding scale means among different institutions...
6. Although the relationships between needs scores and press scores for the same students from a variety of institutions is not much higher than that obtained from samples located within the same institution, suggesting that perceptions of press are not projections of needs, there is a decided relationship between the mean needs scores and mean press scores at forty-three institutions. The average level of specific needs among students at a given college tends to match the average level of the corresponding press at the same college...
7. Students enrolled in different programs in a complex institution describe the press of the institution in significantly different ways.

Pace developed the College Characteristics Analysis (CCA) as a tool for estimating the characteristics of subcultures within the university. From his research, he found: "academic subgroups whose environment differs significantly from that of the college as a whole"; "Academic subgroups whose members differ significantly from the general student body in various personality characteristics"; "significant differences between subgroups and the college as a whole in the estimated attainment of various educational goals." The existence of differentiated subcultures is related to size, according to Pace, and in small colleges there are few such subcultures. (Pace, 1964).

Studies of environments in community colleges or junior colleges have been less numerous. Richard White (1965) explored the similarities and differences in institutional environments in twelve junior colleges in Minnesota. The objectives of these colleges were to provide the first two years of college for students who would then transfer. The College Characteristics Index was used as the measure of environments, with analysis following a pattern developed by Pace to obtain four cluster scores. He found the patterns varied among the junior colleges. Further, the perceptions of institutional press by Minnesota students placed these colleges below the normative group studied by Pace and Stern.

Another study by Gold (1968) investigated student and faculty perceptions of the Los Angeles City College environment using the Junior College Edition of the College and University Environment Scales (CUES).

Pace (1967) reported the results of preliminary studies using the Junior College Edition of the college and university environment scales.

In sum, this study concentrated on the interaction between environments and student personality factors in two institutions with two year occupational programs. As a methodological concern, it explored the applicability of measures of environmental press and student personality factors, designed for use in four year institutions to the environmental press and personality factors of students seeking to learn specified occupational competencies.

Substantively, it explored relationships between continuing in occupational programs or dropping out, expectations for environmental press, experiences with environmental press and personality factors.

Method

Two institutions, a community college and a technical institute, were selected for their relative comparability on the following:

1. Occupational curricula offered
2. Public funding
3. Population base-demographic characteristics, i.e., percent of non-white, median education, age distribution, proportion in school attendance, industrial and commercial activities, direction of change in these areas. (Determined from census data).

The two institutions selected were relatively close to each other geographically. Thus it was possible that students could conceivably select one institution over the other, although this might entail increasing daily travel time to the school.

If, in fact, discernible differences existed between the community college and technical institute such differences would be less likely to be confused with or obscured by, differences resulting from the region and population from which students in each institution were drawn.

Each institution offered occupational programs in business administration, electrical technology, registered nursing, and secretarial science.

The above curricula were selected for the following reasons:

1. These curricula were among the most frequently offered occupational curricula that lead to the associate degree.
2. It was decided to include curricula that included male and female.
3. It was decided to select curricula that were thought generally, to attract students with different aptitudes, abilities, and interests.

Presidents of both institutions were informed about the nature of the study, and asked that the schools participate. Several meetings took place with personnel in both schools to discuss the survey and the arrangements necessary for collecting data. A description of the community college and the technical institute, in which student respondents were enrolled, follows:

Description of Institutions¹

Community College: The community college officially opened in 1960 with a full-time enrollment of 171 students and part-time enrollment of 335 students. In its first year of operation the college offered programs in Liberal Arts, Business Administration and Secretarial Science.

In 1961 the College moved to its permanent 130 acre campus and opened for its second year of operation. Through the years, student enrollment increased to 4,200 full-time students and 4,500 part-time students.

The College is dedicated to providing for each student the opportunity to realize the highest intellectual, social, cultural, physical, and personal development of which he is capable. The College aims to foster the total growth of its students, preparing them for their educational and career objectives, and for their roles in society as enlightened, responsible human beings.

As a comprehensive community college both two year transfer programs and career programs are offered. The transfer program provides the opportunity for students to complete the freshman and sophomore years of study towards the baccalaureate degree.

The A.A. Degree in Liberal Arts is awarded to students who have completed course work within the Humanities, Social Science or Mathematics areas.

The A.S. Degree is conferred upon students completing the Science or Engineering Curriculums.

While the career programs prepare students for entry in technical or semi-professional career fields after graduation, each curriculum includes courses in the Humanities, Social Sciences, Science and Mathematics.

Programs are offered in Electronics and Mechanical Technology, Telecommunications, Marine Technology, Nursing, Police Science, Secretarial Science, Data Processing and Business.

A program of General Studies resulting in the A.A. Degree is also available providing flexibility for those students who are undecided about their academic and career goals. Health career programs are also offered culminating in the Associate degree.

¹ Adapted from college catalogues.

The majority of faculty members at the Community College held M.A. degrees. Approximately two percent of the full-time faculty held Ph.D. degrees. A limited number of the faculty held Bachelors degrees (13 percent), primarily in the areas of English and Electronics Technology.

Four year colleges and universities within the state appeared frequently as institutions at which faculty members completed graduate work, but institutions throughout the United States were represented. Part-time instructional personnel numbered 100, while full-time faculty was approximately 300.

Facilities included an ever expanding library which provided books, periodicals, and pamphlets to enable students to complete class assignments, to do reference and research work and to have materials available for recreational reading and to help them keep abreast of current trends.

The library contained a main reading room with shelf space for 100,000 volumes and seating for 1,000 students, and a periodical room for reference collections, periodical files, information file and microfilm reader. An Audio-Visual Center also was included which provided a preview room and facilities for the preparation of Audio-Visual materials.

Numerous buildings served each of the divisions within the College in addition to the Administration Building, Science Building, and Gymnasium. The Student Center including a cafeteria, lounge facilities and recreational facilities was available for student use, also.

Coordinated by the Assistant Dean of Students, student groups and faculty created a wide range of club activities such as special interest clubs, religious groups, service fraternities and sororities, professional clubs, publications, musical and dramatic societies and sports groups.

The Student Council provided the framework for self-government within the student community. Through committee action, the Student Council was responsible for approving club charters, administering the student activities budget, providing an adequate program of social and cultural activities, and supplying student membership for service on the Joint Faculty-Student Affairs Committee, Special Events Committee, and Curriculum Committee.

Pi Alpha Sigma was the College Honor society open to students achieving a 3.2 cumulative grade point average.

The College Service Society hosted visitors to the College and assisted at College sponsored events.

While the College did not maintain on-campus student housing, a file was maintained of inspected rental facilities available to students whose permanent residence was not within ready commuting distance of the campus. Most facilities available for rent were in private homes in the immediate area.

Through its Student Personnel staff of professionally trained counselors, the College offered students an opportunity to receive help with such problems as learning difficulties, family relationships, vocational and educational planning, and personal problems. In addition, there was a fully equipped health office under the direction of a College Nurse experienced in health education. The College Health Service guided the student and aided him in assuming responsibility for his own health.

The College was a member of the National Junior College Athletic Association. A varied athletic program was conducted, and the College scheduled intercollegiate contests in tennis, golf, basketball, baseball, cross-country, soccer, wrestling, bowling, lacrosse, and track.

Technical Institute: The technical institute was founded in the early 1900's and at that time mirrored the agrarian orientation of the region.

In 1948 the institute became a unit of the then newly formed State University. As technological advances were made, curriculum offerings shifted to meet the local employment demands.

The institute was authorized to offer two-year programs of study beyond the high school level which would qualify students for direct placement in various technical and related fields. Subject to this authorization, the technical institute subscribed to the following objectives:

To aid the student in developing abilities and competence in his technical field; to assist each student in developing his potentialities so as to live a happy, healthy, responsible, and productive life; to serve business, industries, professions and units of government by providing competent personnel in technical and related fields; and to serve society by stimulating students to develop their respective capacities for participating in and contributing to the democratic way of life.

Programs for students wishing to prepare for careers in engineering technologies, business, health services, recreation supervision, community services, police science, agriculture and ornamental horticulture were provided.

Courses in English, social science and either mathematics or natural sciences or both were required for all students. Second year advanced courses emphasize concentration on theory and applied science appropriate to the field of specialization, reinforced by laboratory experiences.

All curricula were approved for awarding the degree of Associate in Applied Science. The Associate in Science degree (A.S.) is awarded to graduates of the Engineering Science curriculum.

The full-time faculty numbered 274; part-time, 28. A majority of the faculty had advanced degrees, with approximately four percent having doctorates. Many faculty had earned degrees at institutions within the state. Some had earned degrees from out-of-state institutions.

The campus was comprised of 380 acres and provided residence halls for approximately 400 men and 250 women. The total student population was approximately 3,900.

Library facilities included a reference room, listening room, microfilm viewing facilities and a conference room. The library contained 83,000 volumes, 950 periodical titles which were received annually as well as bulletins, circulars, and government publications in academic, agricultural and technical fields.

Student extra-curricular activities included at least 40 organizations. Half of these student organizations were curriculum clubs designed to serve the pre-professional interests of students and related directly to various academic departments. Religious organizations included the Student Christian Association, Canterbury Club and Hillel. Cultural activities centered on the Drama Club, Collegiate Chorale and International Club.

Student government organizations, publications, recreational activities and service organizations completed the list.

Academic advisement, placement or career advisement, personal counseling, and financial aid services were administered by the Dean of Students through the Student Personnel Office.

The College Health Department endeavored to safeguard the health of all students while they were on the campus.

Social affairs were scheduled throughout the year either on campus or off campus. Many of these events were under the direction of various student organizations.

The Dean's List was composed of all students who earned an average of 3.00 or better and was determined at the end of each semester. One of the greatest honors a student could receive was election to the local chapter of the National Junior College Honorary Scholastic Society.

The Department of Health and Physical Education offered intercollegiate varsity competition in baseball, basketball, cross-country, golf, soccer, tennis, track, and wrestling. Association of College Unions tournament competition was offered in chess, billiards, bowling, and table tennis.

In sum, the community college provided programs in liberal arts for students who might wish to transfer to a four year college, as well as two year career programs. The technical institute provided career programs.

Library, health and counseling services were available in both schools. Opportunities for extracurricular activities were available on both campuses.

Population and Data Collection

Data were collected from freshmen in 1967 and again, from those who continued into the fourth term, in 1969.

Freshmen, Fall, 1967: Personnel in the Offices of the Dean of Students informed Freshmen in the four curricula of the survey and requested their participation. Community college freshmen assembled in the lounge and were directed to three classrooms in groups of approximately one hundred. Each student received a manila envelope containing the questionnaire, directions for the questionnaire and the Sterns Activities Index. A proctor from the project staff explained the purpose of the test and the time allotted to Part I.

Following the completion of Part I there was a short intermission in which these envelopes were collected and envelopes containing the Sterns Environmental Characteristics Index and the Allport-Vernon-Lindsey Study of Values test were distributed. Three hours were required for completing the questionnaire and tests.

Approximately one week later, freshmen in the four curricula at the technical institute assembled in the gymnasium as soon as each completed registration, and were given Part I, as described above. As soon as Part I was completed each was provided with the second part. Students entered and left at different times. Thus sections within the gymnasium were treated as units, with instructions given to smaller groups assembling at approximately the same time. Proctors on the project staff, were available to provide material and to clarify directions when asked. Three hours were required for the data collection with no intermission.

Fourth Term Students, Spring 1969: Arrangements were completed with personnel at both institutions to collect data from fourth term students in the four curricula in mid-March, 1969. Students were informed of the second phase of the survey and were asked to participate. The time provided was one which did not conflict with class sessions. The response of students in both schools was exceedingly low. Personnel at both schools agreed that other arrangements were essential in planning for a second effort to obtain data from fourth term students.

Arrangements were made for a second time. Letters were written to department chairmen at each school asking them to urge majors in departments to participate in the study. Some regularly scheduled classes were suspended to enable students to participate in the survey.

In a final effort to increase the rate of responses from fourth term students, the Sterns Activities and College Characteristics Index and the Study of Value Scales were mailed to those who had not participated on either of the previous two occasions. These data were viewed as particularly critical to comparing expectations of press as freshmen, with the perceptions derived from experience in the schools, and in ascertaining to what extent if any, values of fourth term students differed from freshmen. This effort produced twenty-three additional responses.

Response Rates: Tables 1 and 2 report the proportion of freshmen and fourth term students participating in the survey when data were obtained on each campus.

Of freshmen entering both schools in 1967, slightly over 3/4 participated in the survey with sufficient completeness to be included in the study. Since the questionnaires and tests were time consuming some responses were incomplete. The decision was made to use all data available for each variable, even though this resulted in

TABLE 1. Number and Percent of Freshmen Participating in Survey By Institution and Curriculum

Curriculum	Community College			Technical Institute		
	Total	N Responding	Percent	Total	N Responding	Percent
Business Administration	180	131	72.8	201	168	83.6
Electrical Technology	51	43	84.3	147	106	72.1
Nursing Secretarial Science	53	42	79.2	72	56	77.8
	112	88	78.6	196	157	80.1
Total	396	304	76.8	616	487	79.6

variations in the number of respondents for various aspects of the report. Thus, if a student completed questions on twenty-nine of the thirty scales on the College Characteristics Index his responses to those were included. Likewise, if the Activities Index were completed but not the Study of Value booklet, the Index data were included.

TABLE 2. Number and Percent of Fourth Term Students Participating In Survey by Institution and Curriculum

Curriculum	Community College			Technical Institute		
	Total ¹	N Responding	Percent	Total	N Responding	Percent
Business Administration	69	14	20.2	93	48	51.6
Electrical Technology	15	8	53.3	37	37	100.0
Nursing Secretarial Science	41	32	78.1	45	29	64.4
	26	14	53.8	109	78	71.6
Total	151	68	45.0	284	192	67.6

¹Total is the number of students graduating June, 1969 from each curriculum.

The response of fourth term students was lower than that of freshmen, but did exceed half for all curricula in both schools except business administration students in the community college. Over 70 percent of nurse students at the community college participated, in comparison to 64.4 percent at the technical institute. Of secretarial science students, 72 percent in the technical institute responded compared to 54 percent in the community college. For the total population from each school, the rate of response (67.6 percent) for the technical institute exceeded by 23 percent the rate of response at the community college (45 percent).

The response from the mailed survey brought the highest response from students of business administration at the community college with 11; 1, from electrical technology, 5 from nurse students, and 6 from secretarial science. Of technical institute students, one in secretarial science responded to the mailing. Thus for some data the rate of response from students of business administration in the community college was increased from 20.2 percent to 36.2 percent.

Generalizability of findings are limited by the fact that students in only one community college and one technical institute were surveyed. Results may have relevancy for community colleges and technical institutes with characteristics very similar to the two included in the study. Further, the low rate of response for fourth term students of business administration at the community college, requires that results for that category be viewed as suggestive.

Variables and Measurements: The institutions and curricula were consistently treated as independent variables. Demographic characteristics, occupational expectations, occupational aspirations, status and attitudes of reference group members, present vs. future orientation, values, dogmatism, risk-taking propensities, expectations and perceptions of environmental press, and descriptions of personality needs were treated as dependent variables.

As specified, the purpose of the study was to describe, compare, and explore relationships rather than to test hypotheses pertaining to relationships between the independent and dependent variables. The independent variables were directly evident from the institution and curriculum in which each respondent was enrolled. Detailed descriptions of the measures of dependent variables appear immediately preceding the report of findings to provide greater clarity. Brief descriptions of these measures follow with definitions of the variables.

VARIABLES

MEASURE

Environmental Press: i.e., aspiration level, intellectual climate, student dignity, academic climate, academic achievement, self-expression, group life, academic organization, social form, play, and vocational climate.

Stern's College
Characteristic
Index

Student Needs: i.e., personality need for self-assertion, audacity-timidity, intellectual interests, motivation, applied interests, orderliness, submissiveness, closeness, sensuousness, friendliness, expressiveness-constraint, egoism-diffidence.

Stern's Activity
Index

Student Values: six basic interests or motives in personality: theoretical, economic, aesthetic, social political and religious.

Allport-Vernon-Lindsey
Study of Values

Dogmatism, i.e., a relatively closed cognitive organization of beliefs related to intolerance and organized around central beliefs about absolute authority.

Rokeach's Dogmatism
Scale
40 items

Risk-Taking Propensities - a tendency to choose alternatives assessed as risk-laden rather than security-oriented.

Williams'
Job Preference
Inventory
8 forced choice items
Guttman Scale

Present vs. future orientation, i.e., the seeking of immediate short-term pleasure rather than future long-term satisfactions.

Direct question about
plans, and time in
which plans will be
accomplished.

Occupational expectation, i.e., type and level of employment which the respondent reports expecting to achieve within a specified period of time.

Direct question about
expectations for five
years later.

Occupational aspiration, i.e., type and level of employment which the respondent would like to achieve within a specified period.

Direct question about
preferences for five
years later.
Reissman-Occupational
Advancement Scale.

VARIABLES

MEASURE

Status of reference group. Members compared with status of respondent. Reference defined as a group taken by the individual as a frame of reference for self-evaluation and attitude formation.

Direct questions about occupations of parents and siblings; and attitudes of parents and friends.

Analysis

Data were analyzed and comparisons reported between: 1) community college freshmen and technical institute freshmen, in different curricula within each school and between each school; 2) Freshmen dichotomized into drop-outs and "still enrolled". Respondents categorized as drop-outs were students who at some time between September, 1967 and May, 1969 had left the occupational curriculum. Respondents categorized as "still enrolled" were listed as active students in the occupational curriculum as late as May, 1969. 3) Responses of all freshmen to responses of all fourth term students. It needs to be emphasized that some freshmen did not participate in the survey in 1967; these same persons may have participated in the survey as fourth term students in 1969. The fourth term student category also includes some persons who may have entered the schools with some advanced standing and thus did not participate as freshmen in 1967. 4) Some analysis was completed for respondents who participated as freshmen, in 1967, and who completed the total or portions of the survey questions as fourth term students in 1969. This analysis was undertaken in the effort to more precisely answer questions pertaining to what, if any changes, relative to the variables measured had occurred during the period of post-secondary education. Limited resources precluded matching freshmen and fourth term responses for each variable and thus including only complete cases. The procedure followed was to include all data available for each respondent who had participated as a freshman and again as a student in his fourth term. Proportional and mean variations were then compared. As described earlier, some respondents, either by choice or inadvertently did not complete all questions or scales. Thus the number of cases of freshmen for some variables was different from the number of cases of fourth term students for the same variable.

Comparisons were made in terms of proportional variations, differences in means, correlation coefficient. Where it was considered of value, appropriate tests for levels of significance were computed.

CHAPTER II

DEMOGRAPHIC CHARACTERISTICS AND ATTITUDES OF REFERENCE GROUP MEMBERS

Demographic data were obtained from direct questions (see Appendix A [questionnaire]) for two purposes. The first was to ascertain whether students entering the community college were similar to those entering the technical institute. The second was to ascertain whether freshmen who continued in the program differed significantly from those who subsequently dropped out. Information about demographic characteristics of the students' families was elicited also. Such information served as an aid to increasing understanding of the results obtained in other aspects of inquiry. The influence of reference groups on the values, goals, attitudes and behavior of the individual has been substantiated in diverse ways and need not be justified here. Suffice it to say that the demographic characteristics of the families of students were considered as indicators of the students' reference groups.

In addition to demographic data, questions were extended to include some which asked about the attitudes of significant others in the reference group, i.e., parents and friends, towards the student's choice of school.

The results of the analysis of these data are presented in this section for freshmen, as well as for freshmen dichotomized on the basis of dropping out of curricula or continuing into the fourth term.

Freshmen

Age

Total populations: The single largest proportion of entering freshmen at both institutions was under 20 years of age; the second largest between 20-25, and the lowest over 25. Variations between the institutions existed, with the community college having approximately 20 percent of the students 20 years and over in contrast to the technical institute which had approximately 10 percent, 20 and over.

TABLE 3. Age of Freshmen by Curriculum and Institution

Curriculum	Community College			Technical Institute				
	N	Under 20 Percent ¹	20-25 Percent	Over 25 Percent	N	Under 20 Percent	20-25 Percent	Over 25 Percent
Business Administration	131	74.8	19.9	.8	168	83.3	6.6	
Electrical Technology	43	86.1	7.0		106	78.2	13.2	
Nursing	42	33.3	16.7	47.6	56	66.1	8.9	19.6
Secretarial Science	88	93.2	1.1		157	91.6	2.5	
Total	304	76.0	12.2	6.9	487	82.9	6.9	2.3

¹Percent less than 100 indicates proportion of no responses.

Specific Curricula: The majority of students in the business administration curriculum at each school was under 20. However, a larger proportion (19.9 percent) of those at the community college was between 20-25, in contrast to 6.6 percent at the technical institute.

Of students studying electrical technology at the community college, 86 percent were under 20, as were 78 percent of technical institute students. Only 7 percent at the community college were between 20-25, as contrast to 13 percent of the technical institute students.

Considerable variation in age of nurse students existed between the institutions. One-third of this curriculum at the community college was under 20; in contrast to almost 2/3 of those in the technical institute being in this age category. Approximately 17 percent at the community college were between 20-25, whereas only 9 percent were so categorized at the technical institute. The most pronounced differences occurred for the "over 25 years" category, with almost half of those at the community college so categorized in contrast to about 20 percent of those at the technical institute.

Over ninety percent of secretarial science students at both institutions were under 20, with the remainder between 20-25. Variations between the two institutions were slight.

In sum, approximately 90 percent of the entering students at both institutions were 25 years of age or less. The nurse curricula had a larger proportion of students over 20 than did other curricula at both institutions, with the single largest proportion over 25 years at the community college.

Sex

Total populations: Slightly over one-half of the entering freshmen at both institutions were male. Variations between the institutions were very slight.

TABLE 4. Sex of Entering Freshmen by Curriculum and Institution

	Community College			Technical Institute		
	N	Male Percent	Female Percent	N	Male Percent	Female Percent
Business Administration	131	87.8	12.2	168	85.6	13.8
Electrical Technology	43	100.0		106	98.1	0.9
Nursing	42	9.5	90.5	56	3.6	96.4
Secretarial Science	88		100.0	157	.6	99.4
Total	304	53.0	47.0	487	51.4	48.1

Specific Curricula: Over eighty-five percent of business administration students were men; over ninety-eight percent of electrical technology students were men; whereas over ninety percent of nurse students at both institutions were women, as were over 99 percent of all secretarial students. Variations between institutions were slight.

Marital Status

Total populations: Over ninety percent of entering students at both institutions were single (91 percent at community college and 94.5 percent at technical institute).

Specific Curricula: Over ninety-five percent of entering students in each curriculum at both institutions, except the nurse students were single. For these students one-half at the community college was single, as were over

TABLE 5. Marital Status of Entering Freshmen by Curriculum and Institution

Curriculum	<u>Community College</u>			<u>Technical Institute</u>		
	N	Single Percent	Other ¹ ₂ Percent	N	Single Percent	Other ¹ Percent
Business Administration	131	95.4	2.3	168	96.5	1.2
Electrical Technology	43	100.0		106	95.3	1.9
Nursing	42	50.0	47.6	56	76.8	21.4
Secretarial Science	88	100.0		157	98.1	
Total	304	91.1	7.5	487	94.5	3.3

¹ married, widowed, or divorced

² percent less than 100 reflects percent of no responses

three-fourths of those in the technical institute. The variations for this curriculum constituted the major variation between the two institutions.

Number with children: Slightly less than one-third of married students at the community college reported having children. Less than 15 percent of married students in the technical institute reported having children. Nurse students, as a group, in both institutions had the largest number and proportion reporting having children.

In brief, approximately 6 percent of all community college students and slightly less than 3 percent of students in the technical institute reported having children.

Socioeconomic Origins

Occupational data were used as the basis for categorizing respondents in socioeconomic strata. Socioeconomic origins were determined by father's occupation. Educational achievement was used to facilitate accurate indexing of occupations. Each occupation was assigned a socioeconomic index based on the work of Duncan (1961). The Socioeconomic Index ranges from 0 to 100. The approximate range for commonly used occupational categories are as follows:

TABLE 6. Number of Married Students Reporting Having Children By Curriculum and by Institution

Curriculum	Community College		Technical Institute	
	Married N	With Children N	Married N	With Children N
Business Administration	4	2	12	1
Electrical Technology	11		49	1
Nursing	21	18	11	11
Secretarial Science	2		8	
Total	38	20	80	13

RANGE SEI	OCCUPATIONAL CATEGORY	ILLUSTRATIVE OCCUPATIONS
100-76	Professionals	Chemists, lawyers, physicians, etc.
75-60	Proprietors, managerial, and other professionals	Managers, dealers, public school teachers, social welfare workers, etc.
59-44	Sales, clerical, other white collar	Bookkeepers, salesmen, mail carriers, etc.
43-28	Skilled Craftsmen	Electricians, machinists, plumbers
27-0	Semi-skilled and unskilled	Carpenter, operatives, cooks, waiters, etc.

Total population: Socioeconomic origins of students entering the community college and technical institute were very similar. Range of socioeconomic indexes of father's present occupations of students entering the community college was 4 to 94; and for technical institute students, 7 to 96. Table 7 reports the mean socioeconomic index of occupations of father, by curriculum and institution.

The larger proportion of students in both schools was predominately from what could be labeled lower middle class white collar occupations and skilled craftsmen, semi-skilled and unskilled occupations. Each respondent was asked what occupation his father was engaged in while

TABLE 7. Mean Socioeconomic Index of Father's Present Occupation By Curriculum and Institution

Curriculum	Community College			Technical Institute		
	N	\bar{X}	SD	N	\bar{X}	SD
Business Administration	125	47.75	22.29	161	48.65	20.35
Electrical Technology	42	35.45	18.34	101	45.50	21.64
Nursing	41	50.39	22.27	55	40.00	21.48
Secretarial Science	82	45.17	22.24	149	49.46	21.78
Total	290	45.61	22.10	466	47.21	21.38

the respondent was in grammar school. Comparing group means of present to previous occupation provides a crude index of socioeconomic mobility. There was an increase in mean index scores but very slight at approximately 2.5 points for each group.

Mean socioeconomic indexes and standard deviations for occupations of brothers and those of employed mothers indicate heterogeneity with the larger proportion engaged in lower middle class white collar occupations, skilled crafts; and semi-skilled and unskilled occupations.

Specific Curricula: On the basis of father's present occupation, socioeconomic origins of students entering business administration in the community college and technical institute were the same. A somewhat different picture emerged for students in electrical technology, with those entering the community college having fathers whose present occupation mean index was ten points below that of students entering the technical institute. The reverse was true for nurse students since father's occupation of those entering the community college was indeed 10 points higher than that of students entering the technical institute. The difference may be a function of the fact that a larger proportion of community college nurse students were over 25, and thus the socioeconomic index may reflect higher status associated with the longer period of occupational activity of their fathers. This seemed to be supported by the greater similarity of the two groups when the mean index (42.18) for father's previous occupations were compared.

Very slight differences existed between students entering the community college and technical institute to study secretarial science.

In sum, students in all curricula at each institution tended to be drawn from similar socioeconomic strata. The range and distribution of socioeconomic indexes of fathers' occupations indicated a heterogeneous population which drew from all socioeconomic levels, with approximately three fourths from three lower strata, predominated by sales, clerical, skilled, semi-skilled and unskilled occupations. Students entering the electrical technology curriculum at the community college somewhat more frequently originated from families in which the father was engaged in unskilled, semi-skilled work or was a craftsman than did those in other curricula.

Educational Achievement of Parents

Tables 8, 9, 10, and 11 report the highest educational achievement of students' parents by institution and curriculum.

Total population: Approximately seventy percent of students in each institution reported that parents had a high school education or less. Slightly higher proportions of community college students (34.4 percent) reported less than a high school education for fathers, than did technical institute students (29.7 percent). Less than thirty percent in both institutions reported some post-secondary

TABLE 8. Highest Educational Achievement of Fathers of Community College Freshmen by Curriculum

	N	Less than High School Graduate Percent	High School Graduate Percent	Some Post Secondary Percent	College Graduate + Percent
Business Administration	129	32.0	37.5	26.6	3.9
Electrical Technology	43	48.8	25.6	23.2	2.3
Nursing	38	26.3	36.8	23.8	13.2
Secretarial Science	85	34.1	44.7	17.7	3.5
Total	295	34.4	37.8	23.1	4.8

TABLE 9. Highest Educational Achievement of Fathers of Technical Institute Freshmen by Curriculum

	N	Less than High School Graduate Percent	High School Graduate Percent	Some Post Secondary Percent	College Graduate + Percent
Business Administration	149	30.9	36.9	20.7	11.4
Electrical Technology	92	32.6	43.5	17.5	6.5
Nursing Secretarial Science	48	31.3	31.3	25.0	12.5
	146	26.0	46.6	19.3	8.2
Total	435	29.7	40.9	19.9	9.4

TABLE 10. Highest Level of Educational Achievement of Mothers Of Community College Freshmen by Curriculum

	N	Less Than High School Graduate Percent	High School Graduate Percent	Some Post Secondary Percent	College Graduate + Percent
Business Administration	128	29.7	51.6	14.1	4.6
Electrical Technology	42	38.1	50.	9.5	2.4
Nursing Secretarial Science	41	36.6	34.1	29.3	
	86	36.	51.2	11.8	1.2
Total	297	33.7	48.8	14.8	2.7

education achieved by fathers. Less than twenty percent in each institution reported that mothers have some post-secondary education.

Specific Curricula: Students in business administration were very similar at the community college and technical institute. The one exception being that approximately four percent of community college students reported fathers were college graduates, in contrast to over eleven percent of technical institute students.

TABLE 11. Highest Level of Educational Achievement of Mothers Of Technical Institute Freshmen by Curriculum

	N	Less Than High School Graduate Percent	High School Graduate Percent	Some Post Secondary Percent	College Graduate + Percent
Business Administration	151	25.8	56.3	12.6	5.3
Electrical Technology	88	30.7	52.3	13.6	3.4
Nursing	48	27.1	50.0	18.8	4.2
Secretarial Science	150	24.7	55.3	15.4	4.7
Total	437	26.5	54.5	14.4	4.6

Of students entering electrical technology at the community college over forty-eight percent reported fathers were not high school graduates, with over 32 percent of the technical institute students reporting similarly. Approximately the same proportions (24-25 percent) reported fathers had post-secondary education. Technical institute students more frequently reported fathers had a college education than did community college students.

Variations in educational achievement of fathers reported by nurse students in the two institutions were slight. A slightly larger proportion of secretarial science students in the community college reported lower educational achievement of fathers (78.8 percent) than did technical institute students (72.6 percent). A larger proportion of technical institute students reported parents having a college education (8.2 percent) than the proportion of community college students (4.8 percent).

Variations in educational achievement of mothers did exist but these were slight, except for nurse students at the community college. For all curricula at both schools, over 50 percent reported mothers were high school graduates, except for nurse students at the community college where it was 34 percent. A larger proportion (29.3 percent) of community college nurse students reported mothers to have post-secondary education. Proportions of students reporting post-secondary education including college in other curricula ranged from 11 to 23 percent.

Attitudes of Parents and Friends Towards Choice of School

Students were asked to indicate the degree of approval or disapproval of parents and friends towards the school selected.

Total population: Father: Almost ninety percent of all students in both schools reported father's approval of the choice of school. Variation between student populations was minimal (community college, 87.5 percent; technical institute, 88.7 percent).

Mother: Over ninety percent of all students in each school reported approval of mother.

Friends: Of community college students, 46.7 percent reported that "almost all" friends approved choice; 34.5, the majority, 14.5, some and 1.6, few. Of technical institute students 52.2 percent reported almost all of friends approved the choice; 33.1, the majority; 9.9 some; and 1.4 few. Thus for students in both schools, over eighty percent thought the majority or more of friends approved their choice.

Specific Curricula: Fathers: Responses of students in the business administration and electrical technology curricula at both schools coincided with results for the total population. Nurse students differed, in that between 71.5 technical institute and 78.6 community college percent reported approval of fathers. The proportion of secretarial science students reporting approval exceeded ninety percent; community college, 92 percent; technical institute, 93 percent.

Mothers: Reports of students in business administration, electrical technology and in secretarial science indicating mothers approved choice were consistent with results for the total population. Nurse students differed. Although community college students were similar with 90.5 percent reporting approval, over 76.8 percent of technical institute students reported approval; 8.9 reported neither support nor opposition. Whether this variation is a function of the lower rate of response or the possibility that mothers of younger women do not as frequently favor daughters preparing to be nurses remains a question.

Friends: Responses of business administration students at both schools paralleled results for total population. Of those in the technical institute, 41.2 percent reported approval of almost all friends as compared to 43.5 percent of those in the community college.

TABLE 12. Percent of Community College and Technical Institute Freshmen by Attitude of Father Towards Choice of School by Curriculum

	Community College						Technical Institute				
	Approved		Opposed		Neither		N	Approved		Opposed	Neither
	N	Percent	Percent	Percent	Percent	Percent		Percent	Percent	Percent	Percent
Business Administration	131	87.1	1.5	6.1	168	89.3	.6	6.0			
Electrical Technology	43	88.4		7.0	106	90.5		1.9			
Nursing	42	78.6	2.4	2.4	56	71.5	1.2	8.9			
Secretarial Science	88	92.0		4.5	157	93.0		3.2			
Total	304	87.5	.3	5.3	487	88.7	.6	4.5			

¹ Percent less than 100 indicates rate of no response

TABLE 13. Percent of Community College and Technical Institute Freshmen by Attitude of Mother Towards Choice of School by Curriculum

	Community College				Technical Institute			
	Approved		Opposed		Approved		Opposed	
	N	Percent	Percent	Neither Percent	N	Percent	Percent	Neither Percent
Business Administration	131	90.9	1.5	6.1	168	91.6	.6	4.8
Electrical Technology	43	93.1	4.7	2.3	106	92.4	1.8	2.8
Nursing	42	90.5		4.8	56	76.8		8.9
Secretarial Science	88	94.3	1.1	1.1	157	97.4		1.9
Total	304	92.1	1.6	3.9	487	91.9	.6	3.9

¹Percent less than 100 indicates rate of no return

TABLE 14. Percent of Community College and Technical Institute Freshmen by Attitude of Friends Towards Choice of School by Curriculum

	Community College						Technical Institute					
	Approval by Almost			Approval by All			Approval by Almost			Approval by All		
	N	Percent	Few	Majority	Some	Few	N	Percent	Few	Majority	Some	Few
Business Administration	131	43.5	1.5	31.3	19.8	1.5	168	51.2	31.	10.1	2.4	
Electrical Technology	43	48.8	4.7	23.3	18.6	4.7	106	42.5	34.	17.	.9	
Nursing Secretarial Science	88	39.8	1.1	47.7	10.2	1.1	157	58.	34.4	6.4	1.3	
Total	304	46.7	1.6	34.5	14.5	1.6	487	52.2	33.1	9.9	1.4	

Among electrical technology students, those at the community college reporting approval by almost all of friends equalled 48.8 percent, as compared to 42.5 percent of technical institute students; 23.3 percent of community college students and 34 percent of technical institute students reporting a majority approved; with 18.6 of community college students and 17 percent of technical institute students reporting "some" approved. A larger proportion of community college students (4.7 percent) reported "few" approved as contrast to .9 percent at the technical institute. The largest proportions of nurse students at both schools reported that almost all or a majority of friends approved (community college, 97.6 percent; technical institute, 91.0 percent). With reference to secretarial science students, at both schools, over 85 percent reported that almost all or the majority of friends approved choice of school.

In sum, the proportion of students in any curricula at each school who perceived opposition to their choice of school was very small, with the single largest proportion (4.7 percent) being for electrical technology students in the community college who reported opposition of mother.

Freshmen Dichotomized as Drop-Outs and Still Enrolled

Freshmen respondents were dichotomized on the basis of being still enrolled in the curriculum during the fourth term or having dropped out of the curriculum sometime prior to the fourth term.

For the community college, 140, i.e., 46.2 percent of students had dropped out of the curriculum in which they had initially enrolled. Of the 486 students surveyed in the technical institute, 66.5 percent dropped out of the curriculum prior to the fourth term. The difference of 20 percent between the two schools was significant beyond the .001 level with a $\chi^2 = 30.76$, 1df.

The fact that the drop-out rate was significantly higher in the technical institute as compared to the community college heightens interest in examining data to ascertain whether drop-outs from curricula in the two schools differed significantly in demographic characteristics.

Age

As reported in Table 15, variations within each school were relatively slight, with 77.9 percent of drop-outs being under 20, as compared to 74.5 percent of students

TABLE 15. Age of Freshmen by Institution and by Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College			Technical Institute				
	N	Under 20 Percent	20-25 Percent	Over 25 Percent	N	Under 20 Percent	20-25 Percent	Over 25 Percent
Dropped Out	140	77.9	15.0	3.6	323	84.2	7.7	2.2
Still Enrolled	161	74.5	9.9	9.9	161	80.7	5.6	2.5
No Data	2		100.0		1	100.0		
Total	303	76.3	12.2	6.9	485	83.1	7.0	2.3

¹Percent less than 100 indicates rate of no response.

still enrolled at the community college; 15 percent between 20-25; as compared to 9 percent; and 3.6 percent over 25 as compared to 9.9 of those still enrolled. For the community college, the data suggest that students over 25 years of age tend to drop out less frequently. Variations within the predominately under 20 years of age student body were slight however.

Within the technical institute, the pattern is consistent with that at the community college except for the over 25 years of age category. The fact that the technical institute had a slightly larger proportion, i.e., (6%) of students under 20 years of age than the community college continued to be reflected in the age distribution of those dropping out and those still enrolled.

Sex

Within the community college, the proportion (54%) of males dropping out exceeded that of the total population (52.6%) and for those still enrolled (51.6%); whereas the proportion of women (46%) dropping out was slightly less than for the total population (47%) and for students still enrolled (47.8%). Variations for both groups were slight, however. The results for the technical institute differed in that the same pattern was much more evident and pronounced. Note that males constituted approximately 60 percent of the drop-outs as compared to 51 percent of the total population; whereas women constituted 38.7 percent

TABLE 16. Sex of Freshmen by Institution and By Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College				Technical Institute			
	N	Male Percent ¹	N	Female Percent	N	Male Percent	N	Female Percent
Dropped Out	75	54.0	64	46.0	195	60.4	125	38.7
Still Enrolled	83	51.6	77	47.8	54	33.3	107	66.0
No Data	1	50.0	1	50.0				
Total	159	52.6	142	47.0	249	51.2	233	47.9

¹Percent less than 100 indicates rate of no response.

of drop-outs as compared to being 47.9 percent of the total population. Of students still enrolled in the technical institute, about 1/3 were men and 2/3 were women. The variations evident were significant beyond the .001 level, with a chi-square of 32.17, and 1 degree of freedom.

Curriculum

As evident from Table 17, persons in business administration and secretarial science curricula constituted slightly larger proportions of drop-outs, 45.7 and 32.1 percent respectively from the community college than of the total population (42.9 and 29.0 percent respectively). The proportion of drop-outs previously enrolled in electrical technology at the community college was the same as the proportion in the total population (14%). Nurse students constituted the lowest proportion of drop-outs (7.9%) in relation to the proportion in the total population (13.9%).

Variations within the technical institute drop-outs in relation to curriculum reflected the significant relationship between dropping out and being male.

Note that the proportion of drop-outs having been enrolled in business administration (37.2%) and electrical technology (27.6%), both predominately men, slightly exceeded the proportions for the total population (34.6% and 21.8% respectively). In contrast, proportions of drop-outs

TABLE 17. Curriculum of Community College Freshmen by Dropping Out or Still Enrolled in Curriculum During Fourth Term

	Business Administration		Electrical Technology		Nursing		Secretarial Science	
	N	Percent	N	Percent	N	Percent	N	Percent
Dropped Out	64	45.7	20	14.3	11	7.9	45	32.1
Still Enrolled	64	39.8	23	14.3	31	19.3	43	26.7
No Data	2							
Total	130	42.9	43	14.2	42	13.9	88	29.0

TABLE 18. Curriculum of Technical Institute Freshmen by Dropping Out and Still Enrolled in Curricula During Fourth Term

	Business Administration		Electrical Technology		Nursing		Secretarial Science	
	N	Percent	N	Percent	N	Percent	N	Percent
Dropped Out	120	37.2	89	27.6	32	9.9	82	25.4
Still Enrolled	48	29.6	17	10.5	24	14.8	73	45.1
No Data							1	100.0
Total	168	34.6	196	21.8	56	11.5	156	32.1

enrolled in nursing and secretarial science (9.9% and 25.4% respectively) were slightly lower than proportions in the total population, i.e., 11.5% and 32.1% respectively.

In sum, variations existing between the community college and technical institute were that proportions of drop-outs from each curriculum in the community college followed the proportional distribution within the total population, except for nursing. In the technical institute sex appeared to be a significant intervening variable in that business administration and electrical technology students constituted slightly larger proportions of drop-outs than the proportions in the total population, whereas nurse and secretarial science students were slightly under-represented.

TABLE 19. Marital Status of Community College and Technical Institute Freshmen by Dropping Out or Still Enrolled in Curriculum During Fourth Term

	Community College				Technical Institute			
	Single		Other		Single		Other	
	N	Percent ¹	N	Percent	N	Percent	N	Percent
Dropped Out	133	95.0	6	4.3	305	94.4	11	3.4
Still Enrolled	141	87.6	17	10.6	153	93.4	5	3.1
No Data	2	100.0			1			
Total	276	91.1	23	7.6	459	94.4	16	3.3

¹ Percent less than 100 is due to no response rate and rounding off error.

Marital Status

Due to the fact that over 90 percent of student populations in both schools were single, marital status had only minor importance. Table 19 reports the results. For the community college, as noted the number married was small, and when compared with the proportion (7.6%) in the total population was slightly overrepresented in the still enrolled category with 10.6% and underrepresented (4.3%) among drop-outs. This did not hold for technical institute students, however, where the proportion is approximately 3 percent of drop-outs, still enrolled, and total population.

For both schools the proportion of drop-outs who were single was equivalent to or slightly exceeded (community college) the proportion in the total population.

Scholastic Aptitude

Cooperating institutions provided scores on measures of scholastic aptitude for all students for whom data were available. Since the measure of scholastic aptitude differed¹ for the two schools, data for each school was

¹For community college, a composite score of verbal and quantitative SCAT scores were used. The score for the aptitude section of a Regents examination was used for technical institute students.

tabulated separately. On the basis of all scores, the total number of students in the community college was categorized as upper 1/3, middle 1/3, and lower 1/3. Students in the technical institute were categorized in the same manner, based upon the distribution of scores for all technical institute respondents. Table 20 presents the distribution of drop-outs and students still enrolled by institution and scholastic aptitude category.

If scholastic aptitude were a major determining factor for dropping out, it would seem to follow that a disproportionate number of drop-outs ought to be categorized as lower 1/3 on scholastic aptitude.

For the community college, the proportion of drop-outs in the middle 1/3 and lower 1/3 scholastic aptitude categories were the same (35.4%) and exceeded the proportion (34.1%) for the total population by only 1.3 percent. Conversely 29.1 percent of the drop-outs were in the upper 1/3 scholastically. Students still enrolled were distributed in equal proportions among the three scholastic categories. Thus for the community college, scholastic aptitude did not appear to be a major factor in dropping out. The findings for the technical institute differed slightly in that 34.6 percent of drop-outs were in the lower 1/3 scholastically compared with 31.7 percent of the total population and 36.7 percent were in the middle 1/3 as compared to 35.7 percent of the total. However, 28.6 percent of the drop-outs were in the upper 1/3 scholastically, in relation to 32.5 percent of the total. Of those still enrolled, proportions progressed in the expected direction, with 39.7 percent in the upper 1/3; 33.9 percent in the middle 1/3 and 26.2 percent in the lower 1/3. The extent of the variation in the expected direction is still less, however, than might be expected if dropping out were equated primarily with ability, and did not attain statistical significance.

Socioeconomic Origins

Socioeconomic status has been shown to be closely associated with entering and dropping out of college. Thus it is pertinent to ask whether similar relationships hold for community college and technical institute students.

Table 21 reports the mean socioeconomic index of respondents' fathers' occupations by dropping out and still enrolled for each school. Within both the community college and technical institute students dropping out of curricula had fathers with a slightly higher mean socioeconomic index scores, with 46.21 and 48.35 for drop-outs respectively, and 45.31 and 45.23 for those

TABLE 20. Percent in Scholastic Aptitude Categories by Institution and by Dropping Out and Still Enrolled in Curricula During Fourth Term

	Community College						Technical Institute			
	Upper 1/3		Middle 1/3		Lower 1/3		Upper 1/3		Middle 1/3	Lower 1/3
	N	Percent	Percent	Percent	N	Percent	Percent	Percent	Percent	Percent
Dropped Out	127	29.1	35.4	35.4	297	28.6	36.7	34.6		
Still Enrolled	151	33.1	33.1	33.1	156	39.7	33.9	26.2		
Total	278	31.7	34.1	34.1	453	32.5	35.7	31.7		

¹Total N for which data were available

TABLE 21. Mean Socioeconomic Index of Father's Present Occupation by Dropping Out and Still Enrolled During Fourth Term by Institution

	Community College			Technical Institute		
	N	\bar{X}	SD	N	\bar{X}	SD
Dropped Out	137	46.21	21.41	308	48.35	20.79
Still Enrolled	150	45.31	22.87	155	45.23	22.50
Total ¹	290	45.61	22.10	466	47.21	21.38

¹ Not the sum of drop-outs and still enrolled, since data were not available for some Freshmen to be so classified.

still enrolled. Standard deviations indicated that the range of variation was about the same. More detailed examination found that approximately 75 percent of drop-outs and those still enrolled in both institutions were from families where the socioeconomic index of the father's occupation was between 62 and 0.

The findings suggest that the direction is for those of higher status to drop out more frequently. The nature of the index is such however that actual differences for measured differences amounting to .9 and 3.12 are probably negligible. A conservative conclusion to draw is that socioeconomic status, as measured in this study, is not related to dropping out of occupational programs in either school.

Educational Achievement of Fathers

Tables 22 and 23 present data on educational achievement of fathers of respondents from both schools. A trend evident for both institutions was for drop-outs to have a slightly lower proportion reporting that fathers completed less than a high school education than the comparable proportion for the total population. For the community college, 30.1 percent as compared to 34.1 percent; and for the technical institute (Table 23) 26 percent as compared to 29.6 percent. Conversely the proportion of students still enrolled reporting that fathers completed less than high school education exceeded that for the total population; for the community college it is 38 percent, and 37.1 percent for the technical institute.

TABLE 22. Highest Educational Achievement of Fathers of Community College Freshmen by Dropping Out and Still Enrolled in Curriculum During Fourth Term

	N	Less than High School Graduate Percent	High School Graduate Percent	Some Post-Secondary Percent	College Graduate + Percent
Dropped Out	133	30.1	45.9	21.1	3.0
Still Enrolled	158	38.0	31.6	24.1	6.3
No Data	2			100.0	
Total	293	34.1	37.9	23.1	4.8

TABLE 23. Highest Educational Achievement of Fathers of Technical Institute Freshmen by Dropping Out and Still Enrolled in Curriculum During Fourth Term

	N	Less than High School Graduate Percent	High School Graduate Percent	Some Post-Secondary Percent	College Graduate + Percent
Dropped Out	289	26.0	42.2	21.8	10.1
Still Enrolled	143	37.1	37.8	16.8	8.4
No Data	1		100.0		
Total	433	29.6	40.9	20.1	9.5

Students who reported fathers had completed high school tended to be slightly disproportionately represented among drop-outs; thus for the community college, 45.9 percent of drop-outs as compared to 37.9 percent of total population and for the technical institute 42.2 percent of drop-outs as compared to 40.9 percent of the total.

The similarity for the two schools ceased for the last two education categories. For the community college, the proportion of students still enrolled and reporting fathers with some post-secondary education and college degrees slightly exceeded that for the total population, whereas the proportion among drop-outs was less. The

reverse was true for the technical institute. In both cases variations were slight.

A similar pattern was evident between dropping out and being still enrolled and level of educational achievement of mother.

Nativity of Father and Paternal Grandfather

Respondents were asked whether the father and the paternal grandfather were born in the United States. When responses were analyzed in relation to dropping out, observable differences were small rarely exceeding 1 to 2 percent, within the school and between the schools. Approximately 85 percent of all respondents' fathers were native born; slightly over 50 percent of all respondents reported that the paternal grandfather was born outside the United States.

In conclusion, relationships between dropping out and demographic characteristics were not pronounced except that men tended to constitute a slightly larger proportion of drop-outs from the community college. Variation in the same direction was more pronounced for the technical institute and was statistically significant at the .001 level.

Attitudes of Parents and Friends Toward Choice of School

Drop-outs from curricula in both schools were compared with those still enrolled during the fourth term to ascertain whether drop-outs, in significantly larger proportions, reported as entering freshmen less parental approval of choice of school.

Table 24 presents the results.

In excess of 85 percent of students at both schools, whether drop-outs or still enrolled, reported that the father approved of the choice of school. For drop-outs from the community college, a slightly higher proportion (89.3 percent) reported approval than of those still enrolled (86.4 percent). The reverse occurred for technical institute students with 87.6 percent of drop-outs reporting approval and 90.1 percent of those still enrolled reporting approval. In all, variations were negligible. The proportional variation between categories reporting opposition is in the expected direction with 1.4 percent of drop-outs as compared to .6 percent of those still enrolled. In the technical institute proportions of both groups were the same at .6 percent. In any case the proportions were so low that few students were involved.

TABLE 24. Percent of Freshmen Indicating Attitude of Father Towards Choice of School by Institution and Dropping Out and Still Enrolled During Fourth Term

	Community College				Technical Institute				
	N	Percent	Approved	Neither	Opposed	Neither	Approved	Opposed	Neither
Dropped Out	140	89.3	1.4	5.0	303	87.6	.6	5.6	
Still Enrolled	161	86.4	.6	5.6	151	90.1	.6	2.5	
No Data	2	100.0			32				
Total	303	87.8	1.0	5.3	486	88.5	.6	4.5	

¹ Percent less than 100 indicates rate of no response

As is evident in Table 25, over 90 percent of all students, whether classified as drop-out or still enrolled, in the community college or technical institute, reported mothers approved the choice of school. Slight variations occurred, but in no consistent direction.

Over 80 percent of all categories, except of community college drop-outs (78.6 percent) reported approval of friends. Students still enrolled in both schools consistently had a slightly higher proportion reporting approval than did drop-outs (community college, 83.9, as to 78.6; technical institute 85.2 as to 84.8). Variations were very slight, however, and although a slightly larger proportion (2.1 percent) of community college drop-outs reported opposition than did those still enrolled (1.2 percent), the variation was in the reverse direction for technical institute students (drop-outs 1.2 and still enrolled, 1.9 percent). A slightly larger proportion of drop-outs at both schools reported friends as being neutral (community college 15.7 percent; technical institute, 10.2) than did those still enrolled (community college, 13.0; technical institute, 9.3 percent).

No significant differences appeared when data pertaining to the attendance of friends and relatives at the same school were analyzed. As indicated in Tables 27 and 28, over 80 percent of all students indicated friends were attending the same school. Compared with distributions for the total population, proportional variations for both the community college and technical institute between drop-outs and still enrolled were very slight and in all likelihood chance occurrences.

Summary

In summary, of freshmen in the community college and technical institute:

1. Over ninety percent were 25 years of age or less;
2. Slightly over 1/2 were male;
3. With a single exception over 90 percent in each curriculum were single;
4. Approximately 3/4 were from families where the breadwinner was employed in sales, clerical, skilled, semi-skilled and unskilled occupations;
5. About 70 percent reported that the highest level of parents' education was high school or less;
6. Over 85 percent reported approval of parents at choice of school, and 80 percent reported approval of friends.

TABLE 25. Percent of Freshmen Indicating Attitude of Mother Towards Choice of School by Institution and Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College				Technical Institute			
	N	Percent ¹	Percent	Neither	N	Percent	Opposed	Neither
Dropped Out	140	93.6	1.4	2.9	10	91.7	.3	4.0
Still Enrolled	161	90.7	1.9	5.0	157	92.0	.6	3.7
No Data	2	100.0			19			
Total	303	92.1	1.7	4.0	486	91.8	.4	3.9

¹ Percent less than 100 indicates rate of no response

TABLE 26. Percent of Freshmen Indicating Attitude of Friends Towards Choice of School by Institution and Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College				Technical Institute			
	N	Approved Percent ¹	Opposed Percent	Neither Percent	N	Approved Percent	Opposed Percent	Neither Percent
Dropped Out	140	78.6	2.1	15.7	311	84.8	1.2	10.2
Still Enrolled	161	83.9	1.2	13.0	156	85.2	1.9	9.3
No Data	2	100.0			19			
Total	303	81.6	1.7	14.2	486	85.0	1.4	9.9

¹ Percent less than 100 indicates rate of no response

TABLE 27. Percent of Freshmen Reporting Friends Attending Same School by Institution and By Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College			Technical Institute		
	N	Friends Attending Yes Percent	Friends Attending No Percent	N	Friends Attending Yes Percent	Friends Attending No Percent
Dropped out	134	89.6	10.4	308	83.8	14.6
Still Enrolled	159	90.6	8.2	159	84.9	12.6
No Data	2			1	100.0	
Total	295	90.2	9.2	468	84.2	13.9

¹ Percent less than 100 indicates rate of no response

TABLE 28. Percent of Freshmen Reporting Relatives Attending Same School by Institution and By Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College			Technical Institute		
	N	Relatives Attending Yes Percent ¹	Relatives Attending No Percent	N	Relatives Attending Yes Percent	Relatives Attending No Percent
Dropped Out	139	14.3	85.6	321	15.0	80.1
Still Enrolled	161	17.9	82.0	162	18.5	80.2
No Data	2			1		
Total	302	16.2	83.8	484	16.1	80.2

¹ Percent less than 100 indicates rate of no response

Of freshmen who subsequently dropped out of the curriculum:

1. The larger proportion were men, with the disproportion being statistically significant for technical institute drop-outs;
2. They had been somewhat more frequently enrolled in business administration and secretarial science at the community college, and business administration and electrical technology at the technical institute;
3. The proportional distribution in the three scholastic categories indicated that scholastic aptitude may be somewhat more related to dropping out from the technical institute than from the community college. In neither school, however, was it significantly related;
5. They were heterogeneous with reference to socioeconomic status and did not differ significantly on this variable from those still enrolled;
6. Over 80 percent of drop-outs as well as those continuing reported that as freshmen, parents and the majority of friends approved of the choice of school.

CHAPTER III

ENVIRONMENTAL PRESS AND STUDENT PERSONALITY FACTORS

As indicated previously, the College Characteristics Index and The Activities Index, both developed by George Stern were used as measures of environmental press and student personality factors. Each index is made up of 30 scales, each composed of ten items. During the development of the measures, analysis indicated the existence of a smaller number of factors. Stern describes the development fully. (Stern, 1970).

College Characteristics Index

The College Characteristics Index is composed of three hundred statements about college life. Statements refer to the curriculum, teaching, classroom activities, to rules and regulations, to student organizations and activities and interests, to features of the campus and so on. Respondents express their opinion as to whether the statement is probably true or probably false about the college. First-order college environment factors measured are:

Work Play: It reflects an absence of activities associated with dating, athletics, and other forms of collegiate play or amusement.

Non-Vocational Climate: In its reversed form the items reflect opportunities to engage in theoretical, artistic, and other "impractical" activities. Other items imply an absence of expectation, coercion, or demands for student conformity to conventional values.

Aspiration Level: A high score on this factor indicates that the college encourages students to set high standards for themselves in a variety of ways. These include opportunities for students to participate in decision-making processes involving the administration of the school, and administrative receptivity to change and innovation, thus implying that a student's efforts to make some

impact on his environment have some probability of being successful. But a high level of aspiration is also encouraged by introducing students to individuals and ideas likely to serve as models of intellectual and professional achievement.

Intellectual Climate: All of the various items contributing to this factor reflect the qualities of staff and plant specifically devoted to scholarly activities in the humanities, arts, and social sciences.

Student Dignity: This factor is associated with institutional attempts to preserve student freedom and maximize personal responsibility. Schools with high scores on this factor tend to regulate student conduct by means other than legislative codes or administrative fiat. There is a minimum of coercion and students are generally treated with the same level of respect accorded any mature adult.

Academic Climate: This factor stresses academic excellence in staff and facilities in the conventional areas of the natural sciences, social sciences, and the humanities.

Academic Achievement: Schools high in this factor set high standards of achievement for their students. Course work, examinations, honors, and similar devices are employed for this purpose.

Self-Expression: The last of the factors in this area is concerned with opportunities offered to the student for the development of leadership potential and self assurance. Among the activities serving this purpose are public discussions and debates, projects, student drama and musical activities, and other forms of participation in highly visible activities.

Non-Intellectual Climate: This area shares the self-expression factor with the preceding one. The highest loadings, however, are connected with three factors involving a high level of organization of student affairs, both academic and social. The

remaining two factors are associated with student play and an emphasis on technical and vocational courses.

Group Life: The four scales on this factor are concerned with various forms of mutually supportive group activities among the student body. These activities are of a warm, friendly character, more or less typifying adolescent togetherness, but the items also reflect a more serious side to this culture as represented in activities devoted to the welfare of fellow students and less fortunate members of the community.

Academic Organization: The various components of this factor may be regarded as the environmental counterparts of the needs for orderliness and submissiveness in the individual. High scores on this factor are achieved by institutions which stress a high degree of organization and structure in the academic environment.

Social Form: In some respects this factor represents the formal institutionalization of those activities represented in Group Life. There is in fact considerable overlap between these two factors, but Factor 9 minimizes the friendly aspects of Factor 7 while stressing its welfare components. Schools characterized by this factor also offer opportunities for the development of social skills of a formal nature and in some respects suggest the finishing school counterpart of the vocational climate represented in Vocational Climate.

Play-Work: Schools high in this factor offer opportunities for participation in a form of collegiate life reminiscent of the popular culture of the 1920's. These are the institutions sometimes referred to as the fountains of knowledge where students gather to drink.

Vocational Climate: The last of the non-intellectual factors is also shared with the intellectual climate area. The items of Factor 11 emphasize practical, applied

activities, the rejection of aesthetic experience, and a high level of orderliness and conformity in the student's relations to the faculty, his peers, and his studies. (Stern, 1963).

Activities Index

Stern's Activities Index contains three hundred brief statements describing many different kinds of activities. The respondent checks whether the item describes an activity or event that he would like, enjoy, or find more pleasant than unpleasant, or whether the item describes an activity or event that he would dislike, reject or find more unpleasant than pleasant. First order student personality factors measured are:

I. Intellectual Orientation: This dimension consists of five factors. Two of these involve, as might be expected, intellectual interests and achievement motivation. Two others are concerned with the maintenance of a high level of intellectual and social aggressiveness, suggesting that intellectuality is partially a function of ego strength. The last of these five factors is based primarily on items reflecting an interest in the development of useful, applied skills.

Self-Assertion: This factor reflects a need to achieve personal power and sociopolitical recognition. It is based on items which emphasize political action, directing or controlling other people, and the acceptance of roles involving considerable group attention.

Audacity-Timidity: The second factor is more personally than socially oriented. The emphasis here is on aggressiveness in both physical activities and in interpersonal relationships. It is of interest that this personal aggressiveness should also be associated with a high level of interest in science.

Intellectual Interests: The factors with the highest loadings in this dimension are based on items involving various forms of intellectual activities. These include

interests in the arts as well as the sciences, both abstract and empirical.

Motivation: This factor, like 1 and 2 above, represents another form in which need achievement may be expressed. Here, however, are the more conventional forms of striving most recognizable among students, involving elements of competitiveness and perseverance as well as of intellectual aspiration.

Applied Interests: A high score on this factor suggests an interest in achieving success in concrete, tangible, socially acceptable activities. The items involve orderly and conventional applications in business and science.

II. Dependency Needs: This dimension is based on seven factors. It starts with the orderly aspects of applied interests, carries these to a more explicitly compulsive level of personal organization, and then shades off into submissiveness. This, in turn, when shorn of its more self-abusive qualities, becomes reconstituted in the last factor of this dimension as emotional closeness.

Constraint-Expressiveness: This is the inverse of Factor 11 in area III below. Moderately high scores suggest guardedness and emotional constriction. Extreme scores are likely to be associated with high levels of inhibition, defensiveness and rigidity.

Diffidence-Egoism: Reversed scores on Factor 12 reflect a lack of preoccupation with the self as a source of gratification. This implies good contact and reality testing, although very high scores may perhaps be associated with a tenuous, underdeveloped ego structure and a vague or obscurely-defined self-concept.

Orderliness: People with high scores on this factor have indicated a marked interest in activities stressing personal organization and deliberativeness. Although some of the items are concerned with long range planning and relatively

high level time perspective, the major emphasis here is on the maintenance of ritual and routine and the avoidance of impulsive behavior.

Submissiveness: The preceding factor suggests a strong defensive system, based on rigid internal controls, for guarding against the expression of impulses. The Submissiveness factor also implies a high level of control, but one which is based on social conformity and other-directedness.

The items emphasize humility, deference, getting along with others, keeping in one's place, etc. It is of interest that the Nurturance scale items should appear in this context, suggesting that the submissive individual's interest in supportive activities is based to a considerable extent on his own unexpressed need for such help.

Timidity-Audacity: This is the inverse of Factor 2 described previously under Intellectual Orientation. In its reversed form it suggests a concern with any risk of danger to the self, whether physical, psychological, or social. These people avoid sports, social activities, and even fantasies which might conceivably incur harm or blame.

Closeness: This factor is closely related to Factor 7, with which it shares both the Nurturance and Deference scales. However, the abasive and self-denying qualities implicit in Factor 7 are absent here. In their place is an acceptance of items which recognize one's needs for warmth and emotional supportiveness.

III. Emotional Expression: This dimension shares the Closeness factor with the preceding area, but the remaining five factors with loadings on this dimension stress much higher levels of social participation and emotional spontaneity. The last one of this group, Self-Assertion, is shared with the intellectual area, thus bringing the circle to a close.

Sensuousness: The thirty items associated with this factor are concerned with activities of a sensual character. The items suggest a measure of self-indulgence along with a delight in the gratifications which may be obtained through the senses.

Friendliness: Persons with high scores on this factor are indicating an interest in playful, friendly relationships with other people. These interests involve simple and uncomplicated forms of amusement enjoyed in a group setting.

Expressiveness-Constraint: This factor stresses emotional ability and freedom from self-imposed controls. Individuals with high scores on this factor are outgoing, spontaneous, impulsive, and uninhibited.

Egoism-Diffidence: This factor reflects an extreme preoccupation with self. The items are concerned with appearance and comfort, as well as with fantasies in which the self obtains unusually high levels of gratification. The responses to other items in this group suggest that reality itself is interpreted in egocentric terms, but this may be not so much a matter of autistic distortion as of narcissistic egoism.

IV. Educability: There is a fourth dimension to be extracted in this second-order space of considerably less magnitude than the preceding three. It is of intrinsic interest to the educator, however, insofar as it combines elements of both intellectuality and submissiveness. As can be seen in Figure 1, it excluded the more self-assertive aspects of intellectual orientation on the one hand, and the most self-denying, inhibited aspects of Dependency Needs. Insofar as scores on this dimension reflect a strong interest in intellectual activities, coupled with orderliness and conformity, it seems likely that this factor is specifically associated with academic achievement. A score for this dimension may be obtained by summing

the values for Factors (3) Intellectual Interests, (4) Motivation, (5) Applied Interests, (6) Orderliness, and (7) Submissiveness. No norms are available as yet for the interpretation of this dimension, however. (Stern, 1963).

Freshmen

Environmental Press: Total Population

Mean scores on the factors of the College Characteristics Index for freshmen in the community college and the technical institute appear in Table 29.

TABLE 29. College Characteristics Index Factor Mean Scores of Freshmen Students by Institution

FACTOR	N=303	Community College		Technical Institute	
		\bar{X}	SD	\bar{X}	SD
Work-Play		14.22	4.84	14.53	4.64
Non-Vocational Climate		20.16	4.68	19.38	5.14
Aspiration Level		24.12	4.54	24.47	4.32
Intellectual Climate		31.73	6.92	30.68	6.86
Student Dignity		17.82	4.12	16.31	3.68
Academic Climate		13.78	3.74	13.86	3.51
Academic Achievement		35.87	6.37	35.39	6.25
Self Expression		28.40	5.39	27.77	5.41
Group Life		26.90	4.50	27.91	4.72
Academic Organization		36.24	6.22	36.10	5.99
Social Form		31.59	5.98	33.67	5.71
Play-Work		25.78	4.84	25.47	4.64
Vocational Climate		29.84	4.68	30.62	5.14

Figure 1 shows the factor score profile for the two categories of freshmen.

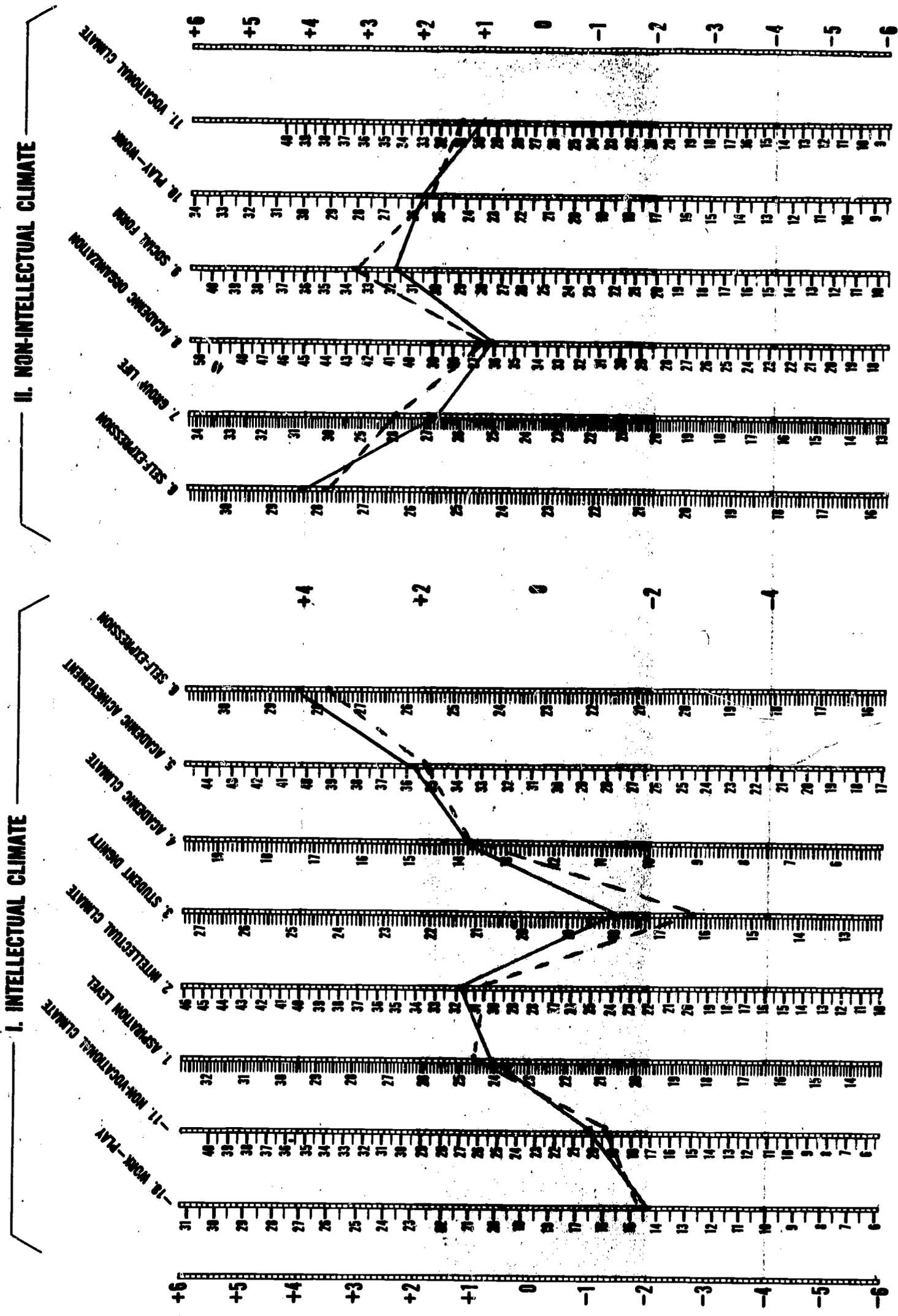
The high degree of similarity in the expectations held by both groups is evident. The largest differences in factor means occurred for social form (2.08), student dignity (1.51), intellectual climate (1.05) and group life (1.01). Community college freshmen had the higher mean scores on Intellectual Climate and Student Dignity. Thus community college freshmen expected an environment somewhat more oriented to scholarly activities and to treating students as mature adults than did technical institute students. Technical institute students more than community college students expected an environment which would be more oriented to concern for the welfare

FIGURE 1. Freshmen: Community College and Technical Institute

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



CC - N = 303
 TI - N = 486

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of students and to provide opportunities for developing social skills of a formal nature. The variances were small, however, and thus the serious question as to the extent to which these have educational import.

In terms of the pronounced similarities, both community college and technical institute freshmen expected environments highly supportive of academic achievement; opportunities for developing leadership potential and self assurance; activities conducive to warm, friendly relationships and the welfare of students; and lastly opportunities for participating in a form of collegiate life involving play activity, amusements, athletics and so on. Expectations of both groups were approximately 1 standard score above the normative means (derived from juniors and seniors) for aspiration level, intellectual and academic climates, academic organization and vocational climate. Mean scores were below the normative means on the three factors of work-play, non-vocational climate, and student dignity. The correlation coefficient computed for the two sets of 30 scale mean scores was .963 and significant beyond the .01 level. In brief the similarities in expectations of the two groups for environmental press were far more pronounced than the differences.

Personality Need Factors:
Total Population

Factor mean scores on the Activities Index for men and women in each school are reported in Table 30.

TABLE 30. Activity Index Factor Mean Scores of Freshmen Students By Sex and Institution

FACTOR	Community College		Technical Institute	
	Men	Women	Men	Women
	N= 108	130	274	212
Self-Assertion	20.63	16.65	19.86	16.39
Audacity-Timidty	21.70	15.16	21.77	14.67
Intellectual Interests	21.83	21.19	21.04	21.47
Motivation	24.94	24.24	24.96	24.16
Applied Interests	17.03	17.22	16.76	16.54
Orderliness	18.34	21.55	18.65	20.12
Submissiveness	21.93	25.83	20.74	24.38
Closeness	24.18	29.20	22.51	28.96
Timidity-Audacity	18.29	24.84	18.20	25.33
Constraint-Expressiveness	20.83	18.23	21.51	18.01
Diffidence-Egoism	17.48	18.13	17.87	18.18
Sensuousness	15.70	18.91	15.16	19.22
Friendliness	13.18	13.76	13.37	14.54
Expressiveness-Constraint	19.40	21.77	18.49	22.20
Egoism-Diffidence	12.52	11.87	12.13	11.81

Figure 2 is of the Factor Score Profiles.

Men: A comparison of male freshmen mean scores in the two schools showed that only on two factors did differences of factor mean scores exceed one point, i.e., on closeness (1.67) and submissiveness (1.19), and in each case community college men had the higher mean scores. The correlation coefficient computed for scale mean scores was .96 significant beyond the .01 level. From Figure 1 it can be seen that profiles of the two groups of men were more alike, than were either similar to the profiles for women respondents from each school.

Relative to intellectual orientation, both groups were above the normative mean on the audacity-timidity factor, approximated the mean on self-assertion and were 1 standard score below the mean on applied interests. Both groups were considerably below the normative range in intellectual interests and motivation.

With reference to factors related to dependency needs, community college men were above the mean on closeness, with technical institute men slightly below. Both groups had means below the normative mean but still within the range of 68 percent of all respondents on applied interests, submissiveness and timidity-audacity. Mean scores on the factors constraint-expressiveness and diffidence-egoism were considerably below the normative mean and range of response.

Relative to emotional expression both groups had means within the normative range on closeness and self-assertion factors, and on the upper boundary at a standard score of +2 and slightly above, on friendliness. Scores on the factors of sensuousness, expressiveness-constraint, and egoism-diffidence exceeded the normative mean with standard scores between +3 and +6.

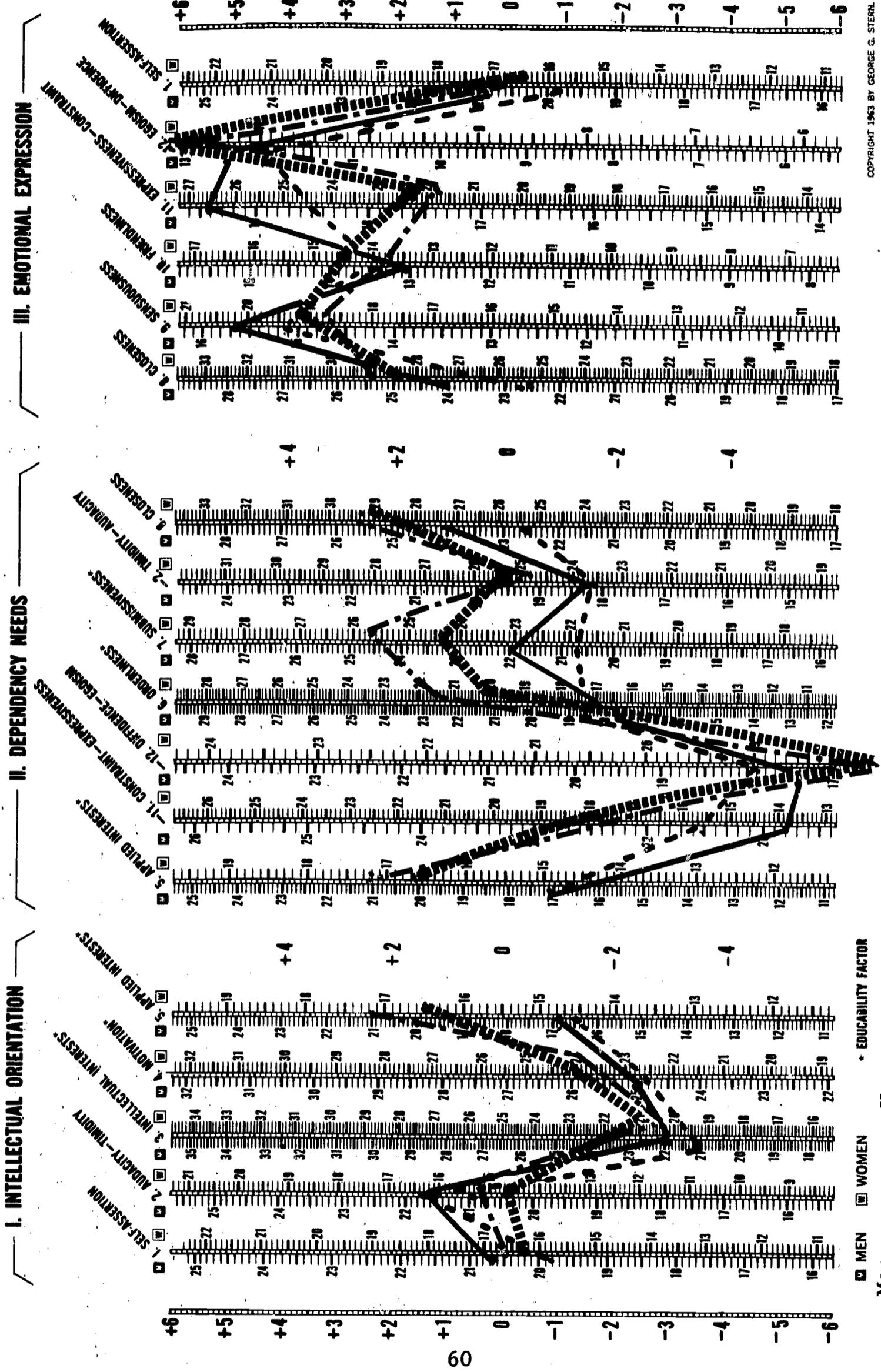
Generally, both groups of male students were close to the norm in self-assertion and aggressiveness in both physical and social relations, have fewer intellectual interests and lower motivation, and were interested in achieving success in concrete, socially acceptable activities calling for practical applications. In relation to dependency needs, factor scores indicate that each were on most factors in a range of 68 percent of the normative group respondents. The major exceptions suggesting these students to be less constrained and inhibited, more expressive and more concerned with the self as a source of gratification. Similarly factor scores on sensuousness indicate a measure of self-indulgence and delight in gratifications which may be obtained

FIGURE 2. Freshmen at Community College and Technical Institute by Sex

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A1)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



through the senses; while factor scores on expressiveness-constraint suggest outgoing spontaneous, impulsive and uninhibited behavior, with somewhat extreme preoccupation with self gratification. On each of these three factors, community college students expressed these needs somewhat more so than did technical institute men.

Women: Examining data for freshmen women for the two schools, it was found that in their intellectual orientation, on factors of self-assertion, audacity-timidity and motivation both groups were very much the same; deviated only slightly from the normative mean on the first two factors and were below the mean but within the range of 68 percent of normative groups on the third. On the factor of intellectual interests mean scores were lower than those for 68 percent of the normative groups; while on applied interests mean scores were between 1 and 2 standard scores above the normative mean.

Relative to dependency needs, both groups of women freshmen had factor mean scores within the range of 68 percent of normative scores on constraint-expressiveness, orderliness and timidity-audacity. Women in the community college had factor means which in standard scores were slightly above +2 on applied interests, submissiveness. Women in the technical institute had slightly lower mean scores. On the factor of closeness mean scores for both exceeded +2. Both groups had factor mean scores beyond -6 on diffidence-egoism, indicating preoccupation with the self as a source of gratification. This is reflected also, in the mean score of +6 for both groups on the egoism-diffidence factor.

As did male students, women in both schools had high factor mean scores on the sensuousness factor, though slightly lower than for men. Factor mean scores in standard score terms slightly exceed +2 and +3 on friendliness. On expressiveness-constraint and self-assertion factor means for both groups were within the range of 68 percent of those of normative groups. The correlation coefficient between scale mean scores for community college women and technical institute women was .96 significant beyond the 1 percent level.

Comparing men and women freshmen generally, the two are about the same on self-assertion, women were slightly less aggressive than men, had more intellectual interests, motivation, and applied interests; tended to be more constrained, more inhibited and slightly more preoccupied with self. Women tended towards greater orderliness, to be more submissive, slightly more concerned with risk of danger to the self, and more accepting of needs for warm supportive interpersonal relationships. Men were higher on sensuousness and overlaps

occurred for friendliness, in that community college women were higher than community college men, but these two were slightly lower than technical institute men who in turn were lower than women in the institute. This was the only personality need factor on which variations within school populations were smaller than variations between sexes.

Environmental Press and Personality
Need Factors

As a measure of relationship between expectations of freshmen for the environment and personality need factors, correlation coefficients were computed between mean scale scores on the 30 scales on the College Characteristics Index and the 30 scales on The Activities Index for men and for women. Correlation coefficients between mean scale scores of all freshmen on the environment index and mean scores on the Activities Index were as follows:

<u>Community College Freshmen</u>	Product-Moment Correlation Coefficient
CCI Mean Scale Scores with Male AI Mean Scale Scores	.329
CCI Mean Scale Scores with Female AI Mean Scale Scores	.462
<u>Technical Institute Freshmen</u>	
CCI Mean Scale Scores to Male AI Mean Scale Scores	.330
CCI Mean Scale Scores to Female AI Mean Scale Scores	.477

All were significant beyond the .02 level with 58 degrees of freedom.¹ Statistically significant correlations were low but positive.

Examining relationships in terms of factors, congruence between personality needs and expectations for environmental press seemed to exist in these areas. Mean

¹Mean press scores and mean activities scale scores of business administration and electrical technology students were combined as 60 paired observations, for males. Both curricula had a very small number of women. Mean scale scores for nurse and secretarial science students were combined similarly to measure the relationships for women students.

factor scores on closeness, sensuousness, friendliness, expressiveness, constraint and egoism-diffidence seemed consistent with expectations for an environment highly supportive of group life, social form, self-expression, and play, while less apt to treat the student as a mature adult, as indicated by lower mean scores on the Student Dignity Factor.

Personality need factors of orderliness, submissiveness and applied interests appeared to be reciprocated in similar level expectations for academic organization and vocational climate, and the lower expectations relative to non-vocational climate.

Areas of dissonance were suggested in that mean factor scores on intellectual interests and motivation as personality factors were lower than the level of expectations for environmental press factors of aspiration, intellectual and academic climate and academic achievement.

Fourth Term Students

Environmental Press: Total Population

A comparison of community college and technical institute fourth term students perceptions of environmental press found variations in the two schools in contrast to the high degree of similarity among expectations of students entering each school. Factor mean scores of community college students were, on every factor, within the range of 68 percent of all responses of normative groups. Six of the thirteen factor mean scores for technical institute students were outside this range and were below the normative means. These factors were: aspiration level, intellectual climate, student dignity, academic climate, academic achievement and self-expression.

Table 31 reports the factor mean scores for each school. Differences in factor mean scores were largest for intellectual climate (6.19), self expression (5.37), academic achievement (5.36), academic climate (3.28), student dignity (3.26), non-vocational (2.87), and vocational (2.87) climate. Means for the community college were higher on six of the factors and lower on vocational climate. The correlation coefficient between the 30 scale mean scores of fourth term students at the community college and those at the technical institute was .61, with 28 d.f., significant beyond the 1 percent level. In brief, these findings suggest that the environmental press did differ in the two institutions with the community college press perceived by students as: providing more opportunities to engage in theoretical and artistic activities;

TABLE 31. College Characteristics Index Factor Mean Scores Fourth Term Students by Institution

FACTOR	Community College			Technical Institute		
	Fourth Term Students			Fourth Term Students		
	N-91	X	SD	N=193	X	SD
Work-Play		15.85	5.32		17.89	5.07
Non-Vocational Climate		22.76	4.56		19.89	5.27
Aspiration Level		20.94	4.38		18.82	5.38
Intellectual Climate		27.28	7.93		21.09	6.86
Student Dignity		20.35	4.79		17.09	4.51
Academic Climate		12.31	4.19		9.03	3.97
Academic Achievement		28.82	7.34		23.46	8.20
Self-Expression		22.36	6.35		16.99	6.08
Group Life		23.16	4.94		23.30	5.30
Academic Organization		32.35	6.38		31.26	6.26
Social Form		23.71	6.19		24.82	6.10
Play-Work		24.15	5.32		22.11	5.07
Vocational-Climate		27.24	4.56		30.11	5.27

making somewhat fewer demands for student conformity to conventional values; encouraging students to set high standards for themselves in a variety of ways; being more supportive of scholarly activities; being more supportive of preserving student freedom and maximizing personal responsibility, stressing academic excellence in the conventional areas of the natural sciences, social sciences and humanities; and being more supportive in providing opportunities for students to develop leadership potential and self assurance. All of these factors contribute to the intellectual climate aspect of press. In the non-intellectual aspects of press, the two schools were much alike with the technical institute being somewhat higher on the factors of social form and vocational climate. Inasmuch as the factor, self-expression, contributes to both the intellectual and non-intellectual climate, variations described earlier continue to apply.

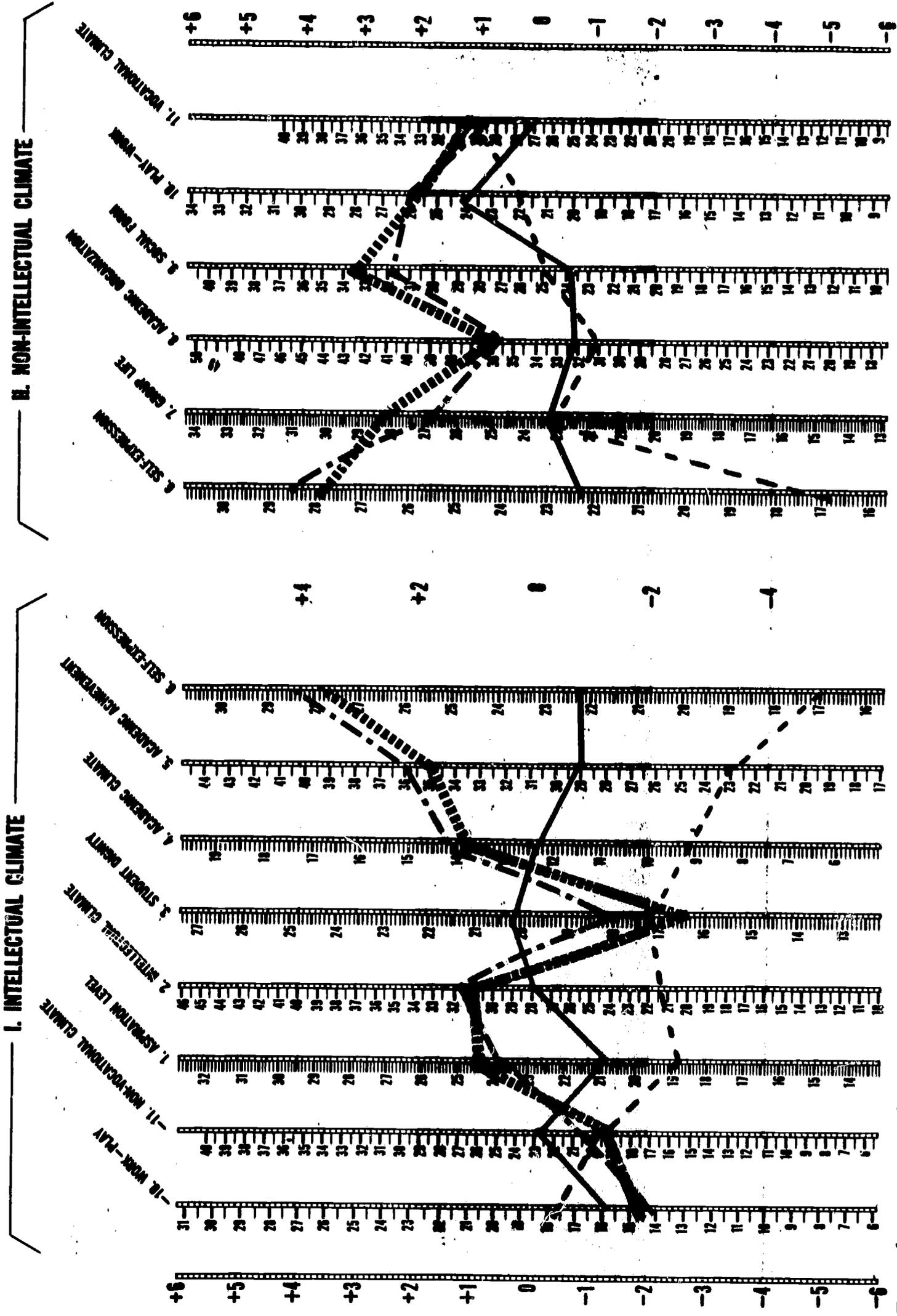
Compared to Freshmen: Figure 3 shows the profiles of freshmen and fourth term students in both schools. Freshmen expectations for intellectual climate were somewhat higher than what they would describe later as experience in aspiration levels, intellectual climate and academic climates and were considerably higher for academic achievement and self expression factors. Expectations were lower in areas of work, non-vocational climate and student dignity. With the exception of the non-vocational and student dignity factors, discrepancies between freshmen expectations and fourth term perceptions were greater for technical institute students than for community college students.

FIGURE 3. Freshmen and Fourth Term Students at Community College and Technical Institute

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



Fourth Term Students

CC - N = 91

TI - N = 193

Freshmen

CC - N = 303

TI - N = 486

In the non-intellectual climate, expectations of freshmen at the technical institute were almost the same as later perceptions for the vocational climate. Discrepancies existed for all other factors with the largest being for technical institute students on the factor of self-expression. Adjustments in all areas, but self-expression, brought freshmen expectations, through experience in each institution, to levels of approximately +1 or -1 of the normative means.

Mean scale scores of community college freshmen were paired with mean scale scores of fourth term students and a correlation coefficient computed. The coefficient was .82, significant beyond the .01 level. Following a similar procedure for technical institute students, mean scale scores of freshmen and fourth term students correlated at .38 significant at the .05 level.

Personality Need Factors:
Total Population

Men: Analysis of factor mean scores on the Activities Index for men in the fourth term at the community college found that scores, in terms of standard scores: exceeded by +1 or more, those of the normative samples on audacity-timidity, sensuousness, friendliness, expressiveness-constraint, and egoism-diffidence; were less than -1 or more than the normative sample on intellectual interests, motivation, constraint-expressiveness, diffidence-egoism, orderliness, submissiveness, and timidity-audacity.

Fourth term male students at the technical institute had factor mean scores which exceeded by +1 or more those of normative samples on audacity-timidity, closeness, sensuousness, friendliness, expressiveness-constraint, and egoism-diffidence. Mean factor scores converted to standard scores were -1 or more than normative samples on intellectual interests, applied interests, constraint-expressiveness, diffidence-egoism, orderliness, and timidity-audacity. Table 32 reports factor mean scores. Both groups, in brief, deviated from the norms in the same direction on each factor although to varying degrees. (See Figure 4).

Differences in factor mean scores between the community college men and technical institute men which exceeded 1.5, in rank order from largest to smallest differences, were on submissiveness, egoism-diffidence, and diffidence-egoism. Technical institute students had the higher scores indicative of being slightly more submissive and diffident than community college students.

TABLE 32. Activities Index Factor Mean Scores of Fourth Term Students by Sex and Institution

FACTOR	N=	Community College		Technical Institute	
		Men 34	Women 57	Men 85	Women 108
Self-Assertion		20.85	17.79	20.73	17.56
Audacity-Timidty		23.15	16.61	21.99	16.52
Intellectual Interests		24.18	23.21	23.08	21.14
Motivation		25.65	23.99	25.78	22.68
Applied Interests		17.91	16.98	16.97	15.05
Orderliness		18.38	20.16	17.17	17.82
Submissiveness		19.53	22.51	21.33	23.06
Closeness		23.56	26.89	23.99	28.86
Timidity-Audacity		16.85	23.39	18.01	23.48
Constraint-Expressiveness		20.79	19.07	20.01	16.13
Diffidence-Egoism		16.62	18.54	18.39	17.66
Sensuousness		16.68	16.86	15.95	19.92
Friendliness		12.91	13.35	14.00	14.26
Expressiveness-Constraint		19.20	20.93	19.99	23.87
Egoism-Diffidence		13.38	11.33	11.57	12.34

Women: A similar comparison of factor mean scores for women in both schools showed that women in the community college (see Figure 4) exceeded by +1 or more, normative means on self-assertion, audacity-timidty, applied interests, sensuousness, friendliness, and egoism-diffidence. Mean factor scores were -1 or more than the normative means on intellectual interests, motivation, diffidence-egoism, and timidity-audacity.

Women in the technical institute had factor mean scores exceeding by +1 or more normative means on audacity-timidty, closeness, sensuousness, friendliness, expressiveness-constraint, and egoism-diffidence. Factor mean scores were -1 more than normative means on intellectual interests, motivation, constraint-expressiveness, diffidence-egoism, orderliness, and timidity-audacity.

The two groups differed in the direction of variation from normative means on the factors of applied interests and orderliness. Further, the two groups differed in the degree of variation from normative means. The variation was most pronounced for factors which pertained to emotional expression, with community college students having mean factor scores within the range of 68 percent of normative respondents on five of the six factors, as compared to one factor (self-assertion) for technical institute students.

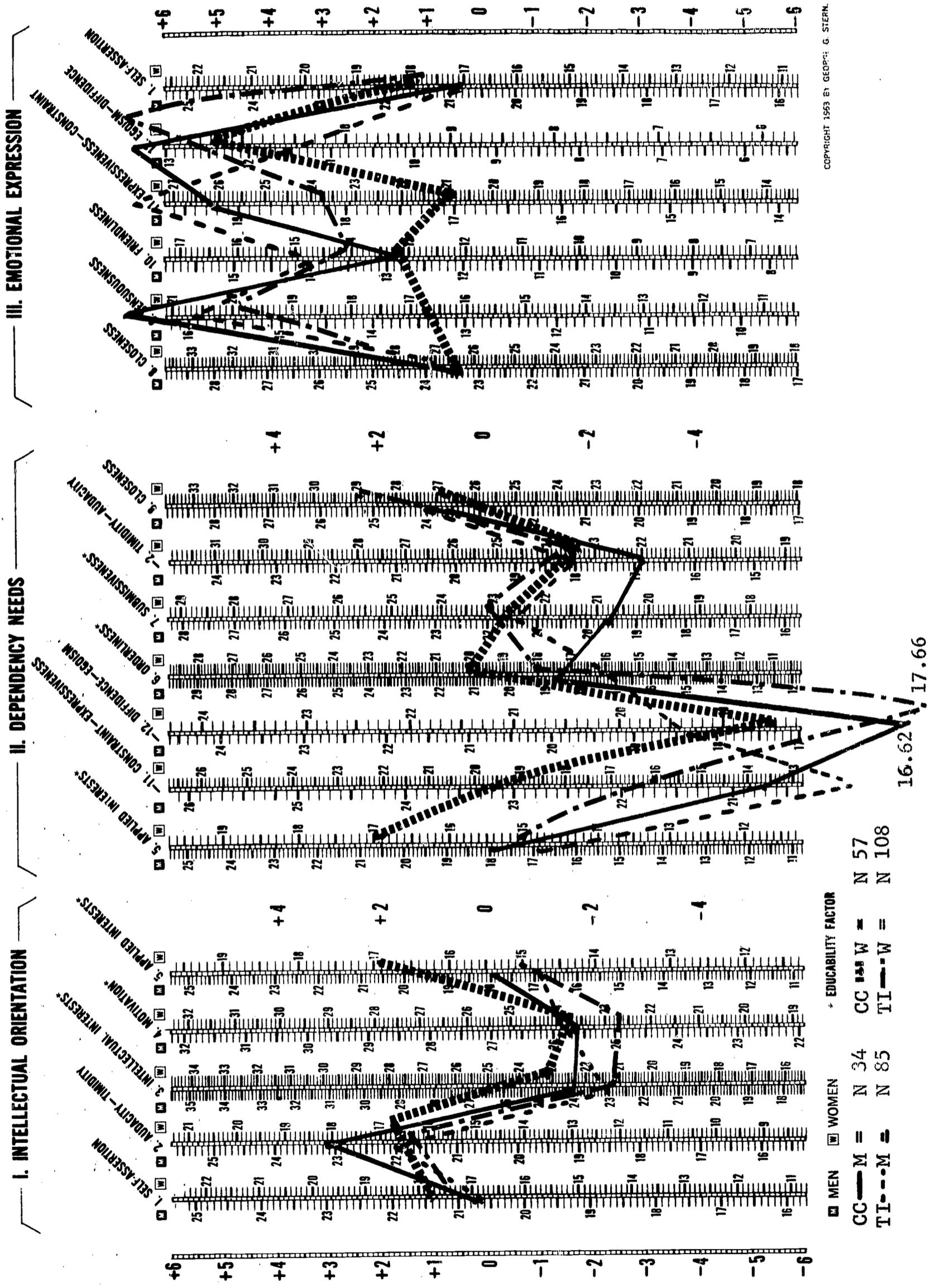
Note on Table 32, differences in raw factor mean scores between community college women and technical institute women, which exceeded 1.5, in rank order from

FIGURE 4. Fourth Term Students at Community College and Technical Institute by Sex

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A1)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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largest to smallest were on sensuousness, constraint-expressiveness, expressiveness-constraint, orderliness, intellectual interests, closeness, and applied interests. Community college students tended towards more constraint, orderliness, slightly more intellectual and applied interests than technical institute students.

Compared to Personality Needs as Freshmen: A comparison of factor mean scores for freshmen, Table 30, with those of fourth term students, Table 32, showed that the factor mean scores for men in both schools related to intellectual orientation increased for fourth term students. Increases in factor mean scores for community college students exceeded 1 for audacity-timidity and intellectual interests at 1.45 and 2.35 respectively. For technical institute men differences in factor mean score of fourth term students exceeded that for freshmen by more than 1 on the factor intellectual interests (2.04). On factors related to dependency needs, differences in means for community college students showed decreases on all but orderliness, with the range of decreases from 2.40 (submissiveness) to .04 (constraint-expressiveness). Differences in factor means for technical institute men showed increases in means except on orderliness and constraint-expressiveness which decreased by 1.48 and 1.50 respectively. The range of increases was narrow from .59 to .20. In the area of emotional expression, no consistent direction was evident for differences which ranged from 1.55 to .20. Correlation coefficients computed for scale mean scores obtained by freshmen and fourth term students in each curriculum in the two schools ranged from .94 to .86 with 28 df and were all significant beyond the 1 percent level.

In sum, for men, factor mean scores of freshmen did vary from those obtained as fourth term students. The degree of variation however was comparatively slight in most instances.

Comparisons of scores of freshmen women with those scores obtained as fourth term students in both schools found that for community college women, factor mean scores increased for factors of self-assertion, audacity-timidity, intellectual interests, constraint-expressiveness, and diffidence-egoism. Increases in factor mean scores ranged from 2.02, for intellectual interests to .41 for diffidence-egoism. Mean scores decreased on factors of motivation, applied interests, orderliness, submissiveness, closeness, timidity-audacity, sensuousness, friendliness, expressiveness-constraint, and egoism-diffidence. The decreases ranged from 3.32 for submissiveness to .24 for applied interests. Factor mean scores of closeness and sensuousness decreased 2.31 and 2.05 respectively. Correlation

coefficients computed between scale mean scores of freshmen and fourth term students in each of the two curricula predominately women were .88 and .92 with 28 df, significant beyond the 1 percent level.

For technical institute women, factor mean scores as fourth term students increased from those derived as freshmen on factors, self-assertion, audacity-timidity, sensuousness, friendliness, expressiveness-constraint and egoism-diffidence. Increases in scores ranged from 1.85, on audacity-timidity, to .28 on friendliness. Scores decreased on intellectual interests, motivation, applied interests, orderliness, submissiveness, closeness, timidity-audacity, constraint-expressiveness, and diffidence-egoism. Range of decreases were from 2.30 for orderliness to .10 for closeness. No other differences in factor mean scores exceeded 2 points except for orderliness. Consistent with the slight observable variations, correlation coefficients computed between scale mean scores for freshmen and fourth term students for the two curricula predominately composed of women, were .93 and .94 significant beyond the .01 level.

In conclusion, when personality need factors reported as freshmen were compared with those reported as fourth term students, the greater tendency observable was for stability of needs. Variations did occur both within institutions between men and women and between institutions. For men in both schools, factor mean scores relative to the intellectual orientation increased from freshmen to fourth term students; whereas for women in the community college slight decreases occurred on two factors, and for women in the technical institute decreases occurred on three factors.

In the dimension of dependency needs, factor mean scores for community college students decreased from the freshmen to fourth term except on orderliness and applied interests; for men in the technical institute factor mean scores increased slightly in five of the seven areas. Factor mean scores for women showed decreases in the dependency area on all but two factors for community college women and on all factors for women at the technical institute.

Factor mean scores relative to emotional expression showed increases for technical institute men and women in most factors. Only on the factor of egoism-diffidence did scores decrease and that was for men. In slight contrast, factor mean scores relative to this dimension showed decreases on all factors for women and on two of the four factors for men in the community college.

Congruence of Press with Needs: Study of the expectations for press described by freshmen, perceptions of press described as fourth term students, and personality need factors described at these same two points in time lead to these impressions:

- 1) that the perceived environmental press on intellectual climate was closer to, though still higher than the intellectual interests and motivations of students than were expectations for press held by freshmen. Also that those students continuing in both schools into the fourth term increased in the level of intellectual interests and men increased in the level of motivation.
- 2) that, although differences were slight, the perceived environmental press in the community college may have contributed to somewhat increased student autonomy with its greater supportiveness for developing leadership, and making fewer demands for student conformity both in the intellectual and non-intellectual aspects of press.

Freshmen

Environmental Press: Specific Curricula

Environmental press and personality need data of freshmen and fourth term students were analyzed and compared for each curriculum. Tables 33 and 34 report College Characteristics Index factor mean scores of freshmen business administration and electrical technology students respectively. Tables 35 and 36 report the same information for freshmen nurse and secretarial science students. Correlation coefficients computed between mean scores on the 30 scales of freshmen by curriculum and institution were as follows in Table 37.

For comparisons of curricula within each institution correlation coefficients were computed between scale mean scores. All correlations ranged from .98 to .88 and were significant beyond the .01 level. Correlation coefficients for comparisons between specific curricula appear in Table 38.

The high degree of association between expectations of students in the four curricula within each institution and within the same curriculum in each of the two schools is evident from the correlations. In addition to this relationship, an examination of the differences in mean

TABLE 33. College Characteristics Index Factor Mean Scores of Freshmen Business Administration Students by Institution.

FACTOR	Community College			Technical Institute		
	N=129	\bar{X}	SD	N=168	\bar{X}	SD
Work-Play		14.25	4.98		14.98	4.85
Non-Vocational Climate		20.76	4.82		19.79	5.46
Aspiration Level		23.45	4.69		23.93	4.46
Intellectual Climate		30.16	6.96		29.47	6.82
Student Dignity		16.57	4.04		15.77	3.40
Academic Climate		12.89	3.75		13.09	3.34
Academic Achievement		34.26	7.11		34.40	6.21
Self-Expression		26.74	5.71		26.87	5.15
Group Life		26.03	4.41		27.20	4.82
Academic Organization		34.59	6.03		35.51	5.81
Social Form		31.23	6.13		33.22	5.90
Play-Work		25.75	4.98		25.02	4.85
Vocational Climate		29.24	4.82		30.21	5.46

TABLE 34. College Characteristics Index Factor Mean Scores of Freshmen Electrical Technology Students by Institution

FACTOR	Community College			Technical Institute		
	N=43	\bar{X}	SD	N=106	\bar{X}	SD
Work-Play		14.28	5.59		15.22	5.02
Non-Vocational Climate		20.00	5.28		20.19	5.91
Aspiration Level		25.21	4.76		23.88	4.25
Intellectual Climate		32.40	6.70		28.68	6.71
Student Dignity		17.67	3.63		15.82	3.91
Academic Climate		14.19	3.83		12.97	3.76
Academic Achievement		36.38	5.84		33.41	6.70
Self-Expression		28.71	4.98		25.65	5.24
Group Life		26.98	5.07		26.48	4.89
Academic Organization		36.42	5.78		33.87	5.90
Social Form		32.33	6.56		32.54	6.63
Play-Work		25.72	5.59		24.78	5.02
Vocational Climate		30.00	5.28		29.81	5.91

TABLE 35. College Characteristic Index Factor Mean Scores of Freshmen Nurse Students by Institution

FACTOR	Community College		Technical Institute		
	N=42	\bar{X}	SD	N=56	\bar{X}
Work-Play		14.81	5.14	14.73	4.42
Non-Vocational Climate		19.74	4.25	19.64	5.13
Aspiration Level		24.86	4.08	25.71	4.69
Intellectual Climate		33.07	7.09	32.96	7.66
Student Dignity		20.55	3.93	18.36	3.81
Academic Climate		15.07	3.46	15.04	3.70
Academic Achievement		38.05	4.02	37.49	6.04
Self Expression		29.38	4.50	29.53	5.56
Group Life		27.88	3.50	29.02	5.04
Academic Organization		39.38	5.49	37.45	6.85
Social Form		29.90	5.60	33.45	5.01
Play-Work		25.19	5.14	25.27	4.42
Vocational Climate		30.26	4.25	30.36	5.13

TABLE 36. College Characteristics Index Factor Mean Scores of Freshmen Secretarial Science Students by Institution

FACTOR	Community College		Technical Institute		
	N=88	\bar{X}	SD	N=156	\bar{X}
Work-Play		13.86	4.09	13.50	4.07
Non-Vocational Climate		19.55	4.29	18.31	3.94
Aspiration Level		24.23	4.32	24.99	3.96
Intellectual Climate		33.08	6.51	32.48	6.05
Student Dignity		18.44	3.84	16.51	3.52
Academic Climate		14.28	3.55	14.86	3.06
Academic Achievement		36.95	5.86	37.01	5.42
Self-Expression		30.21	4.82	29.50	5.01
Group Life		27.66	4.59	29.21	3.94
Academic Organization		37.09	6.37	37.76	5.32
Social Form		32.55	5.50	34.98	4.82
Play-Work		26.14	4.09	26.50	4.07
Vocational Climate		30.45	4.29	31.69	3.94

TABLE 37. Correlation Coefficients for College Characteristics Index Scale Mean Scores of Freshmen Between Curricula and Institutions

Community College	Technical Institute			
	Business Administration	Electrical Technology	Nursing	Secretarial Science
Business Administration	.96*			
Electrical Technology		.90*		
Nursing			.95*	
Secretarial Science				.96*

* 28 df significant beyond the 1 percent level.

TABLE 38. Correlation Coefficients¹ of College Characteristics Index Scale Mean Scores of Freshmen Between Curricula Within Each Institution

Curricula Compared	Community College	Technical Institute
Business Administration-Electrical Technology	.96	.98
Business Administration-Nursing	.89	.91
Business Administration-Secretarial Science	.95	.97
Electrical Technology-Nursing	.94	.93
Electrical Technology-Secretarial Science	.96	.94
Nursing-Secretarial Science	.95	.96

¹ All significant beyond the .01 level with 28 df.

scores for students in the various curricula indicated that the variations were very small. In sum, expectations of freshmen for environmental press, irrespective of curriculum or institution were very similar.

Fourth Term Students

Environmental Press: Specific Curricula

Tables 39, 40, 41, and 42 report factor mean scores on the College Characteristics Index for fourth term students by institution in the four curricula.

Correlations computed between 30 scale mean scores by curriculum and institution appear in Table 43.

An examination of responses of fourth term students by curricula between institutions found that differences in press of the two institutions were reported consistently, though with variation in degree. From Table 43 and subsequent profiles it is evident that business administration students reported greater similarity in press of the two schools, followed by nurse students, electrical technology students, and secretarial science students.

Business Administration: Figure 5 shows the factor score profile for business administration students in the two schools. The largest differences in environmental press appeared in the dimension of intellectual climate. Variations did occur in the non-intellectual dimension but were comparatively slight except for the factors of self-expression and group life. Business administration students in both schools had mean scores on factors of intellectual climate which were below the normative mean. Means for community college students were lower than those for 68 percent of the normative group on the factors of academic achievement and self-expression. Means for technical institute students were lower than 68 percent of the normative group on aspiration level, intellectual climate, academic climate, academic achievement and self-expression.

Electrical Technology: Factor score profiles for technology students are reported in Figure 6. Consistent with the lower correlation reported earlier, variations in factor means were more frequently greater in both the intellectual and non-intellectual dimensions than for business administration students. The largest difference is in the factor mean scores for student dignity at 5.35, followed by mean scores for self-expression which differed by 3.8 points. In each case community college students had the higher mean scores. With the exception of the

TABLE 39. College Characteristics Index Factor Mean Scores of Fourth Term Business Administration Students by Institution

FACTOR	Community College			Technical Institute		
	N=25	\bar{X}	SD	N=48	\bar{X}	SD
Work-Play		16.20	5.09		17.21	4.63
Non-Vocational Climate		22.36	3.77		21.48	5.31
Aspiration Level		20.04	5.15		18.71	5.45
Intellectual Climate		25.32	8.27		21.49	5.69
Student Dignity		19.24	5.47		17.31	4.53
Academic Climate		10.84	4.26		8.58	3.53
Academic Achievement		25.68	8.80		24.23	8.01
Self-Expression		20.00	6.80		18.06	5.64
Group Life		20.96	5.23		23.00	6.10
Academic Organization		32.20	6.70		31.06	6.32
Social Form		22.80	6.28		23.98	6.43
Play-Work		23.80	5.09		22.79	4.63
Vocational Climate		27.64	3.77		28.52	5.31

TABLE 40. College Characteristics Index Factor Mean Scores of Fourth Term Students in Electrical Technology Curriculum by Institution

FACTOR	Community College			Technical Institute		
	N=9	\bar{X}	SD	N=37	\bar{X}	SD
Work-Play		16.00	4.87		17.70	4.94
Non-Vocational Climate		22.67	3.54		19.54	5.19
Aspiration Level		21.78	3.99		20.62	5.42
Intellectual Climate		25.67	8.66		22.14	7.27
Student Dignity		22.67	5.32		17.32	5.16
Academic Climate		11.89	4.34		9.54	3.99
Academic Achievement		28.78	6.40		26.97	8.95
Self-Expression		21.67	5.61		17.95	6.10
Group Life		22.44	3.58		22.62	5.19
Academic Organization		32.33	4.09		33.03	6.31
Social Form		21.67	6.87		25.08	5.93
Play-Work		24.00	4.87		22.30	4.94
Vocational Climate		27.33	3.54		30.46	5.19

TABLE 41. College Characteristics Index Factor Mean Scores of Fourth Term Nurse Students by Institution

FACTOR	Community College			Technical Institute		
	N=37	\bar{X}	SD	N=29	\bar{X}	SD
Work-Play		16.41	6.22		18.21	6.03
Non-Vocational Climate		23.46	5.49		20.93	5.17
Aspiration Level		22.00	4.26		19.86	5.25
Intellectual Climate		28.66	7.70		23.14	7.44
Student Dignity		19.78	4.75		17.41	4.03
Academic Climate		13.26	4.08		11.00	4.44
Academic Achievement		30.43	6.59		26.11	8.50
Self-Expression		23.94	5.70		19.21	6.02
Group Life		23.83	4.41		23.54	4.71
Academic Organization		31.27	6.85		30.90	5.85
Social Form		24.29	6.54		25.50	6.06
Play-Work		23.59	6.23		21.79	6.03
Vocational Climate		26.54	5.49		29.07	5.17

TABLE 42. College Characteristics Index Factor Mean Scores of Fourth Term Secretarial Science Students by Institution

FACTOR	Community College			Technical Institute		
	N=20	\bar{X}	SD	N=79	\bar{X}	SD
Work-Play		14.30	3.79		18.27	5.05
Non-Vocational Climate		22.00	4.04		18.70	5.08
Aspiration Level		19.85	3.38		17.68	5.16
Intellectual Climate		28.05	7.56		19.63	6.91
Student Dignity		21.75	3.04		16.73	4.41
Academic Climate		12.70	3.98		8.35	3.85
Academic Achievement		29.95	6.15		20.41	6.78
Self-Expression		22.85	6.66		15.11	5.92
Group Life		25.05	5.22		23.72	5.07
Academic Organization		34.55	5.73		30.68	6.32
Social Form		24.75	5.16		24.96	6.07
Play-Work		25.70	3.79		21.73	5.05
Vocational Climate		28.00	4.04		31.30	5.08

FIGURE 5. Fourth Term Students of Business Administration by Institution

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)

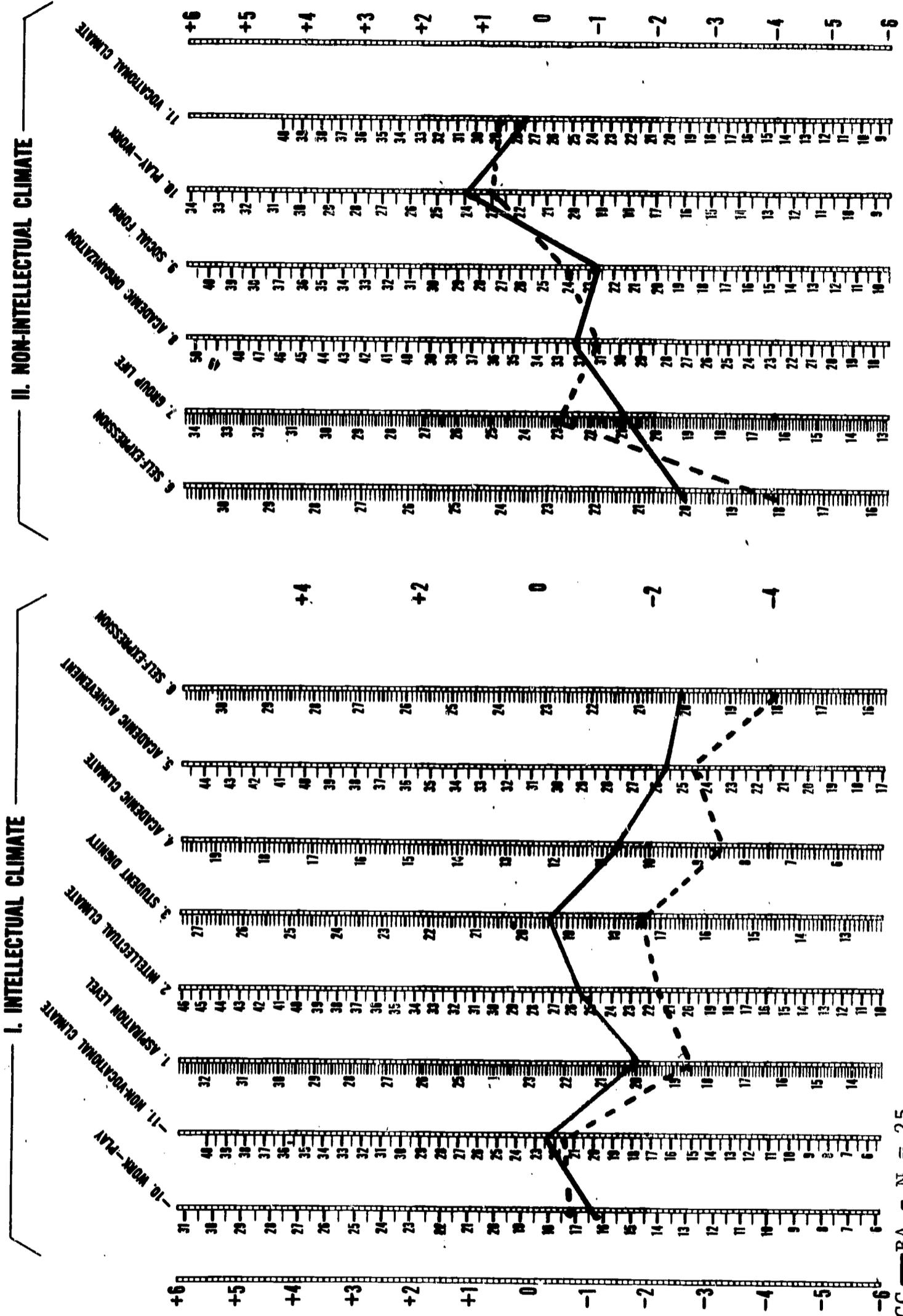


TABLE 43. Correlation Coefficients of College Characteristics Index Scale Mean Scores of Fourth Term Students Between Institutions by Curriculum

Community College	Technical Institute			
	Business Administration	Electrical Technology	Nursing	Secretarial Science
Business Administration	.71**			
Electrical Technology		.55**		
Nursing			.69**	
Secretarial Science				.45*

** 28df significant beyond .01 level

* 28df significant beyond .02 level

factor, work-play, community college technology students consistently had higher mean scores than technical institute students on factors related to intellectual climate. Community college student scores were the same as institute students on the factor group life; and were lower than institute students on factors of academic organization, social form and vocational climate.

Nursing: Figure 7 shows that nurse students in the two schools reported the greatest variations in the intellectual climate dimension. Nurse students in the community college consistently had higher mean scores except on the factor of work-play. The factor on which means differed the most was self-expression. Variations on factor mean scores in the dimension of non-intellectual climate were relatively slight except for the factor self-expression.

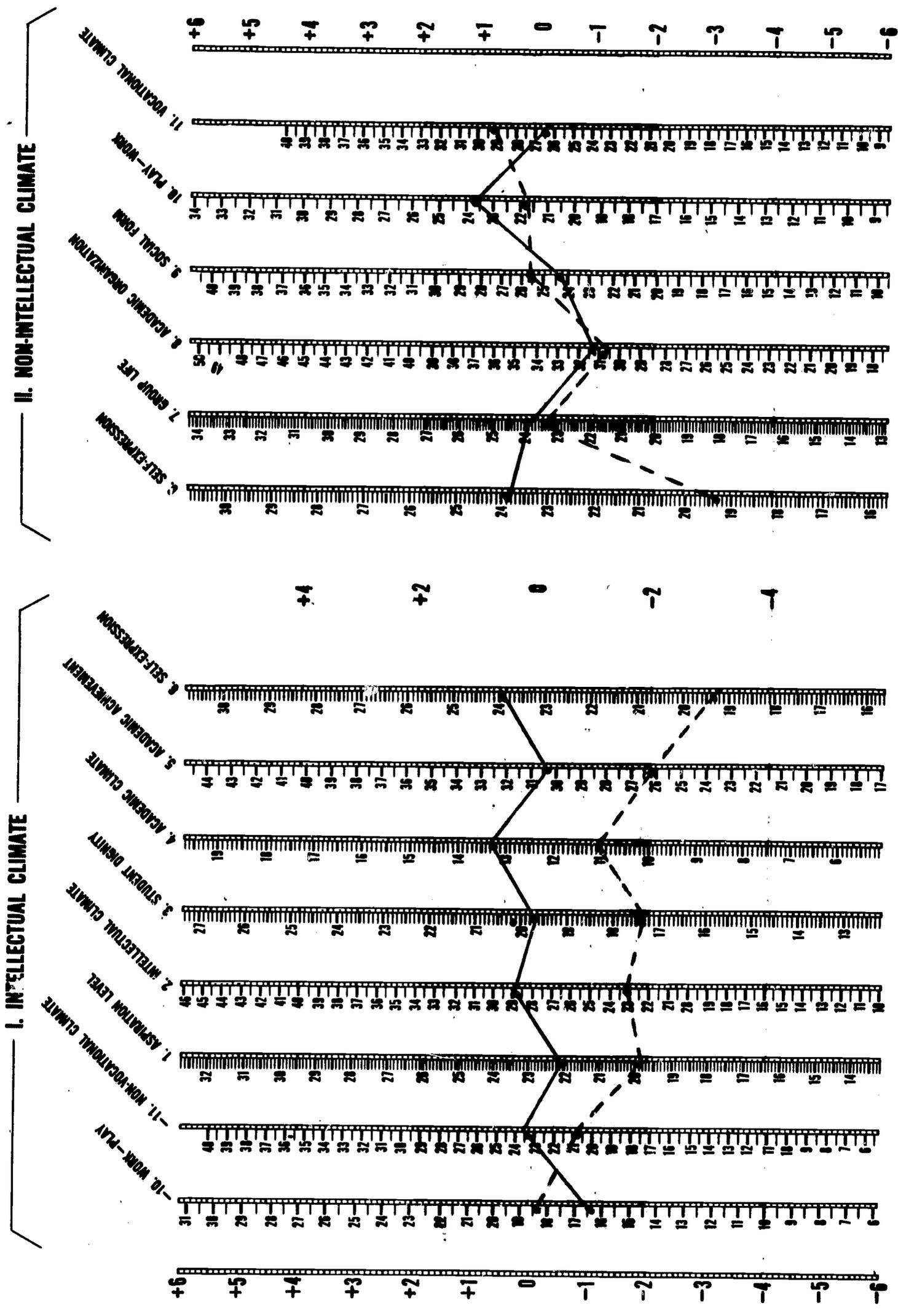
Secretarial Science: Figure 8 shows that profiles of secretarial science students from the two schools differed more sharply than for any other curriculum. On the factor of self-expression, mean scores differed by 7.7 points with community college students having the higher mean score. The difference in means was 9.54 for the factor of academic achievement, 5.02 for student dignity, and 8.42 for intellectual climate. Variations in the factors comprising the non-intellectual climate dimension, were smaller than for the intellectual dimension, but were greater than variations for other curricula. Secretarial science students at the community college had higher mean scores on all factors except work-play and vocational climate.

FIGURE 7. Fourth Term Students of Nursing by Institution

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



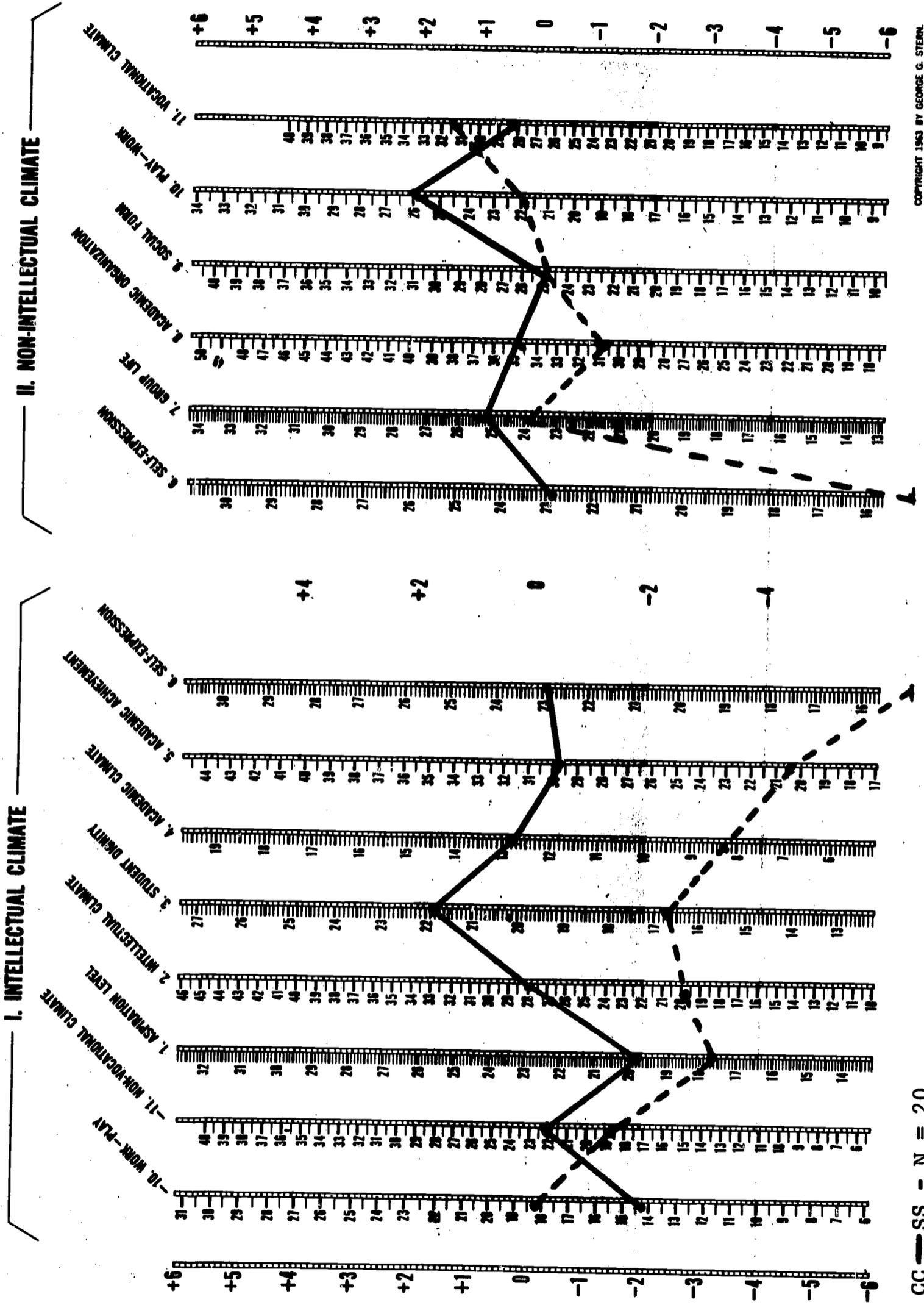
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FIGURE 8. Fourth Term Students of Secretarial Science by Institution

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



CC — SS - N = 20
 TI - - - SS - N = 79

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TABLE 44. Correlation Coefficients¹ of College Characteristics Index Scale Mean Scores of Fourth Term Students Between Curricula Within Each Institution

Curricula Compared	Community College	Technical Institute
Business Administration-Electrical Technology	.89	.84
Business Administration - Nursing	.88	.80
Business Administration - Secretarial Science	.91	.64
Electrical Technology - Nursing	.89	.95
Electrical Technology - Secretarial Science	.89	.64
Nursing -Secretarial Science	.93	.79

¹With 28df all were significant beyond the .01 level.

Table 44 reports the correlation coefficient obtained between curricula within each school. Consistent with results reported above, correlation coefficients ranged from .93 to .88 indicating a relatively high degree of association between the descriptions of environmental press by fourth term students in the community college irrespective of curriculum. Correlation coefficients for curricula within the technical institute ranged from .95 to .64. All were significant beyond the .01 level. Variations between curricula in the technical institute which were described earlier were reflected in lower correlations and the wider range of variation.

In conclusion, environmental press at the community college was described as having a climate supportive of intellectual pursuits more so than the technical institute. Variations between curricula indicated that at both schools electrical technology and nurse students generally had higher mean scores on factors related to intellectual climate than did business administration and secretarial science students. The extent of variations between the two schools in the dimension of non-intellectual climate was smaller. Variations did occur for all curricula however to varying degrees.

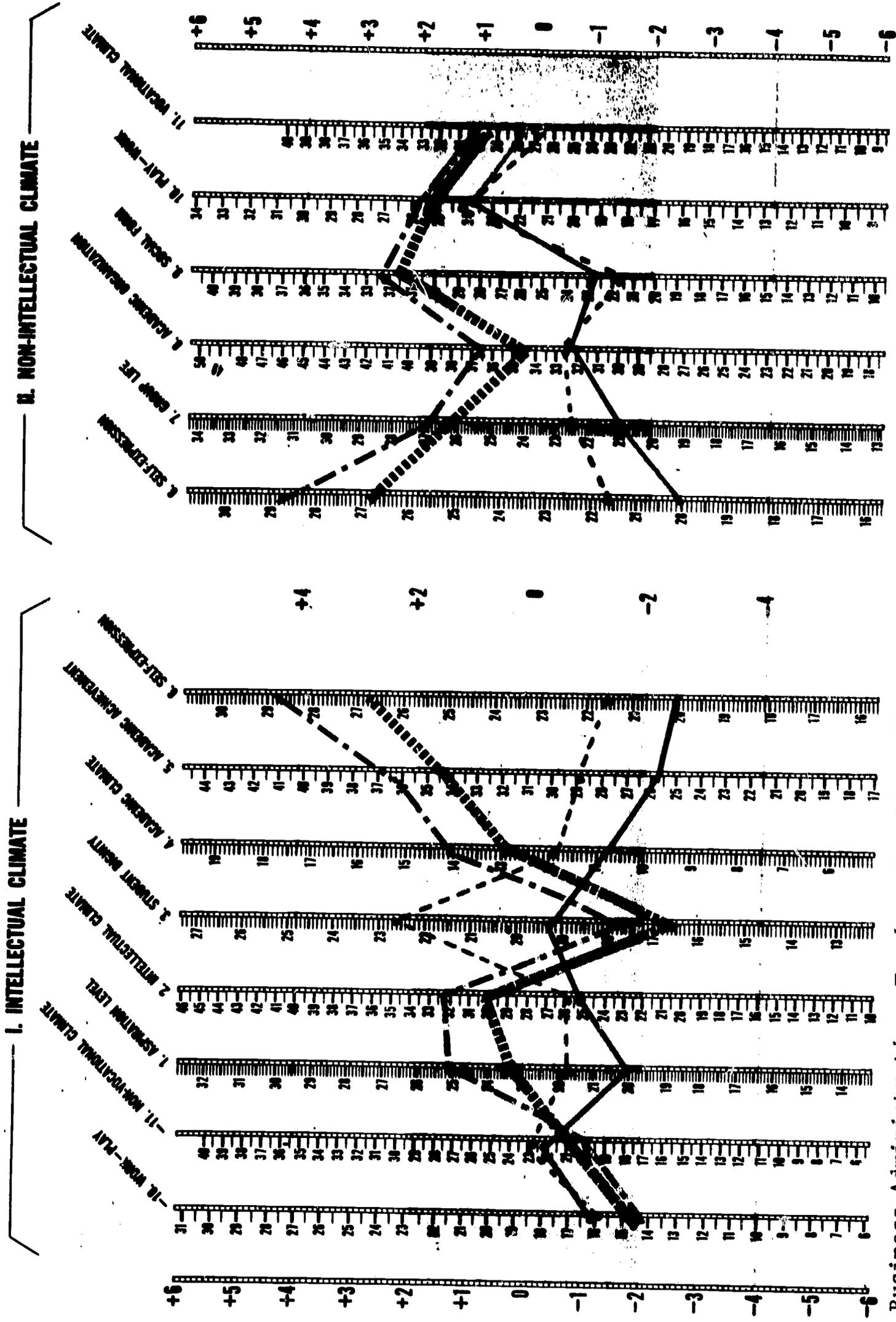
Fourth Term Compared to Freshmen: Figure 9 shows factor mean score profiles of press for freshmen and fourth term students of business administration and electrical technology in the community college. Profiles of freshmen were much the same for both, with that of

FIGURE 9. Freshmen and Fourth Term Business Administration and Electrical Technology Students at The Community College

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



Business Administration Freshmen N = 130
Fourth Term N = 25

Electrical Technology
Freshmen N = 43
Fourth Term N = 9

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electrical technology freshmen being slightly higher on most factors. Factor mean scores for both varied within the range of 68 percent of scores for normative groups except on the following factors: student dignity, academic achievement, self-expression, social form, and play-work. Compared with perceptions of press as fourth term students, variances did occur between the two curricula as well as differing expectations of freshmen. The single largest variation between the two groups, as charted, was on the factor of student dignity. Fourth term students in both curricula perceived a press more supportive of student dignity than what either group expected as freshmen. The press for electrical technology students however, exceeded that for business administration students, and exceeded that as described by 68 percent of the normative group apparently. On the factor of self-expression, electrical technology students had slightly higher factor mean scores than did business administration students. On this factor, mean scores for the latter were less than the mean scores for 68 percent of the normative groups. Variations evident in non-intellectual climate except for self-expression were quite small. For both curricula, it appeared that being a freshman or fourth term student was a more significant variable influencing reports of environmental press than was the curriculum.

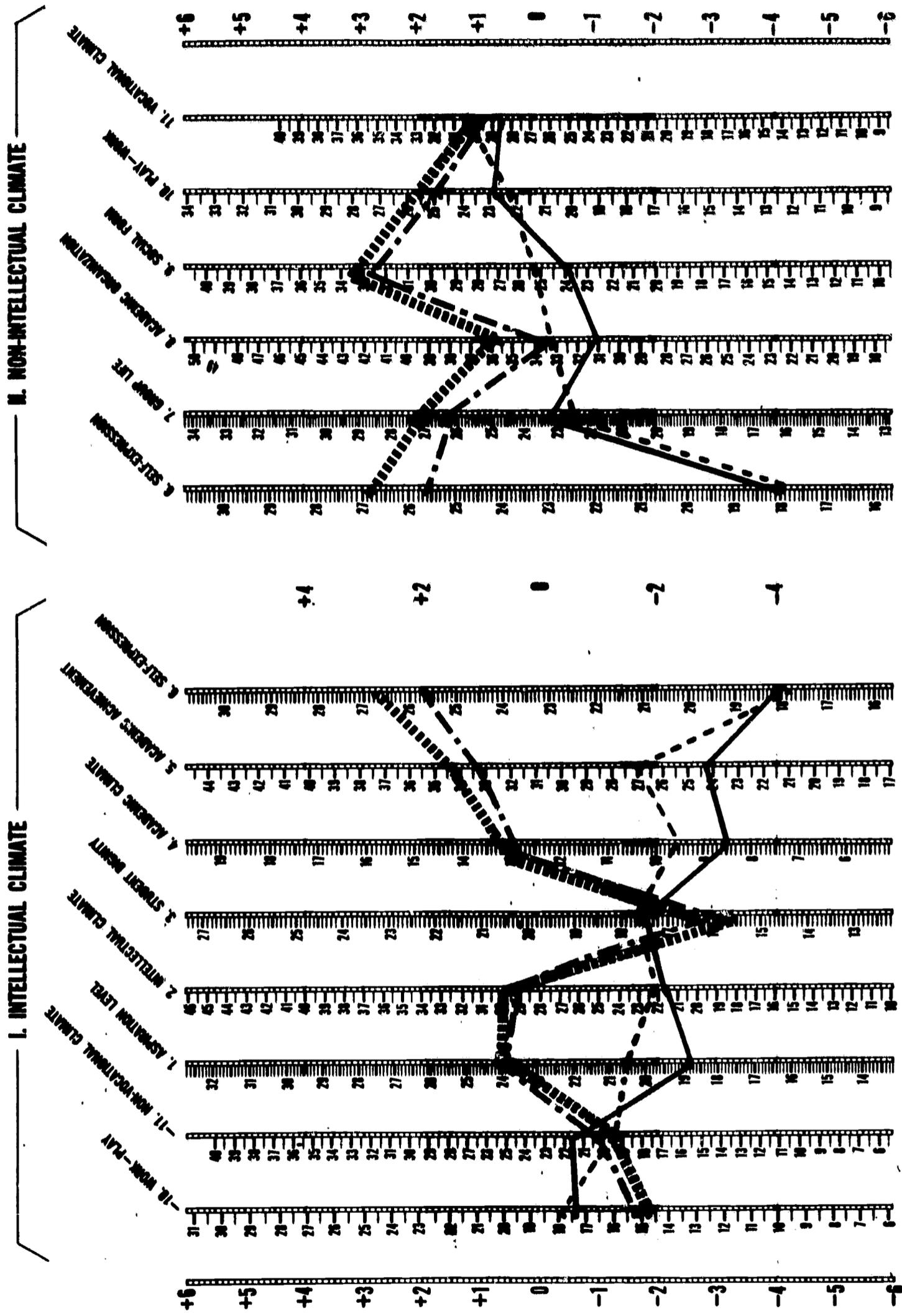
Figure 10 shows the profiles for students of the same two curricula in the technical institute. Variations of freshmen were within the normative range except on: student dignity, self-expression and social form. Profiles of both groups as freshmen were very similar, with mean scores of business administration students being slightly higher on nine of the thirteen factors. Fourth term students as compared with freshmen showed greater variation between the two curricula. Factor mean scores of electrical technology students were less than those of normative groups on two of the factors, i.e., academic climate and self-expression, whereas this occurred for business administration students on four factors, i.e., aspiration level, intellectual climate, academic climate, academic achievement and self-expression. Variations in perceptions of non-intellectual climate were smaller, and for all factors except self-expression varied around the normative means. In brief for these two curricula being a freshman or fourth term student appeared to be more influential in description of press than did curriculum. The profiles suggest that business administration students had to make somewhat greater adjustments between their expectations as freshmen and their experiences within the school over a period of semesters than did electrical technology students.

FIGURE 10. Freshmen and Fourth Term Students of Business Administration and Electrical Technology at Technical Institute

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



Business Administration Freshmen - N = 168
 Electrical Technology Freshmen - N = 106
 Business Administration Fourth Term - N = 48
 Electrical Technology Fourth Term - N = 39

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The differences in environmental press observed from profiles and factor mean scores of the total school populations also appeared to exist for students in each specific curriculum but to slightly different degrees.

Figure 11 shows the profiles for students of nursing and secretarial science in the community college. Variations in factor mean scores did occur between the two curricula with mean scores for freshmen nurse students being slightly higher in the factors comprising intellectual climate, except for self-expression. In the non-intellectual climate, mean scores of nurse freshmen were more frequently slightly lower than those for secretarial science freshmen. Factor mean scores for both groups exceeded the normative range on academic achievement, self-expression, and group life.

Description of press as fourth term students compared with those as freshmen show factor mean scores most often within the normative range; only on the work-play and the reversed form play-work were factor mean scores below and above the normative ranges respectively for secretarial science students. For these two curricula, year in school appears to be more influential in descriptions of press than curriculum. Yet some consistencies in variations between both expectations and perceptions of respondents in each curriculum were evident. Nurse students had factor mean scores in the dimension of intellectual climate which generally exceeded those of secretarial science students; whereas factor mean scores in the non-intellectual climate with two exceptions were lower than those of secretarial science students.

Figure 12 shows profiles for students of nursing and secretarial science in the technical institute. The general conclusions relative to intellectual climate made for community college students in these two curricula apply to those in the technical institute. In the non-intellectual climate, factor mean scores of fourth term nurse students tend to be slightly higher than those of fourth term secretarial science students.

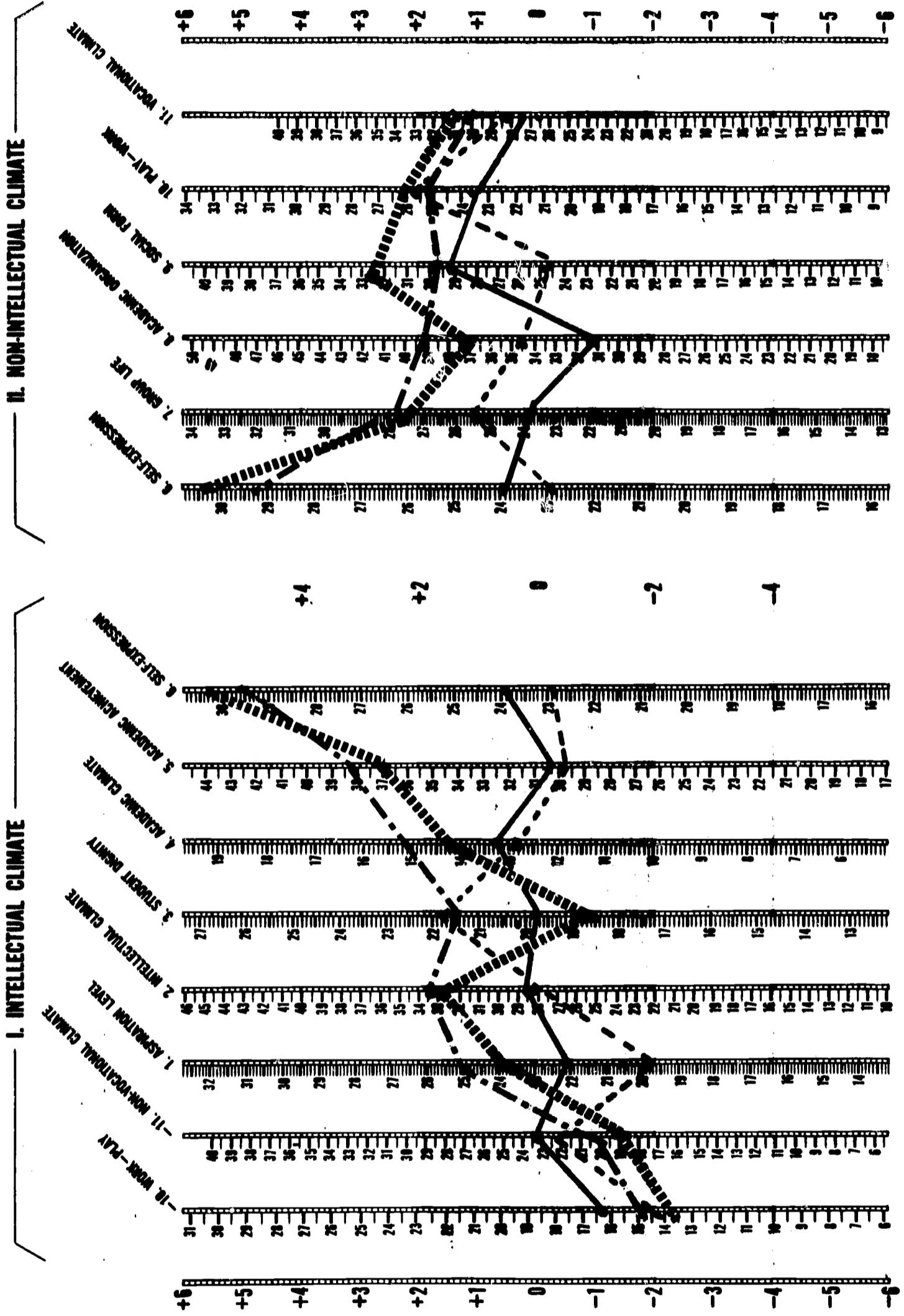
Variations between curricula were less than variations between descriptions of press as freshmen and fourth term students. It is noteworthy, however, that relative to the intellectual climate, factor mean scores for nurse students were lower than the normative range only in self-expression, whereas this was true for secretarial science students on factors of aspiration level, intellectual climate, student dignity, academic climate, academic achievement and self-expression. Further, the profiles of the two groups of students at both points in

FIGURE 11. Freshmen and Fourth Term Nurse and Secretarial Science Students at Community College

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



SECRETARIAL SCIENCE Freshmen N = 88
Fourth Term N = 20

Nurse N = 42
Fourth Term N = 37

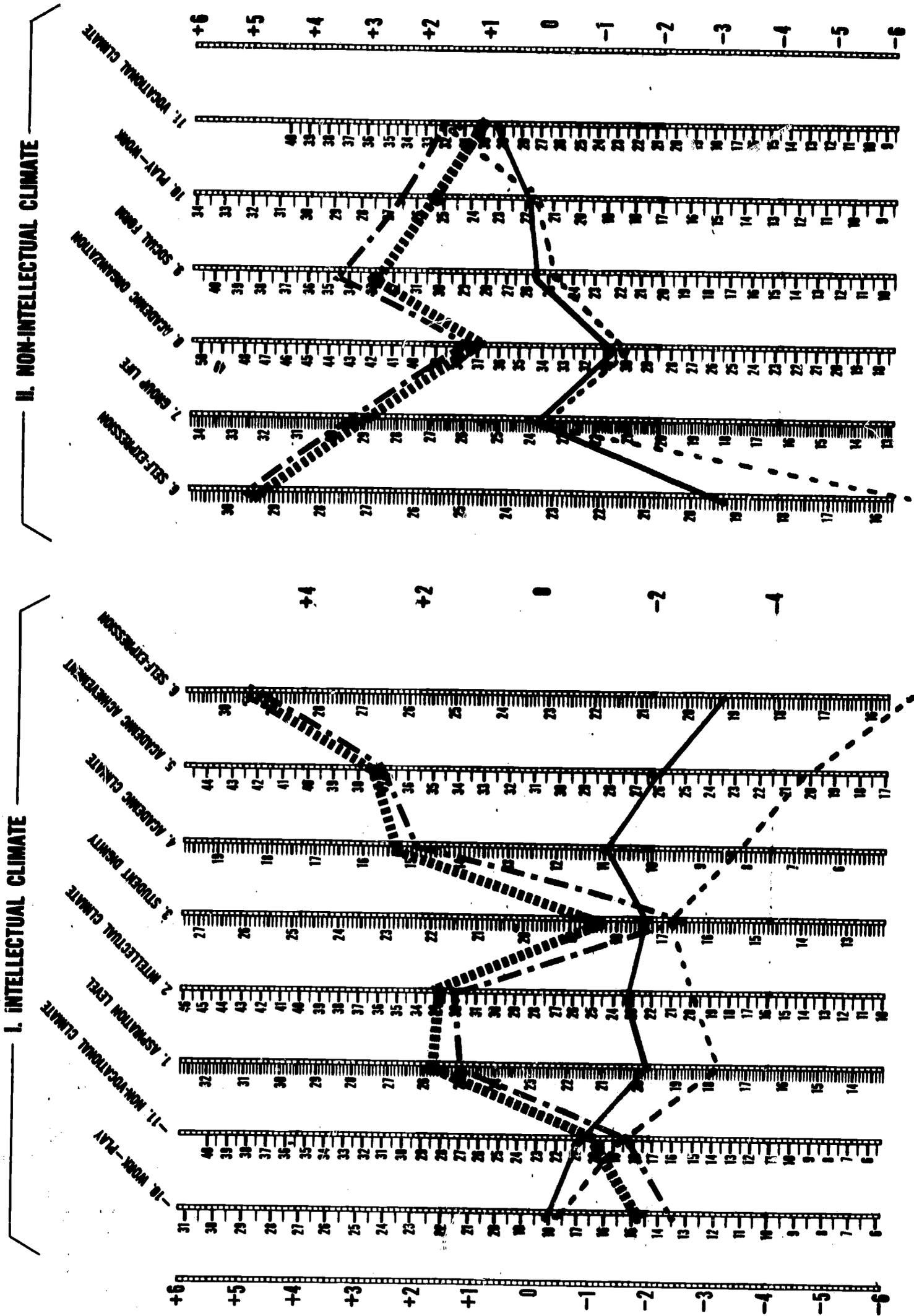
Nurse

FIGURE 12. Freshmen and Fourth Term Students of Nursing and Secretarial Science at Technical Institute

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



Nurse
 Freshmen N = 56
 Fourth Term N = 29

Secretarial Science
 Freshmen N = 156
 Fourth Term N = 79

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time suggest that the adjustment of expectations to later perceptions was somewhat greater for secretarial science students than nurse students.

Freshmen and Fourth Term Students

Personality Need Factors: Specific Curricula

Business Administration: Factor mean scores on the Activities Index for freshmen students of business administration are reported for the community college and technical institute in Table 45.

As is evident by comparing means, the two groups appear to be drawn from the same population. Differences in means did not exceed 1.5 points. The 30 scale mean scores for the two groups correlated .97 and with 28 df was significant beyond the .01 level.

Table 46 reports factor mean scores for fourth term students of business administration by each school. A comparison of factor means showed greater variation between fourth term students with the largest difference of means 3.08 (timidity-audacity) and 3.06 (intellectual interests). Community college students had mean scores indicating somewhat greater intellectual interests and greater audacity. Consistent with these greater variations, the correlation of the 30 scale mean scores for the two groups dropped to .82 with 28 df significant beyond the .01 level.

Personality scale mean scores of freshmen community college students correlated .88 with scores derived as fourth term students. The correlation derived for technical institute students as freshmen and as fourth term students was .93. Both were significant beyond the .01 level and viewed in relation to the slight differences in means were indicative of a high degree of stability in personality needs.

Factor mean scores for freshmen electrical technology students at each school are reported in Table 47.

Electrical Technology: Differences in factor mean scores were greater between electrical technology freshmen than for business administration. Differences exceeding 1, in rank order from largest to smallest, were on factors: intellectual interests (3.05), submissiveness (1.41), motivation (1.28), constraint-expressiveness (1.26) and self-assertion (1.23). Community college student means were higher on each factor except constraint-expressiveness. Even with these variations the 30 scale mean scores for the two groups correlated .96, with 28 df showing a high degree of similarity.

TABLE 45. Activities Index Factor Mean Scores of Freshmen Business Administration Students by Institution

FACTOR	Community College		Technical Institute		
	N=130	\bar{X}	SD	N=168	\bar{X}
Self Assertion		20.87	6.85	20.61	5.92
Audacity-Timidity		21.02	6.06	21.05	5.80
Intellectual Interests		20.77	7.29	20.45	7.69
Motivation		24.15	6.06	24.31	5.61
Applied Interests		16.52	5.81	15.86	5.96
Orderliness		18.31	6.41	18.43	6.31
Submissiveness		21.80	5.67	20.69	5.86
Closeness		23.66	5.36	22.77	6.16
Timidity-Audacity		18.98	6.06	18.95	5.80
Constraint-Expressiveness		20.67	5.91	20.85	5.97
Diffidence-Egoism		17.34	4.31	17.68	3.93
Sensuousness		15.80	4.86	15.40	4.54
Friendliness		13.40	3.56	13.83	3.54
Expressiveness-Constraint		19.63	5.43	19.15	5.97
Egoism-Diffidence		12.66	4.31	12.32	3.93

TABLE 46. Activities Index Factor Mean Scores of Fourth Term Business Administration Students by Institution

FACTOR	Community College		Technical Institute		
	N=25	\bar{X}	SD	N=48	\bar{X}
Self-Assertion		22.08	7.29	21.43	7.78
Audacity-Timidity		23.12	7.97	20.04	6.11
Intellectual Interests		23.64	7.71	20.58	7.74
Motivation		26.04	6.10	24.37	7.41
Applied Interests		17.60	5.40	14.62	5.88
Orderliness		18.24	5.50	15.90	6.57
Submissiveness		19.36	5.43	20.40	6.24
Closeness		24.00	5.49	23.40	6.57
Timidity-Audacity		16.88	7.97	19.96	6.10
Constraint-Expressiveness		20.12	4.78	18.54	6.82
Diffidence-Egoism		16.08	5.48	18.79	4.11
Sensuousness		17.56	5.01	15.52	4.30
Friendliness		13.48	4.07	14.90	3.16
Expressiveness-Constraint		19.88	4.78	21.46	6.82
Egoism-Diffidence		13.92	5.48	11.21	4.11

TABLE 47. Activities Index Factor Mean Scores of Freshmen Electrical Technology Students by Institution

FACTOR	Community College			Technical Institute		
	N=43	\bar{X}	SD	N=106	\bar{X}	SD
Self-Assertion		19.91	7.17		18.68	6.98
Audacity-Timidity		23.74	6.42		22.98	5.75
Intellectual Interests		25.02	6.93		21.97	7.81
Motivation		27.28	5.54		26.00	6.02
Applied Interests		18.56	5.54		18.18	4.84
Orderliness		18.42	5.46		19.00	6.09
Submissiveness		22.33	5.22		20.82	5.56
Closeness		23.40	6.08		22.10	5.56
Timidity-Audacity		16.26	6.42		17.02	5.75
Constraint-Expressiveness		21.30	6.88		22.56	5.60
Diffidence-Egoism		17.88	4.14		18.16	4.69
Sensuousness		15.40	5.36		14.78	4.92
Friendliness		12.53	4.14		12.64	3.95
Expressiveness-Constraint		18.70	6.88		17.44	5.60
Egoism-Diffidence		12.12	4.14		11.84	4.69

TABLE 48. Activities Index Factor Mean Scores of Fourth Term Students In Electrical Technology by Institution

FACTOR	Community College			Technical Institute		
	N=9	\bar{X}	SD	N=37	\bar{X}	SD
Self-Assertion		17.44	6.82		20.41	7.94
Audacity-Timidity		23.22	7.86		24.51	6.74
Intellectual Interests		25.67	9.57		26.32	7.62
Motivation		24.56	6.62		27.62	6.16
Applied Interests		18.78	4.66		20.03	4.84
Orderliness		18.78	4.21		18.81	6.42
Submissiveness		20.00	4.64		22.54	5.75
Closeness		22.33	3.16		24.76	5.68
Timidity-Audacity		16.78	7.86		15.49	6.74
Constraint-Expressiveness		22.67	7.23		21.92	6.20
Diffidence-Egoism		18.11	5.99		17.86	3.42
Sensuousness		14.22	5.65		16.51	4.32
Friendliness		11.33	3.74		12.84	4.07
Expressiveness-Constraint		17.33	7.23		18.08	6.20
Egoism-Diffidence		11.89	5.99		12.14	3.42

Table 48 reports factor mean scores of fourth term students of electrical technology by institution. The differences in means tended to be slightly larger between fourth term students, and the direction changed, with technical institute students having the higher means on the following factors (in rank order from highest to lowest differences of 2 or more): motivation (3.06), self-assertion (2.97), closeness (2.43), sensuousness (2.29) and submissiveness (2.00).

This greater variation was reflected in a .82 correlation coefficient derived from correlating the 30 scale mean scores of fourth term students in the community college with those in the technical institute. Scale mean scores of electrical technology students in the community college as freshmen were correlated with mean scores obtained as fourth term students. The correlation coefficient was .86. A similar comparison for technical institute students resulted in a correlation coefficient of .94. Both with 28 df were significant beyond the .01 level.

Comparisons Between Curricula: For comparisons between curricula within the same school, holding sex constant, profile sheets were drawn. Figure 13 shows the factor mean score profile for business administration and electrical technology students at the community college.

Relative to intellectual orientation, freshmen in electrical technology had factor mean scores which exceeded those of business administration students except on self-assertion; whereas mean scores for electrical technology freshmen were within or above the normative range, those of business administration students were within or below the normative range. An examination of the profile of fourth term students shows that for electrical technology students, mean scores remained the same or dropped slightly, with a rather sizeable drop in motivation. The reverse of this was true for the fourth term students of business administration where mean scores increased on all factors to the extent that all were within or above the normative range.

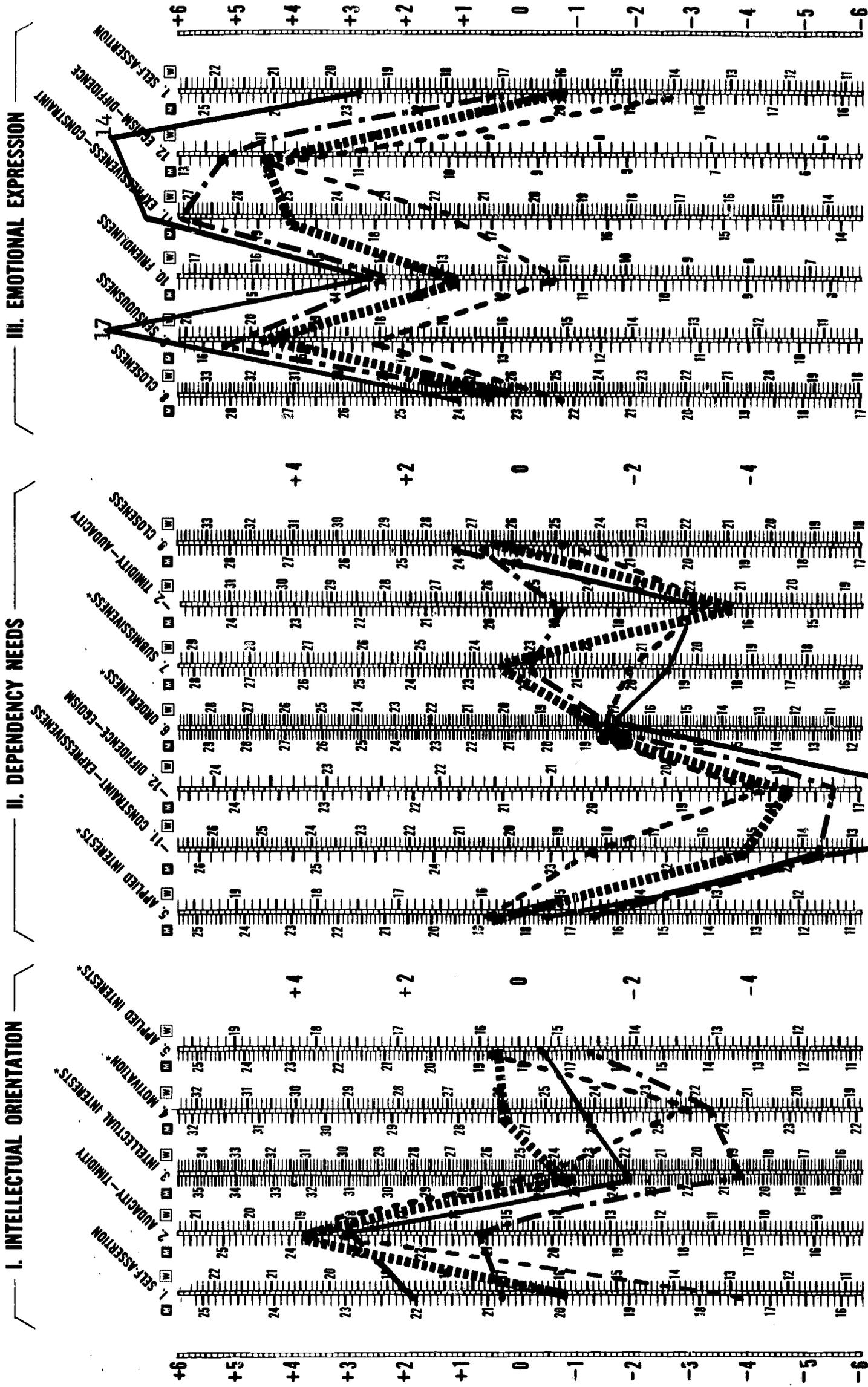
Relative to dependency needs, profiles for freshmen entering both curricula were very similar except on the factor of timidity-audacity. On five of seven factors, mean scores of electrical technology students were slightly higher than for business students. A comparison of profiles of fourth term students showed that the higher mean scores as freshmen technology students were even higher as fourth term students, while those of business students dropped even lower, on factors: applied interests, constraint-expressiveness, diffidence-egoism. Scores were

FIGURE 13. Freshmen and Fourth Term Business Administration and Electrical Technology Students at Community College

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (AI)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



■ MEN ○ WOMEN

• EDUCABILITY FACTOR

Business Administration Freshmen N = 130 Fourth Term N = 25

Electrical Technology Freshmen N = 43 Fourth Term N = 9

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close and remained stable for both groups on orderliness. Scores of both groups dropped on submissiveness.

Mean scores of business students on timidity-audacity dropped while those of technology students increased slightly, with the result that the mean scores of both were approximately the same. Business students showed an increase in mean scores on closeness, while those of technology students dropped slightly.

Relative to emotional expression, the profiles showed that variations existing between students in the two curricula as freshmen became more pronounced as fourth term students. Thus business students had factor mean scores which most frequently exceeded the normative range, rather greatly so, while technology students have means within or close to the normative range on all factors except egoism-diffidence and self-assertion. In this area, business students were higher on closeness, sensuousness, friendliness, expressiveness, egoism and self-assertion.

Consistent with the variations described, whereas scale mean scores correlated .83 between freshmen business and technology students; the correlation dropped to .68 for fourth term students. Both with 28 df were significant beyond the .01 level.

Profiles for business and technology students at the technical institute are presented in Figure 14.

Relative to the intellectual orientation, variations which occurred showed technology students to have higher mean scores on all factors but self-assertion than did business students. Profiles of fourth term students show that these initial differences were more pronounced in the fourth term. Both groups showed increased mean scores in self-assertion, but for business students, mean scores on other factors remained approximately the same or decreased. Technology students showed consistent and comparably sizeable gains on all factors.

With reference to dependency needs, there is less of a pattern. Mean scores for both groups tend to be below normative means and, on five factors, outside the normative range. With two exceptions, on factors diffidence-egoism and timidity-audacity, technology students tend to have higher mean scores.

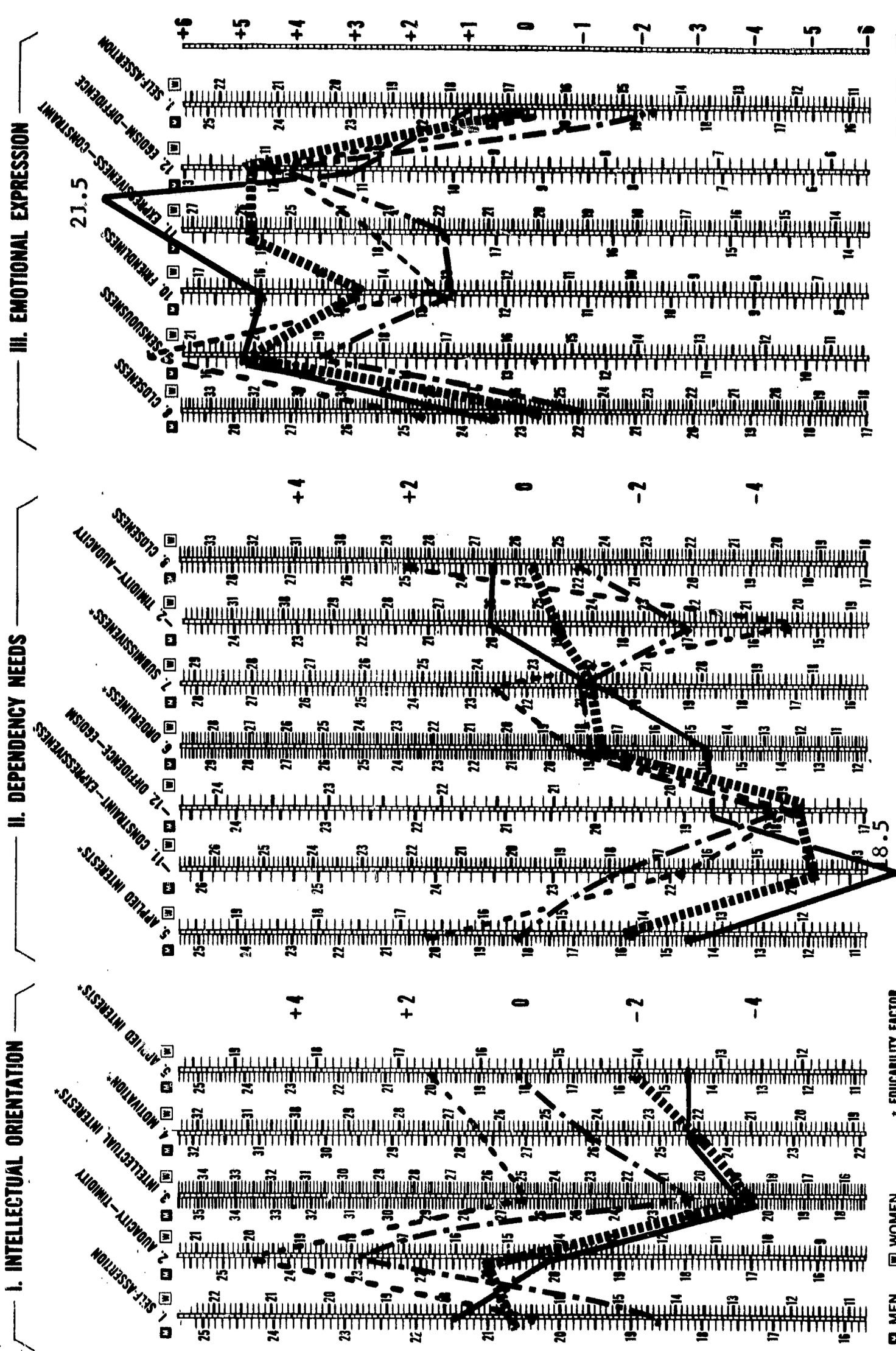
In the dimension of emotional expression, business freshmen tended to have higher mean scores, exceeding the normative range more frequently than not, than did technology freshmen. As fourth term students, business and

FIGURE 14. Freshmen and Fourth Term Business Administration and Electrical Technology Students at a Technical Institute

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (AI)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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□ MEN □ WOMEN * EDUCABILITY FACTOR

Business Administration Freshmen N = 168
 Business Administration Fourth Term N = 48
 Electrical Technology Freshmen N = 106
 Electrical Technology Fourth Term N = 37

technology students with one exception had increases in mean scores over mean scores as freshmen. Business students had a decrease in mean score on egoism-diffidence.

The correlation coefficient was .92 for scale mean scores of business and technology freshmen. The correlation coefficient dropped to .76 for fourth term students in each curriculum. Scale mean scores as freshmen business students correlated .93 with mean scores as fourth term students of business; freshmen technology mean scores correlated .94 with means derived from fourth term technology students.

A comparison of Figures 13 and 14, in an effort to answer the question as to whether, irrespective of school, business students differed from technology students suggest that:

1. technology freshmen tend to be higher on intellectual orientation than business students;
2. tend to be slightly higher, as freshmen, in dependency needs than business students and were lower on the emotional expression dimension;
3. as fourth term students, variations in intellectual orientation, dependence needs, and emotional expression between the two groups were subject to change, in several possible directions whether from the environmental press, or selectivity of students remaining in programs, to mention only two influences.

Nursing: Personality need factor mean scores are reported for freshmen nurse students in each school in Table 49. Differences in mean scores were relatively slight exceeding 1 point on factors of submissiveness (2.61), orderliness (1.86), and sensuousness (1.78). Community college students had the higher mean scores on the first two factors and the lower mean on the third. The high degree of similarity was reflected in the correlation coefficient of .95 derived from the two sets of 30 scale mean scores, which with 28 df were significant beyond the .01 level.

Table 50 reports factor means for fourth term students in each school. Differences in means were somewhat higher for fourth term students, and exceeded 1 on the following: sensuousness (4.88), closeness (3.22), constraint-expressiveness (3.22), applied interests (2.22), orderliness (1.69), diffidence-egoism (1.35), intellectual interests (1.34) and self-assertion (1.17). Technical

TABLE 49. Activities Index Factor Mean Scores of Freshmen Nurse Students by Institution

FACTOR	Community College		Technical Institute			
	N=42	\bar{X}	SD	N=56	\bar{X}	SD
Self-Assertion		17.54	7.00		16.89	6.74
Audacity-Timidity		15.50	5.91		16.45	5.31
Intellectual Interests		25.24	7.08		26.07	7.68
Motivation		26.95	5.72		27.18	6.12
Applied Interests		19.93	5.76		18.98	5.37
Orderliness		23.43	6.46		21.57	6.46
Submissiveness		28.02	4.61		25.41	4.85
Closeness		29.33	5.34		28.64	4.61
Timidity-Audacity		24.50	5.91		23.55	5.31
Constraint-Expressiveness		19.81	6.43		19.21	6.23
Diffidence-Egoism		19.86	4.95		19.05	4.45
Sensuousness		16.45	5.34		18.23	5.32
Friendliness		12.71	4.18		13.39	3.52
Expressiveness-Constraint		20.19	6.43		20.79	6.23
Egoism-Diffidence		10.14	4.95		10.95	4.45

TABLE 50. Activities Index Factor Mean Scores for Fourth Term Nurse Students by Institution

FACTOR	Community College		Technical Institute			
	N=37	\bar{X}	SD	N=29	\bar{X}	SD
Self-Assertion		18.41	6.92		17.24	7.26
Audacity-Timidity		16.97	6.02		15.97	5.65
Intellectual Interests		24.86	7.52		23.52	8.47
Motivation		25.05	5.81		24.03	7.14
Applied Interests		17.84	6.04		15.62	5.98
Orderliness		20.03	6.82		18.34	6.61
Submissiveness		23.27	5.19		23.52	5.63
Closeness		25.97	4.97		29.31	5.01
Timidity-Audacity		23.03	6.02		24.03	5.65
Constraint-Expressiveness		20.08	6.46		16.86	5.72
Diffidence-Egoism		20.14	4.80		18.79	4.24
Sensuousness		15.05	5.31		19.93	5.17
Friendliness		19.27	3.45		13.55	3.57
Expressiveness-Constraint		19.92	6.46		23.14	5.71
Egoism-Diffidence		9.86	4.80		11.21	4.24

institute students had the higher mean scores on the first two factors and the lower mean scores on the remainder. Scale mean scores of fourth term students in the two schools had a correlation coefficient of .79 significant beyond the .01 level with 28 df.

In brief the two groups were very much alike as entering freshmen, and although differences did increase between fourth term students, much commonality existed. The correlation coefficients between scale mean scores as freshmen and as fourth term nurse students in the community college was .88; for technical institute nurse students as freshmen and as fourth term students it was .93. Both were significant beyond the 1 percent level.

Secretarial Science: Personality need factor scores for secretarial science freshmen are presented in Table 51.

Differences in factor mean scores for community college students compared to technical institute students exceeded 1 only on the factor orderliness (1.06) with the higher mean obtained by community college students. The high degree of similarity between the two groups is reflected in the .98 correlation coefficient obtained by correlating scale mean scores for the two groups.

Table 52 reports mean scores for fourth term secretarial science students in both schools. Differences in means were somewhat larger. Factors on which differences exceeded 1 were: orderliness (2.77), diffidence-egoism (1.66), closeness (1.46), applied interests (1.37), sensuousness (1.35), constraint-expressiveness (1.34) and motivation (1.03). The correlation coefficient between the scale means of fourth term community college and fourth term technical institute students was .90 significant beyond the .01 level. Thus, though some variations did exist, these were slight. The two groups both as freshmen and as fourth term students manifested common personality needs.

The stability of factor mean scores over time was demonstrated in the fact that correlation coefficients computed between scale scores for community college freshmen and fourth term secretarial science students, and between technical institute freshmen and fourth term secretarial science students were .92 and .93 respectively, both significant beyond the .01 level.

Comparison Between Curricula: In order to assess the similarity or dissimilarity of personality need factors between nurse and secretarial science students in the same school, Figures 15 and 16 were prepared and show

TABLE 51. Activities Index Factor Mean Scores of Freshmen Secretarial Science Students By Institution

FACTOR	Community College			Technical Institute		
	N=88	\bar{X}	SD	N=156	\bar{X}	SD
Self-Assertion		16.43	7.28		16.21	6.78
Audacity-Timidity		15.00	5.34		14.03	5.47
Intellectual Interests		19.25	6.33		19.82	7.24
Motivation		22.94	5.82		23.08	6.82
Applied Interests		15.92	5.75		15.67	5.19
Orderliness		20.66	6.77		19.60	5.27
Submissiveness		24.78	5.36		24.01	5.38
Closeness		29.14	4.66		29.08	4.95
Timidity-Audacity		25.00	5.34		25.97	5.47
Constraint-Expressiveness		17.48	6.57		17.58	6.14
Diffidence-Egoism		17.30	4.55		17.88	4.14
Sensuousness		20.08	4.82		19.58	4.61
Friendliness		14.26	3.59		14.95	3.20
Expressiveness-Constraint		22.52	6.57		22.71	5.62
Egoism-Diffidence		12.70	4.55		12.12	4.14

TABLE 52. Activities Index Factor Mean Scores of Fourth Term Secretarial Science Students by Institution

FACTOR	Community College			Technical Institute		
	N=20	\bar{X}	SD	N=79	\bar{X}	SD
Self-Assertion		17.53	7.31		17.68	7.77
Audacity-Timidity		15.95	5.41		16.72	6.05
Intellectual Interests		21.21	8.22		20.27	7.09
Motivation		23.21	6.63		22.18	7.05
Applied Interests		16.21	6.80		14.84	4.94
Orderliness		20.40	7.28		17.63	6.18
Submissiveness		22.21	5.02		22.89	5.79
Closeness		30.11	7.32		28.65	6.21
Timidity-Audacity		24.05	5.41		23.28	6.05
Constraint-Expressiveness		17.20	8.26		15.86	6.74
Diffidence-Egoism		15.59	5.33		17.25	4.57
Sensuousness		21.26	4.16		19.91	5.47
Friendliness		14.21	2.94		14.52	3.57
Expressiveness-Constraint		24.00	6.45		24.14	6.74
Egoism-Diffidence		14.05	5.33		12.75	4.57

the profiles of factor mean scores. Figure 15 shows community college students in these two curricula as freshmen and as fourth term students.

With reference to intellectual orientation, nurse students had higher mean scores generally than did secretarial science students. This difference persisted for fourth term students even though mean scores of nurse students dropped on intellectual interests, motivation, and applied interests, while mean scores of secretarial science students show slight increases as fourth term students.

With reference to dependency needs, both as freshmen and fourth term students, nurse students had higher dependency factor mean scores, than did secretarial science students at comparable points in time. For both groups, mean scores dropped slightly on some factors, and more greatly on others for fourth term students. Only on the factors of timidity-audacity and closeness did nurse students have lower mean scores than secretarial students.

Relative to factors which comprise the emotional expression dimension, nurse students, as freshmen and as fourth term students had lower mean scores consistently than secretarial students. As fourth term nurse students, mean scores were consistently within the normative range or only slightly exceeded it (egoism-diffidence). In contrast, mean scores for secretarial students both as freshmen and as fourth term students most frequently were above the normative range. As freshmen, mean scores on expressiveness-constraint and self-assertion were within the normative range; as fourth term students only the self-assertion factor mean score was within the normative range.

The correlation coefficient computed between freshmen nurse and freshmen secretarial science scale mean scores was .70, significant at the .01 level. The correlation coefficient computed between scale mean scores of the two groups of students as fourth term students was .54, 28 df significant beyond the .01 level. In brief, within the community college, persons with different personality needs selected the nurse curriculum than selected the secretarial science curriculum.

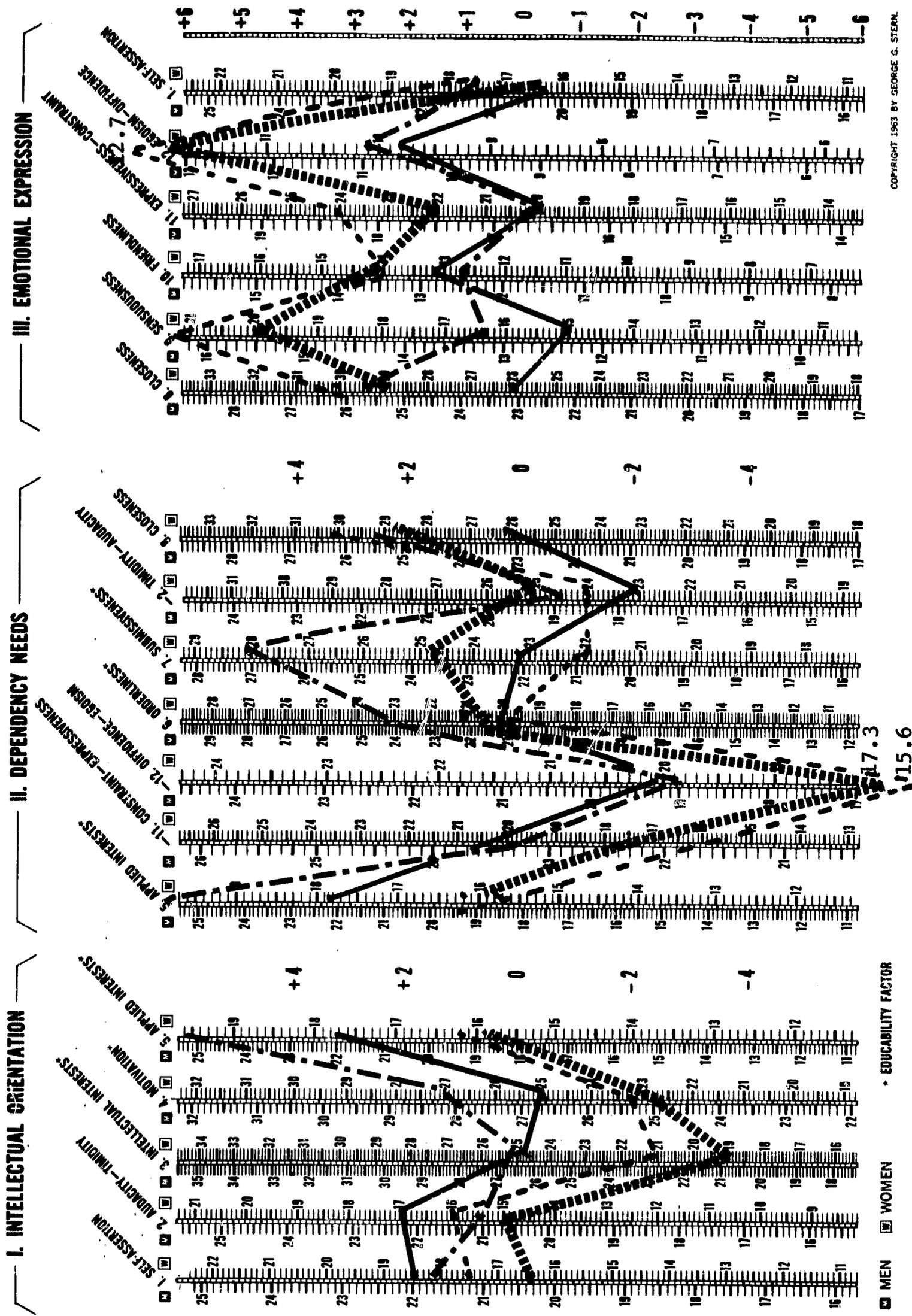
Figure 16 charts the factor profiles for students in nursing and secretarial science in the technical institute.

FIGURE 15. Freshmen and Fourth Term Nurse and Secretarial Science Students at a Community College

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A1)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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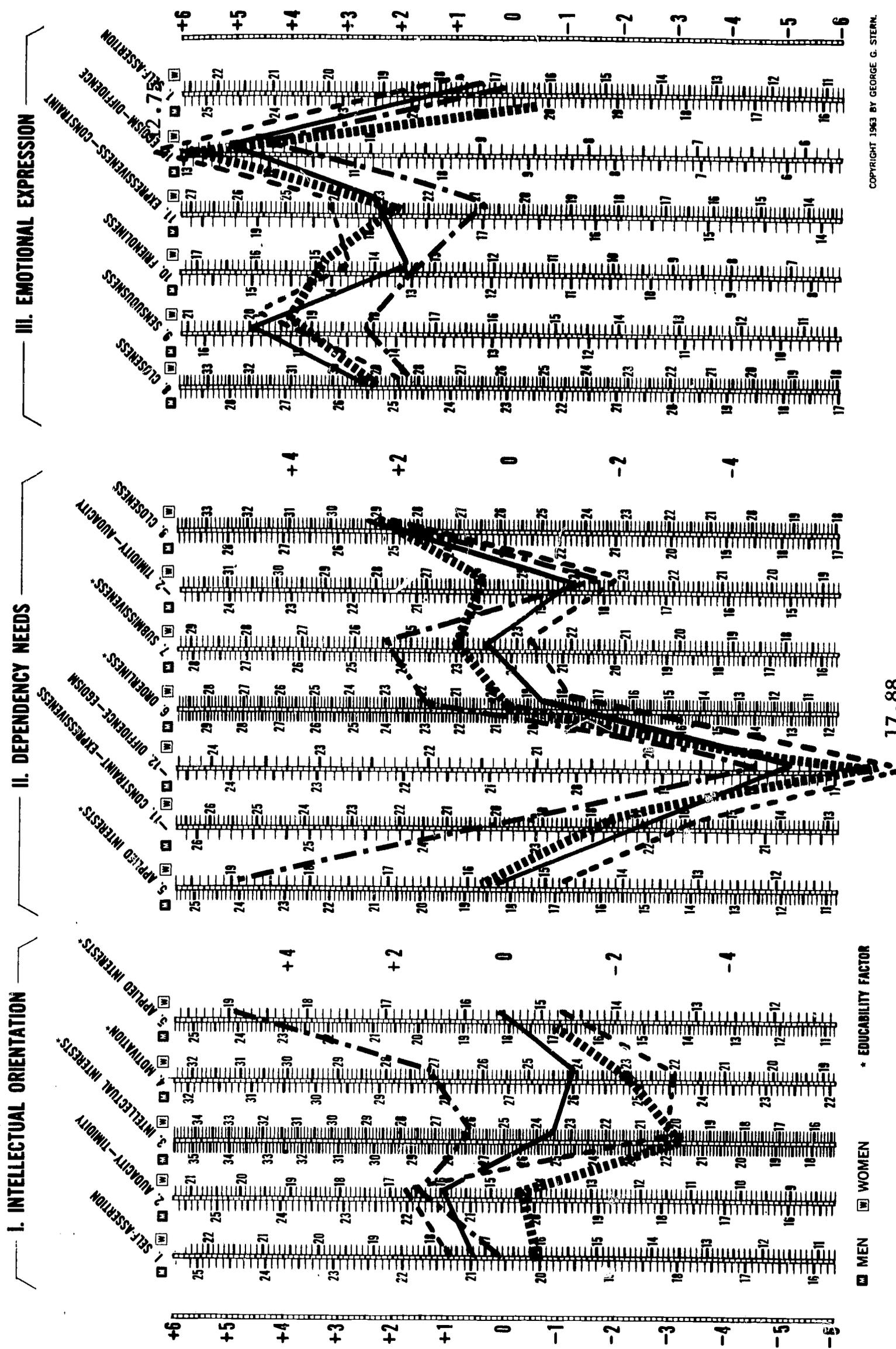
Nursing Freshmen N = 42 Fourth Term N = 37
 Secretarial Science Freshmen N = 88 Fourth Term N = 20

FIGURE 16. Freshmen and Fourth Term Nurse and Secretarial Science Students at a Technical Institute

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A1)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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Nursing Freshmen N = 56 Fourth Term N = 29
 Secretarial Science Freshmen N = 156 Fourth Term N = 79
 17.88

With reference to intellectual orientation, freshmen nurse students had mean scores consistently higher than freshmen in secretarial science. Between entrance and the fourth term, mean scores for nurse students decreased, while those for secretarial science students increased in self-assertion, audacity-timidity, slightly on intellectual interests, decreased in motivation and applied interests. In spite of the opposing directions of change, nurse students continued to have higher mean scores on intellectual interests, motivation and applied interests. Mean scores of nurse students were consistently within the normative range. Mean scores of secretarial students were below the normative range on intellectual interests and motivation.

With reference to dependency needs, the pattern resembled that for the community college students. As freshmen and as fourth term students nurse students consistently had higher mean scores than did secretarial science students at comparable times. Both groups showed decreases in mean scores from entrance to the fourth term, except for the factors of timidity-audacity and closeness, where means of nurse students showed a slight increase.

In the dimension of emotional expression, nurse freshmen had consistently lower mean scores than did secretarial science students. This trend persisted in the scores obtained as fourth term students, except on closeness, where the mean score of nurse students increased and exceeded that of secretarial science students.

Correlation coefficients computed between scale mean scores of freshmen nurse and secretarial science students, and scale mean scores of fourth term nurse and fourth term secretarial science students were .82 and .89 respectively. Both were significant beyond the .01 level.

Correlation coefficients computed between scale mean scores for nurse students as freshmen and as fourth term was .93; for freshmen secretarial students and as fourth term students it was .94, both significant beyond the .01 level.

These findings lead to the conclusion that for technical institute students as for community college students, persons selecting nursing differed in personality needs from those selecting secretarial science. For both schools, findings suggest that nurse students were more oriented towards intellectual endeavors, had greater dependency needs, and slightly less tendency for expression of emotions than did secretarial science students.

Another conclusion drawn is that personality needs show considerable stability over time.

Selected Pre-Test and Post-Test Comparisons

As described previously comparisons between freshmen and fourth term students constituted a comparison of two groups where some but not all respondents were present in both. In an effort to answer questions pertaining to changes over time somewhat more precisely, data from respondents who participated as entering freshmen and again while in the fourth term of their programs were analyzed separately as a type of pre-test and post-test.

Findings related to descriptions of environmental press and reports of personality needs derived from these respondents follow.

Environmental Press: Total Population

Community College: Table 53 reports the factor mean scores on the College Characteristics Index for the 73 community college students responding in Fall 1967 and again in Spring 1969. Factor mean scores increased on the post-test for work-play (1.22), non-vocational climate (2.81) and student dignity (1.46). Mean scores on all other factors decreased with differences in means ranging from 7.10 (academic achievement) to 1.22 (play-work). Differences in means for other factors were as follows: Social form, 6.59; self-expression, 5.64; academic organization, 4.79; intellectual climate, 3.96; group life, 3.20; aspiration level, 2.97; academic climate, 1.42; and play-work, 1.22.

Figure 17 shows the factor score profile for community college respondents.

The correlation coefficient computed between the pre-test and post-test factor mean scores was .93 with 11 df significant beyond the .01 level. Thus, the association between expectations for press and perceptions of press as fourth term students was higher for these respondents than it was for gross comparisons between all freshmen responding and all fourth term students responding. (Correlation coefficient .82).

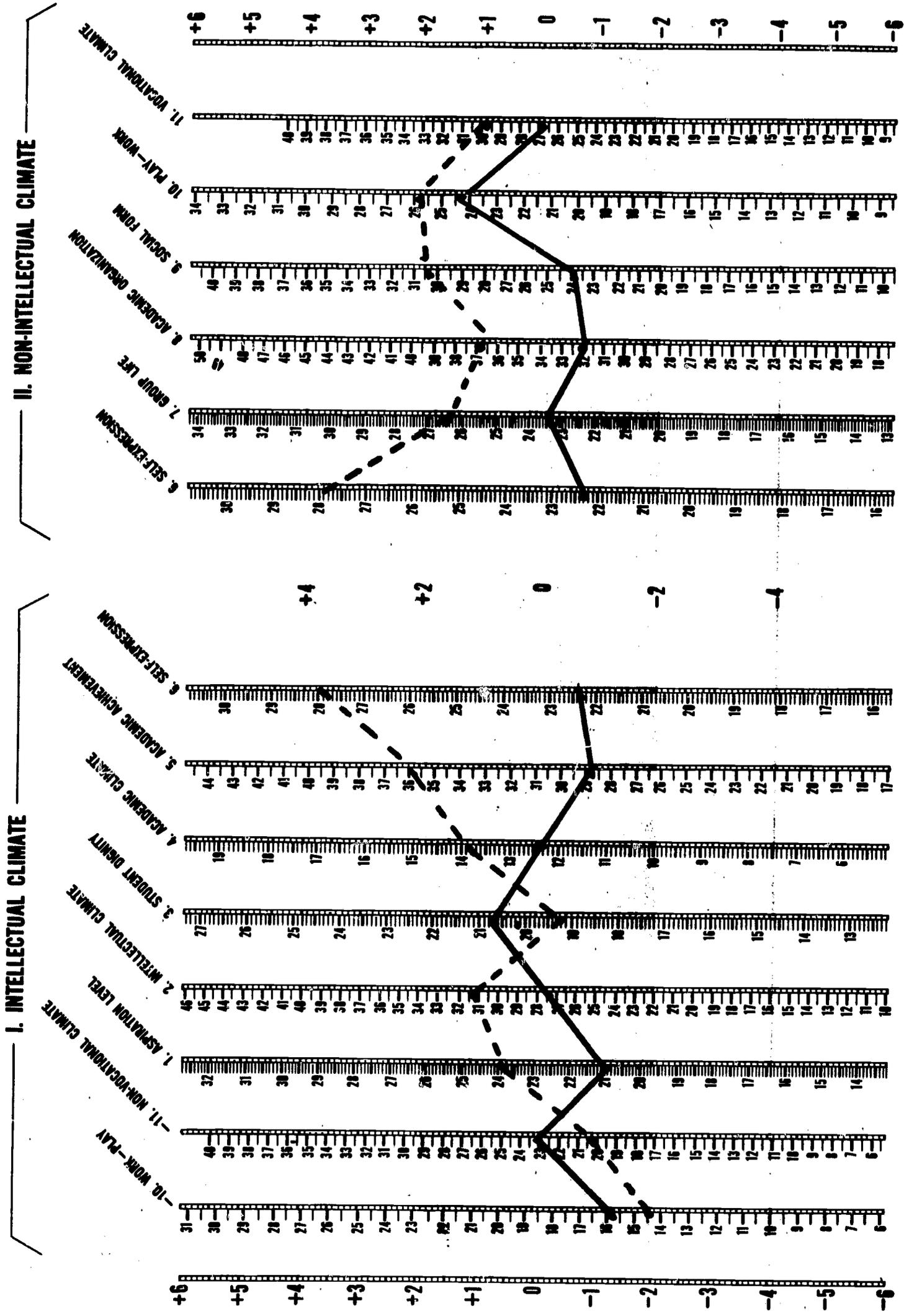
Technical Institute: Factor mean scores for 166 technical institute students who responded in 1967 and again in 1969 are reported in Table 54. Factor mean scores for work-play, non-vocational climate, and student dignity increased on the post-test. Mean scores decreased on all other factors. Decreases in means from largest to smallest were: academic achievement, 13.04; self-

FIGURE 17. Pre-Test and Post-Test Factor Mean Scores of Community College Students

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



Pre-Test - - - N = 73
 Post-Test ——— N = 73

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TABLE 53. College Characteristic Index Factor Mean Scores of Community College Students on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=73	\bar{X}	SD	N=73	\bar{X}	SD
Work-Play		14.47	4.96		15.69	5.29
Non-Vocational Climate		20.22	4.77		23.03	4.64
Aspiration Level		23.89	4.56		20.92	4.23
Intellectual Climate		31.33	7.66		27.37	7.81
Student Dignity		19.18	4.06		20.64	4.79
Academic Climate		13.78	3.88		12.36	4.19
Academic Achievement		35.81	5.75		28.71	7.23
Self-Expression		27.93	5.43		22.29	6.13
Group Life		26.52	4.43		23.32	4.85
Academic Organization		36.82	7.43		32.03	6.64
Social Form		30.27	5.77		23.68	6.16
Play-Work		25.53	4.96		24.31	5.29
Vocational Climate		29.78	4.77		26.97	4.64

TABLE 54. College Characteristics Index Factor Mean Scores of Technical Institute Students on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=166	\bar{X}	SD	N=166	\bar{X}	SD
Work-Play		14.01	4.01		17.84	5.11
Non-Vocational Climate		18.98	4.32		19.77	4.97
Aspiration Level		24.59	4.33		18.88	5.41
Intellectual Climate		21.30	7.04		21.03	6.99
Student Dignity		16.87	4.06		17.22	4.44
Academic Climate		14.50	3.39		9.04	4.12
Academic Achievement		36.55	5.72		23.51	8.45
Self-Expression		29.19	5.11		16.98	6.15
Group Life		28.68	4.37		23.34	5.23
Academic Organization		36.93	5.73		31.21	6.32
Social Form		34.00	5.21		24.79	6.14
Play-Work		25.99	4.01		22.16	5.11
Vocational Climate		31.02	4.32		30.23	4.97

expression, 12.23; intellectual climate, 10.27; social form, 10.21; academic organization, 5.72; aspiration level, 5.71; academic climate, 5.46; group life, 5.34; play-work, 3.83; and vocational climate, .79. The correlation coefficient computed between pre-test and post-test factor means was .77 significant beyond the .01 level with 11 df. Figure 18 shows the factor mean score profile for technical institute respondents. The association between pre-test and post-test factor mean scores was higher than for all freshmen and all fourth term students.

Personality Factors: Total Population

Tables 55 and 56 present personality mean factor scores on pre-test and post-test for community college and technical institute students respectively. Differences in means for both groups of students rarely exceeded 1.5. Correlation coefficients computed between pre-test and post-test factor means for community college and technical institute students were .97 and .95 respectively. Both with 13 df were significant beyond the 1 percent level. Thus the stability of personality factor mean scores was high for students in both schools.

Figures 19 and 20 show the factor mean score profiles for both groups. Although differences in personality factors were found to be linked with sex, it wasn't feasible to analyze pre-test and post-test results for men and women separately. Therefore factor mean scores were charted consistently on the male side. Since a number of respondents were women, a comparison with the normative range is not applicable for these figures.

Environmental Press: Specific Curricula

Business Administration: College Characteristics
mean factor scores of business students in the community college on the pre-test and post-test appear in Table 57. Differences in means range from .84 to 1.52. Mean scores increased slightly on work-play (1.74), non-vocational climate (1.69) and student dignity (2.04). Scores decreased on the remaining factors, with the largest decreases occurring on factors, academic achievement (8.41), social form (8.15), self-expression (6.44) and group life (4.88). Means on the pre-test and post-test for business students correlated .87, 11 df significant beyond the .01 level.

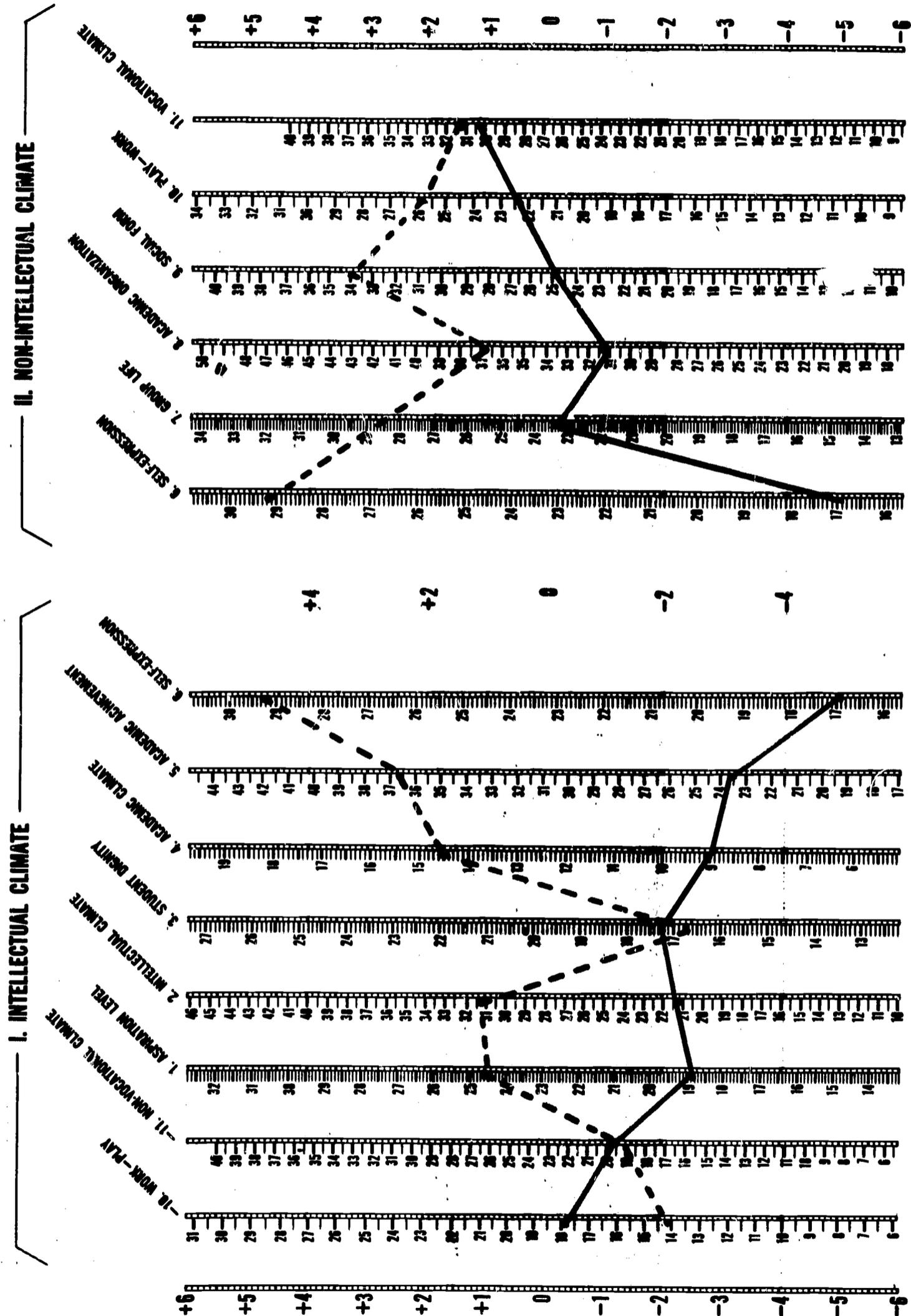
Table 58 reports similar data for business students in the technical institute. Mean scores increased on the post-test for factors work-play (3.54), non-vocational climate (3.13) and student dignity (1.73). Means on all

FIGURE 18. Pre-Test and Post-Test Factor Mean Scores of Technical Institute Students

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



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Pre-Test --- N = 166
 Post-Test ——— N = 166

TABLE 55. Activities Index Factor Mean Scores of Community College Students on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=73	\bar{X}	SD	N=74	\bar{X}	SD
Self-Assertion		19.11	7.81		19.24	7.31
Audacity-Timidity		18.34	7.45		19.48	7.20
Intellectual Interests		24.23	7.25		24.23	8.09
Motivation		24.93	6.40		24.89	6.05
Applied Interests		19.23	5.66		17.91	5.90
Orderliness		22.28	5.91		19.52	6.50
Submissiveness		23.75	6.22		21.64	5.15
Closeness		27.37	5.58		26.51	5.31
Timidity-Audacity		21.66	7.45		20.52	7.20
Constraint-Expressiveness		20.05	7.22		19.28	6.69
Diffidence-Egoism		17.77	5.09		17.48	5.69
Sensuousness		17.37	5.87		17.65	5.56
Friendliness		12.84	4.14		13.38	3.71
Expressiveness-Constraint		20.22	6.87		21.00	6.28
Egoism-Diffidence		12.23	5.09		12.52	5.69

TABLE 56. Activities Index Factor Mean Scores of Technical Institute Students on Pre-Test and Post-Test

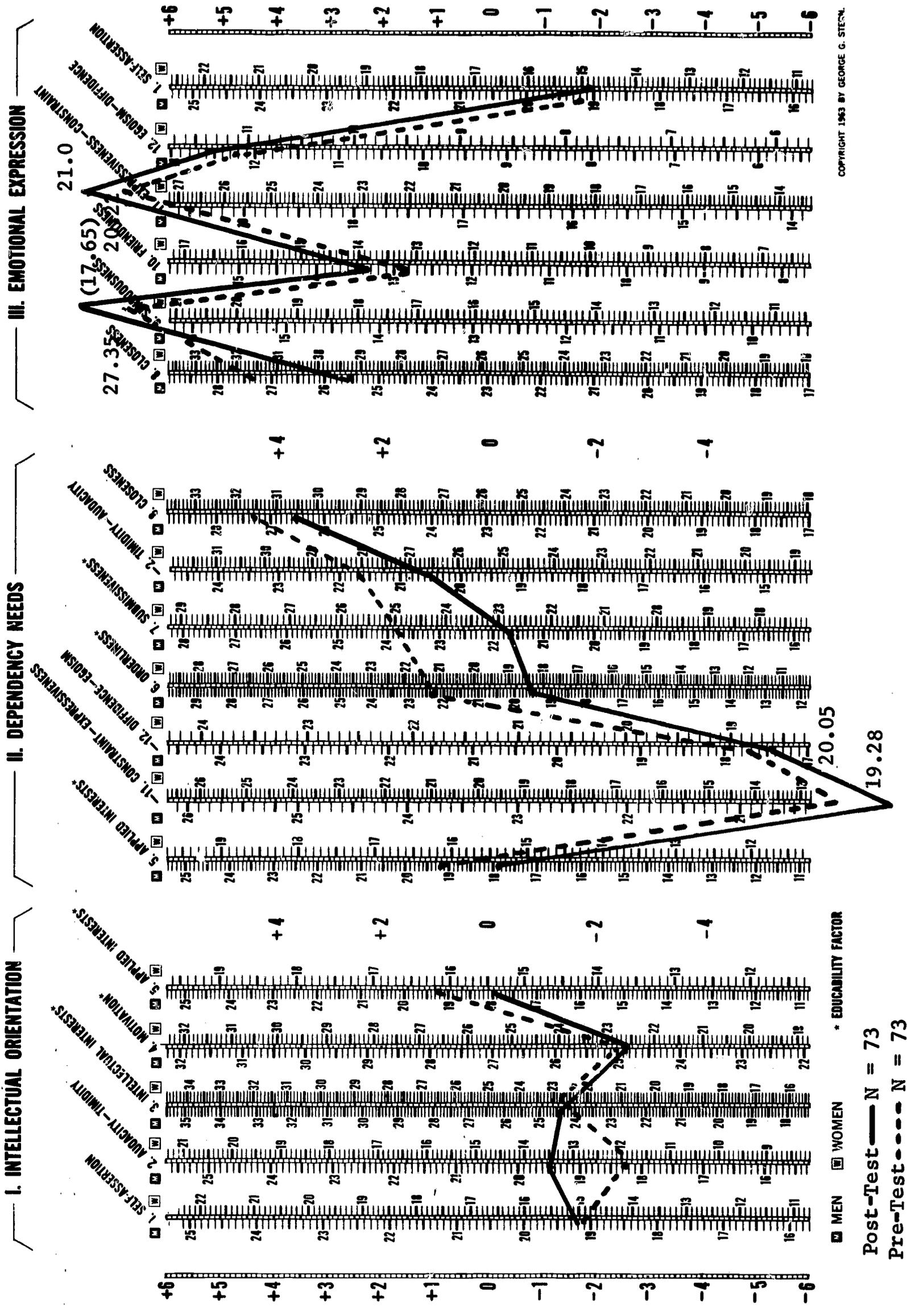
FACTOR	Pre-Test			Post-Test		
	N=166	\bar{X}	SD	N=166	\bar{X}	SD
Self-Assertion		17.77	6.78		18.86	7.97
Audacity-Timidity		17.39	6.74		18.62	6.99
Intellectual Interests		21.33	7.13		22.23	8.01
Motivation		24.02	6.51		24.28	7.35
Applied Interests		17.26	5.47		15.95	5.69
Orderliness		20.30	5.82		17.57	6.59
Submissiveness		23.16	5.68		22.47	5.96
Closeness		27.01	5.76		26.89	6.51
Timidity-Audacity		22.61	6.74		21.38	6.99
Constraint-Expressiveness		19.34	6.50		17.56	6.80
Diffidence-Egoism		18.01	4.21		18.11	4.04
Sensuousness		17.43	5.40		18.31	5.25
Friendliness		13.96	3.64		14.04	3.56
Expressiveness-Constraint		20.66	6.50		22.44	6.80
Egoism-Diffidence		11.99	4.21		11.89	4.04

FIGURE 19. Pre-Test and Post-Test Factor Mean Scores of Community College Students

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A1)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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□ MEN □ WOMEN * EDUCABILITY FACTOR

Post-Test — N = 73

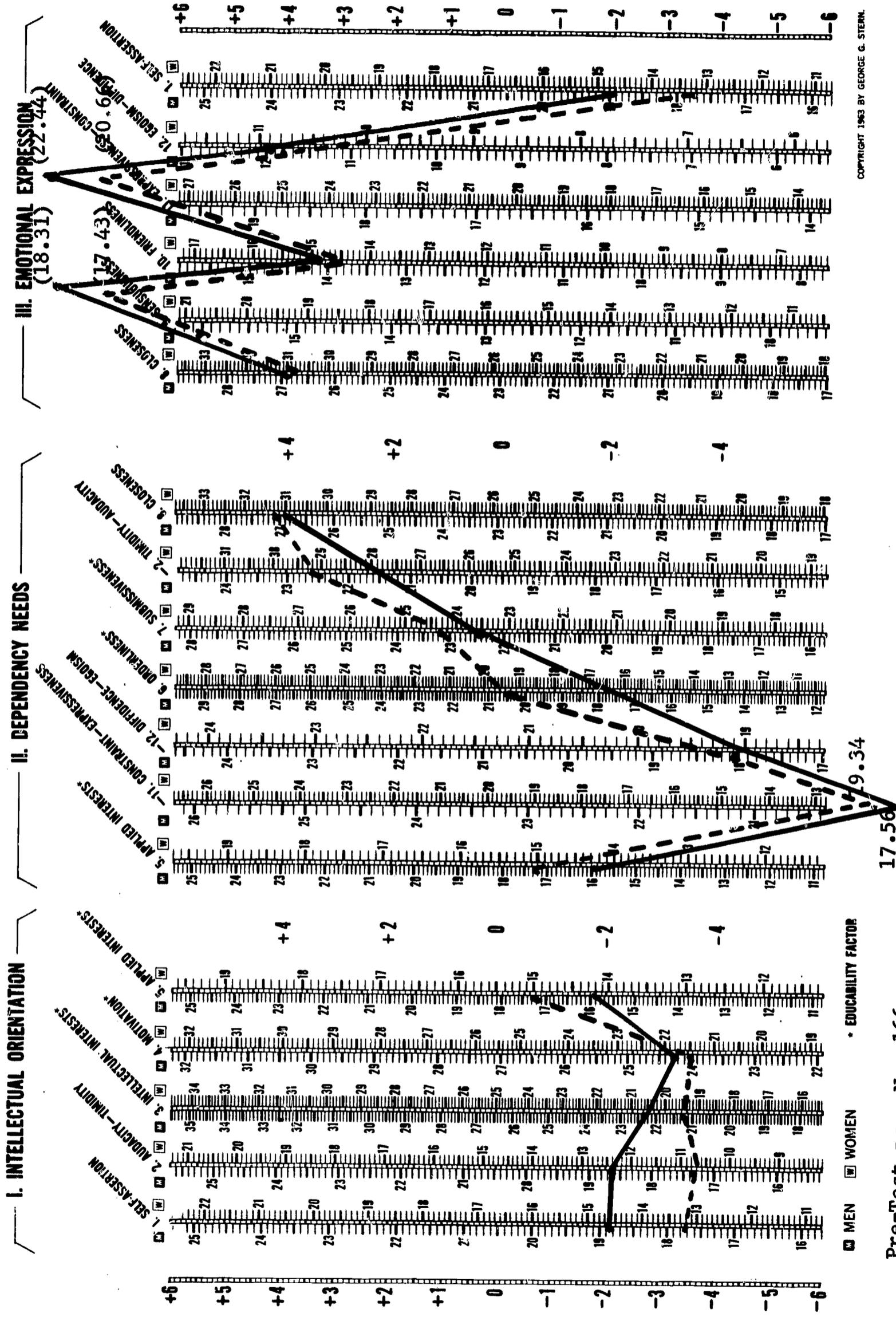
Pre-Test - - - N = 73

FIGURE 20. Pre-Test and Post-Test Factor Mean Scores of Technical Institute Students

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A1)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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TABLE 57. College Characteristics Index Factor Mean Scores of Business Administration Students at the Community College on Pre-Test And Post-Test

FACTOR	Pre-Test			Post-Test		
	N=23	\bar{X}	SD	N=23	\bar{X}	SD
Work-Play		14.17	5.71		15.91	5.20
Non-Vocational Climate		20.83	5.17		22.52	3.75
Aspiration Level		24.36	4.79		20.48	5.11
Intellectual Climate		30.18	8.75		25.83	8.44
Student Dignity		17.48	3.99		19.52	5.33
Academic Climate		12.45	4.44		10.91	4.40
Academic Achievement		34.50	7.70		26.09	8.89
Self-Expression		27.09	6.76		20.65	6.69
Group Life		26.36	4.98		21.48	5.13
Academic Organization		33.35	8.84		31.83	6.66
Social Form		31.32	6.34		23.17	6.42
Play-Work		25.83	5.71		24.09	5.20
Vocational Climate		29.17	5.17		27.48	3.75

TABLE 58. College Characteristics Index Factor Mean Scores of Business Administration Students at Technical Institute on Pre-Test and Post Test

FACTOR	Pre-Test			Post-Test		
	N=41	\bar{X}	SD	N=34	\bar{X}	SD
Work-Play		13.90	3.61		17.44	5.08
Non-Vocational Climate		18.90	4.86		22.03	5.05
Aspiration Level		23.85	4.91		18.26	5.38
Intellectual Climate		29.22	7.94		21.12	5.69
Student Dignity		15.68	3.78		17.41	4.51
Academic Climate		13.59	3.69		8.21	3.69
Academic Achievement		35.59	6.17		24.26	8.55
Self-Expression		28.49	5.66		17.74	6.06
Group Life		27.90	5.00		22.68	6.46
Academic Organization		36.22	5.32		30.41	6.32
Social Form		33.71	6.53		23.29	6.43
Play-Work		26.10	3.61		22.56	5.08
Vocational Climate		31.10	4.86		27.97	5.05

other factors decreased with differences ranging from 11.33 on academic achievement, to 3.13 on vocational climate. Largest differences in other factor mean scores were: self-expression, (10.75); social form, 10.42; intellectual climate, 8.10; academic organization, 5.81; aspiration level, 5.59; academic climate, 5.38; and group life, 5.22.

Factor mean scores on the pre-test and post-test correlated at .78, 11 df significant beyond the .01 level. In sum, expectations differed somewhat from perceptions for business students in both schools but more so for those at the technical institute.

Electrical Technology: Factor mean scores for community college technology students increased on the post-test for factors work-play .99, non-vocational climate 1.45, and student dignity 2.11. Mean scores on all other factors decreased with differences ranging from 8.22 on social form, 7.22 on academic achievement; 6.34 on academic organization, 5.77 on self-expression, 4.66 on intellectual climate to .89 on play work. Correlation coefficient for mean scores on pre-test and post-test was .90 and significant beyond the .01 level. Thus pre-test and post-test means showed a high degree of association though differences in means on some factors were sizeable.

Electrical technology student means on pre-test and post-test are reported for technical institute students in Table 60. Factor mean scores increased on the post-test for work-play, non-vocational, and student dignity with differences of 4.20, .5, 1.40 respectively. Other factor mean scores decreased with differences ranging from 10.62 on self-expression to .5 on vocational-climate. Other largest decreases occurred on social form, 9.23, academic achievement 8.87, intellectual climate 8.64 and group life 5.5. Pre-test and post-test mean scores correlated at .82 with 11 df and was significant beyond the .01 level. Thus differences between expectations and perceptions were greater for technology students in the technical institute than for community college students, in both the degree of association and the range of differences in mean scores.

Nursing: Tables 61 and 62 report pre-test and post-test scores for nurse students at the community college and technical institute respectively. Both groups showed increases in factor mean scores for work-play and non-vocational climate. Means decreased on all other factors. For community college nurse students largest differences in means were 9.93, academic organization; 7.45, academic achievement; 5.88, social form and 5.14, self-expression. For technical institute nurse

TABLE 59. College Characteristics Index Factor Mean Scores of Electrical Technology Students at Community College on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=9	\bar{X}	SD	N=9	\bar{X}	SD
Work-Play	15.11		4.46	16.00		4.87
Non-Vocational Climate	21.22		4.92	22.67		3.54
Aspiration Level	24.44		5.46	21.78		3.99
Intellectual Climate	30.33		8.35	25.67		8.66
Student Dignity	20.56		2.92	22.67		5.32
Academic Climate	14.22		3.80	11.89		4.34
Academic Achievement	36.00		5.45	28.78		6.40
Self-Expression	27.44		6.44	21.67		5.61
Group Life	25.11		5.47	22.44		3.58
Academic Organization	38.57		5.36	32.33		4.09
Social Form	29.89		5.47	21.67		6.87
Play-Work	24.89		4.46	24.00		4.87
Vocational Climate	28.78		4.92	27.33		3.54

TABLE 60. College Characteristics Index Factor Mean Scores of Electrical Technology Students At Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=26	\bar{X}	SD	N=34	\bar{X}	SD
Work-Play	13.54		3.74	17.74		5.02
Non-Vocational Climate	19.00		3.50	19.50		4.89
Aspiration Level	24.85		3.56	20.74		5.61
Intellectual Climate	30.85		6.27	22.21		7.57
Student Dignity	16.19		4.01	17.59		5.14
Academic Climate	14.38		3.71	9.65		4.16
Academic Achievement	36.19		5.77	27.32		9.14
Self-Expression	28.65		4.54	18.03		6.25
Group Life	28.50		4.25	23.00		4.83
Academic Organization	35.77		5.13	33.15		6.55
Social Form	34.23		5.30	25.00		5.87
Play-Work	26.46		3.74	22.26		5.02
Vocational Climate	31.00		3.50	30.50		4.89

TABLE 61. College Characteristics Index Factor Mean Scores of Nurse Students At Community College on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=25	\bar{X}	SD	N=25	\bar{X}	SD
Work-Play		14.96	5.39		16.27	6.31
Non-Vocational Climate		19.48	4.51		24.23	5.81
Aspiration Level		24.16	4.24		21.50	3.95
Intellectual Climate		32.92	7.34		29.38	7.09
Student Dignity		20.64	4.33		20.04	5.09
Academic Climate		15.04	3.59		13.38	4.01
Academic Achievement		37.16	3.84		29.71	6.27
Self-Expression		28.56	4.85		23.42	5.56
Group Life		27.56	3.31		24.21	4.14
Academic Organization		40.20	5.83		30.27	7.33
Social Form		29.92	5.61		24.04	6.49
Play-Work		25.04	5.39		23.73	6.31
Vocational Climate		30.52	4.51		25.77	5.81

TABLE 62. College Characteristics Index Factor Mean Scores of Nurse Students at Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=27	\bar{X}	SD	N=27	\bar{X}	SD
Work-Play		15.50	4.95		18.04	5.64
Non-Vocational Climate		19.36	5.90		20.37	3.72
Aspiration Level		25.81	4.54		19.78	5.33
Intellectual Climate		32.63	7.03		23.11	7.58
Student Dignity		18.71	4.59		17.30	4.15
Academic Climate		15.11	3.23		11.11	4.48
Academic Achievement		38.37	4.40		26.15	8.66
Self-Expression		30.22	3.82		19.22	6.14
Group Life		28.78	4.44		23.37	4.72
Academic Organization		38.14	7.29		31.26	5.67
Social Form		33.67	4.54		25.33	6.11
Play-Work		24.50	4.95		21.96	5.64
Vocational-Climat		30.64	5.90		29.63	3.72

students, largest differences in means were: 12.22 academic achievement, 11.00 self-expression, 9.52 intellectual climate, 8.34 social form, 6.88 academic organization, 6.03, aspiration level, and 5.41 group life.

Correlation coefficients between pre-test and post-test scores were .96 and .83 for community college and technical institute nurse students respectively.

Secretarial Science: Data for secretarial science students appear in Tables 63 and 64 for community college and technical institute students respectively.

Community college secretarial science students showed increase in factor means on the post-test in work-play, non-vocational climate and student dignity. Students in the technical institute showed increases on work-play and vocational climate. Mean scores decreased for both groups on all other factors. Differences of means ranged from 5.41 to .29 for community college students, and from 16.23 to .15 for those at the technical institute. Largest differences in means for community college students were on factors: academic achievement 5.41, self-expression 5.11 and social form 4.71. Largest differences for technical institute students were: academic achievement 16.23, self-expression 14.16, intellectual climate 12.54, social form 9.01, academic organization 6.61, academic climate 6.51 and aspiration level 6.52. Correlation coefficients between pre-test and post-test for community college and technical institute secretarial students was .94 and .61 respectively. With 11 df the first is significant beyond the .01 level, and the second, at the .05 level.

In conclusion greater changes occurred in descriptions of press for technical institute students in all curricula than for community college students.

Personality Need Factors: Specific Curricula

Analysis of personality need factor mean scores on pre-tests and post-tests for each curriculum in each school consistently indicated a high degree of stability. Table 65 reports the correlation coefficients obtained between pre-test and post-test means by curriculum. All with 13 df were significant beyond the .01 level.

TABLE 63. College Characteristics Index Factor Mean Scores of Secretarial Science Students At Community College on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=17	\bar{X}	SD	N=17	\bar{X}	SD
Work-Play		13.82	3.54		14.35	3.98
Non-Vocational Climate		19.94	4.72		22.06	4.16
Aspiration Level		22.59	4.39		20.24	3.53
Intellectual Climate		31.00	6.48		28.94	7.50
Student Dignity		18.59	3.45		22.00	2.42
Academic Climate		13.41	3.18		13.12	3.81
Academic Achievement		35.41	5.34		30.82	5.78
Self-Expression		28.35	3.84		23.24	6.35
Group Life		25.94	4.62		25.00	5.40
Academic Organization		35.50	6.38		34.82	6.11
Social Form		29.65	5.74		24.94	5.02
Play-Work		26.18	3.54		25.65	3.98
Vocational Climate		30.06	4.72		27.94	4.16

TABLE 64. College Characteristics Index Factor Mean Scores of Secretarial Science Students at Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=71	\bar{X}	SD	N=71	\bar{X}	SD
Work-Play		13.65	3.87		18.01	5.05
Non-Vocational Climate		18.86	3.56		18.59	5.08
Aspiration Level		24.46	4.14		17.94	5.18
Intellectual Climate		32.17	6.61		19.63	6.88
Student Dignity		17.08	3.81		16.93	4.23
Academic Climate		14.85	3.10		8.34	3.90
Academic Achievement		36.54	5.84		20.31	6.79
Self-Expression		29.41	5.44		15.25	5.81
Group Life		29.17	4.01		23.80	5.01
Academic Organization		37.28	5.45		30.65	6.37
Social Form		34.21	4.63		25.20	6.17
Play-Work		26.34	3.87		21.99	5.05
Vocational Climate		31.14	3.56		31.41	5.08

TABLE 65. Correlation Coefficients of Factor Mean Scores on Activity Index on Pre-Test and Post-Test By Curriculum and Institution

	Community College	Technical Institute
Business Administration	.95	.92
Electrical Technology	.97	.99
Nursing	.96	.92
Secretarial Science	.98	.96

Tables 66 through 73 present factor means scores on pre-test and post-test for each curriculum in each institution.

Drop-Outs and Students Still Enrolled During Fourth Term

Freshmen were dichotomized on the basis of dropping out of curriculum and continuing in curriculum into the fourth term. Data pertaining to environmental press and personality need factors were then analyzed. The questions to which answers were sought were:

- 1) Do expectations for environmental press reported by freshmen who subsequently leave the curriculum differ significantly from the expectations of freshmen who continue into the fourth term?
- 2) Do freshmen who subsequently leave the curriculum report personality needs which differ significantly from freshmen who continue into the fourth term?

Environmental Press:

Factor mean scores on the College Characteristics Index for community college freshmen are reported in Table 74.

As can be noted, differences in mean scores between students who subsequently dropped out and those who continued rarely exceeded 1 point.

Table 75 reports comparable data for technical institute freshmen. Differences in means were small, often less than 1, but in the factor of academic achievement was 1.27 and on self-expression was 1.9. The great similarity in means for the two categories in each school

TABLE 66. Activities Index Factor Mean Scores of Business Administration Students at the Community College on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=23	\bar{X}	SD	N=23	\bar{X}	SD
Self Assertion		22.32	7.40		22.39	7.49
Audacity-Timidity		21.43	7.49		23.61	8.13
Intellectual Interests		23.23	7.01		24.61	7.22
Motivation		25.14	7.08		26.61	5.98
Applied Interests		18.68	4.73		18.26	5.07
Orderliness		20.52	5.42		18.43	5.63
Submissiveness		21.64	4.92		20.09	4.94
Closeness		25.95	3.79		24.70	5.11
Timidity-Audacity		18.57	7.49		16.39	8.13
Constraint-Expressiveness		20.22	6.51		19.74	4.78
Diffidence-Egoism		16.04	3.13		15.83	5.65
Sensuousness		17.27	3.55		17.87	5.10
Friendliness		13.14	3.41		13.43	4.08
Expressiveness-Constraint		20.68	4.99		20.26	4.78
Egoism-Diffidence		13.96	3.13		14.17	5.65

TABLE 67. Activities Index Factor Mean Scores of Business Administration Students at Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=41	\bar{X}	SD	N=34	\bar{X}	SD
Self-Assertion		20.63	5.54		21.38	7.99
Audacity-Timidity		20.80	7.18		19.62	6.41
Intellectual Interests		20.10	6.75		20.38	8.08
Motivation		23.44	5.78		24.62	7.56
Applied Interests		16.59	5.81		14.62	5.97
Orderliness		18.80	6.46		15.85	7.02
Submissiveness		20.07	6.17		20.44	6.48
Closeness		23.73	6.17		23.59	6.97
Timidity-Audacity		19.20	7.18		20.38	6.41
Constraint-Expressiveness		19.90	7.16		17.50	6.85
Diffidence-Egoism		17.80	3.84		18.62	3.89
Sensuousness		16.00	5.06		16.21	4.15
Friendliness		14.49	3.61		14.88	3.13
Expressiveness-Constraint		20.10	7.16		22.50	6.85
Egoism-Diffidence		12.20	3.84		11.38	3.89

TABLE 68. Activities Index Factor Mean Scores of Electrical Technology Students at Community College on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N= 9	\bar{X}	SD	N=9	\bar{X}	SD
Self-Assertion		16.89	7.59		17.44	6.82
Audacity-Timidity		22.33	8.85		23.22	7.86
Intellectual Interests		26.22	4.92		25.67	9.57
Motivation		24.89	5.06		24.56	6.61
Applied Interests		18.33	4.77		18.78	4.66
Orderliness		19.89	5.90		18.78	4.21
Submissiveness		19.22	5.67		20.00	4.64
Closeness		21.11	5.82		22.33	3.16
Timidity-Audacity		17.67	8.85		16.78	7.86
Constraint-Expressiveness		25.00	6.21		22.67	7.23
Diffidence-Egoism		19.56	6.09		18.11	5.99
Sensuousness		12.89	7.44		14.22	5.65
Friendliness		11.00	5.05		11.33	3.74
Expressiveness-Constraint		15.00	6.21		17.33	7.23
Egoism-Diffidence		10.44	6.09		11.89	5.99

TABLE 69. Activities Index Factor Mean Scores of Electrical Technology Students at Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=26	\bar{X}	SD	N=34	\bar{X}	SD
Self-Assertion		18.85	7.38		20.82	7.92
Audacity-Timidity		22.92	5.55		24.53	6.75
Intellectual Interests		24.31	5.98		26.74	7.57
Motivation		27.12	6.02		27.97	6.15
Applied Interests		20.00	5.09		20.03	4.75
Orderliness		20.77	5.60		18.94	6.66
Submissiveness		22.27	5.44		22.47	5.74
Closeness		23.69	4.34		24.62	5.60
Timidity-Audacity		17.08	5.55		15.47	6.75
Constraint-Expressiveness		23.92	5.04		22.09	6.12
Diffidence-Egoism		18.58	4.33		18.00	3.39
Sensuousness		13.62	4.64		16.21	4.29
Friendliness		12.19	3.69		12.68	4.18
Expressiveness-Constraint		16.08	5.04		17.91	6.12
Egoism-Diffidence		11.42	4.33		12.00	3.39

TABLE 70. Activities Index Factor Mean Scores of Nurse Students At Community College on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=25	\bar{X}	SD	N=26	\bar{X}	SD
Self-Assertion		18.33	6.63		17.92	6.99
Audacity-Timidity		15.48	5.97		16.46	4.61
Intellectual Interests		26.12	6.55		24.92	7.98
Motivation		26.80	5.88		24.62	5.67
Applied Interests		20.80	6.08		17.88	6.56
Orderliness		24.68	5.36		19.81	7.51
Submissiveness		27.80	4.82		23.42	5.46
Closeness		29.56	4.96		26.88	4.86
Timidity-Audacity		24.52	5.97		23.54	4.61
Constraint-Expressiveness		20.68	6.08		19.35	6.54
Diffidence-Egoism		19.92	5.47		20.15	5.07
Sensuousness		16.48	5.97		15.96	5.34
Friendliness		12.64	4.32		13.65	3.77
Expressiveness-Constraint		19.32	6.08		20.65	6.55
Egoism-Diffidence		10.08	5.47		9.85	5.07

TABLE 71. Activities Index Factor Mean Scores of Nurse Students At Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=27	\bar{X}	SD	N=27	\bar{X}	SD
Self-Assertion		15.71	6.43		17.44	7.48
Audacity-Timidity		15.71	5.48		16.00	5.86
Intellectual Interests		24.32	7.64		24.19	8.34
Motivation		25.57	6.09		24.41	7.07
Applied Interests		19.50	5.39		15.74	6.03
Orderliness		22.50	5.45		18.15	6.76
Submissiveness		25.18	5.27		23.78	5.58
Closeness		29.04	4.68		29.44	5.15
Timidity-Audacity		24.29	5.48		24.00	5.86
Constraint-Expressiveness		19.50	5.97		16.74	5.87
Diffidence-Egoism		19.39	4.25		18.89	4.33
Sensuousness		18.11	5.47		19.93	5.33
Friendliness		12.50	3.42		13.48	3.09
Expressiveness-Constraint		20.50	5.97		23.26	5.87
Egoism-Diffidence		10.61	4.25		11.11	4.33

TABLE 72. Activities Index Factor Mean Scores of Secretarial Science Students at Community College On Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=17	\bar{X}	SD	N=17	\bar{X}	SD
Self-Assertion		17.24	9.22		17.88	7.01
Audacity-Timidity		16.24	6.60		16.53	5.35
Intellectual Interests		21.71	8.93		21.75	8.85
Motivation		21.94	6.22		23.06	6.36
Applied Interests		18.12	6.49		16.94	6.85
Orderliness		22.41	6.47		20.94	7.20
Submissiveness		22.94	6.89		21.88	4.59
Closeness		29.29	5.61		30.88	4.27
Timidity-Audacity		23.76	6.60		23.47	5.35
Constraint-Expressiveness		16.29	8.67		16.76	8.30
Diffidence-Egoism		16.00	4.99		15.29	5.18
Sensuousness		21.18	5.41		22.00	3.93
Friendliness		13.71	4.27		14.00	2.90
Expressiveness-Constraint		23.71	8.67		24.69	5.93
Egoism-Diffidence		14.00	4.99		14.71	5.18

TABLE 73. Activities Index Factor Mean Scores of Secretarial Science Students at Technical Institute on Pre-Test and Post-Test

FACTOR	Pre-Test			Post-Test		
	N=71	\bar{X}	SD	N=71	\bar{X}	SD
Self-Assertion		16.54	6.85		17.25	7.80
Audacity-Timidity		14.06	4.94		16.31	6.03
Intellectual Interests		19.77	6.96		20.21	7.10
Motivation		22.61	6.83		22.31	7.30
Applied Interests		15.76	4.85		14.72	4.99
Orderliness		20.11	5.48		17.52	6.23
Submissiveness		24.46	4.87		22.94	5.83
Closeness		29.31	4.90		28.58	6.27
Timidity-Audacity		25.94	4.94		23.69	6.03
Constraint-Expressiveness		17.27	5.92		15.73	6.55
Diffidence-Egoism		17.38	4.28		17.63	4.29
Sensuousness		19.38	4.93		19.70	5.50
Friendliness		14.87	3.39		14.49	3.44
Expressiveness-Constraint		22.73	5.92		24.27	6.55
Egoism-Diffidence		12.62	4.28		12.37	4.29

TABLE 74. College Characteristics Index Factor Mean Scores of Community College Freshmen by Dropping Out or Still Enrolled in Curricula During Fourth Term

FACTOR	Dropped Out		Still Enrolled			
	N=140	\bar{X}	SD	N=161	\bar{X}	SD
Work-Play		14.05	4.37		14.40	5.23
Non-Vocational Climate		19.84	4.20		20.40	5.07
Aspiration Level		24.01	4.32		24.29	4.71
Intellectual Climate		31.88	6.80		31.66	7.07
Student Dignity		17.37	3.96		18.22	4.22
Academic Climate		13.77	3.54		13.81	3.93
Academic Achievement		35.92	6.61		35.87	6.20
Self-Expression		28.47	5.67		28.36	5.18
Group Life		27.24	4.65		26.62	4.39
Academic Organization		36.26	5.68		36.27	6.69
Social Form		32.23	6.16		31.04	5.81
Play-Work		25.95	4.37		25.60	5.23
Vocational-Climate		30.16	4.20		29.60	5.07

TABLE 75. College Characteristics Index Factor Mean Scores of Technical Institute Freshmen by Dropping Out or Still Enrolled in Curricula During Fourth Term

FACTOR	Dropped Out		Still Enrolled			
	N=323	\bar{X}	SD	N=162	\bar{X}	SD
Work-Play		14.61	4.71		14.42	4.47
Non-Vocational Climate		19.47	5.30		19.23	4.81
Aspiration Level		24.52	4.34		24.36	4.30
Intellectual Climate		30.44	6.90		31.15	6.80
Student Dignity		16.06	3.52		16.84	3.95
Academic Climate		13.73	3.47		14.09	3.56
Academic Achievement		34.96	6.25		36.23	6.20
Self-Expression		27.13	5.44		29.03	5.15
Group Life		27.72	4.87		28.27	4.40
Academic Organization		35.82	5.95		36.65	6.06
Social Form		33.72	5.94		33.57	5.25
Play-Work		25.39	4.71		25.58	4.47
Vocational Climate		30.53	5.30		30.75	4.81

was reflected in the correlation coefficients computed between scale mean scores. For community college drop-outs compared with those still enrolled it was .99; for technical institute categories it was .98. Both with 28 df of freedom were significant beyond the .01 level.

Figure 21 shows profiles for the two institutions.

Personality Needs

Tables 76 and 77 report personality need factor mean scores for community college drop-outs and still-enrolled and technical institute drop-outs and still-enrolled. Differences in mean scores were small exceeding 1 point for community college categories on self-assertion 1.36; intellectual interests, 1.59; motivation, 1.04; diffidence-egoism, 1.14; sensuousness, 1.34. Differences in mean scores exceeding 1 point for technical institute categories were on audacity-timidity 2.72; orderliness, 2.09; closeness, 2.17; and constraint-expressiveness, 1.10. Mean scores of drop-outs were slightly higher on self-assertion and audacity-timidity, motivation and constraint than those who continued. Figure 22 shows profiles for the four categories.

Although none of the mean differences attained statistical significance at the .05 level, note in Figure 22, that community college freshmen who subsequently dropped out consistently had lower mean scores on factors related to intellectual orientation than did those who continued. The converse of this was true for the freshmen at the technical institute who subsequently dropped out. In every case factor mean scores were higher than for those who continued with the difference in means on audacity-timidity significant at the .001 level. Scores exceeded the mean scores for drop-outs from the community college also. The similarity of profiles of drop-outs from the technical institute to profiles of those who continued at the community college on the factors of intellectual interests, and motivation poses the question as to whether drop-outs would have continued had they been enrolled at the community college. The same question can be posed for drop-outs from the community college for mean scores on intellectual interests and motivation were almost equivalent to those of students who continued at the technical institute.

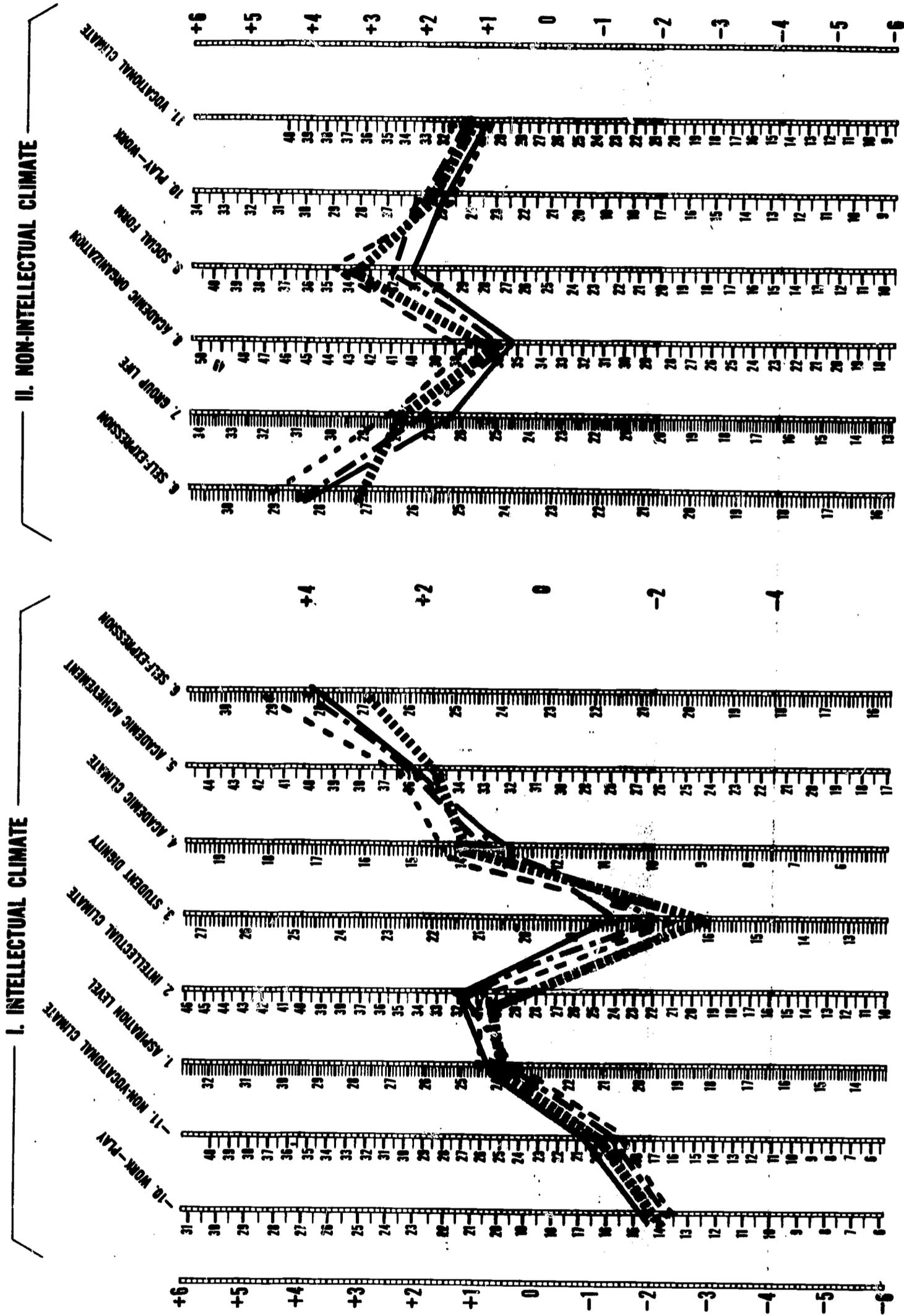
Correlation coefficients between factor mean scores for the two categories in the community college and in the technical institute were .98 and .94 respectively, significant beyond the .01 level.

FIGURE 21. Factor Mean Scores of Freshmen by Dropping Out and Still Enrolled and Institution

FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X}=0, \sigma=2$)



CC Still Enrolled — N = 157
 CC Dropped Out - - - - N = 140
 TI Still Enrolled - - - - N = 323
 TI Dropped Out - - - - N = 162

TABLE 76. Activities Index Factor Mean Scores of Community College Freshmen by Dropping Out and Still Enrolled in Curricula During Fourth Term

FACTOR	Dropped Out			Still Enrolled		
	N=140	\bar{X}	SD	N=161	\bar{X}	SD
Self-Assertion		18.30	7.21		19.66	7.30
Audacity-Timidity		18.84	6.58		19.01	6.05
Intellectual Interests		20.79	7.24		22.30	7.19
Motivation		24.10	6.27		25.14	5.07
Applied Interests		16.68	6.05		17.62	5.64
Orderliness		19.64	6.78		20.00	6.50
Submissiveness		23.88	5.67		23.35	6.01
Closeness		25.61	6.00		26.40	5.82
Timidity-Audacity		21.16	6.58		20.90	6.55
Constraint-Expressiveness		20.11	6.10		19.37	6.79
Diffidence-Egoism		18.34	4.29		17.28	4.65
Sensuousness		16.39	5.55		17.73	5.08
Friendliness		13.19	3.90		13.64	3.65
Expressiveness-Constraint		19.89	6.10		20.89	6.42
Egoism-Diffidence		11.66	4.29		12.88	4.65

TABLE 77. Activities Index Factor Mean Scores of Technical Institute Freshmen by Dropping Out or Still Enrolled in Curricula During Fourth Term

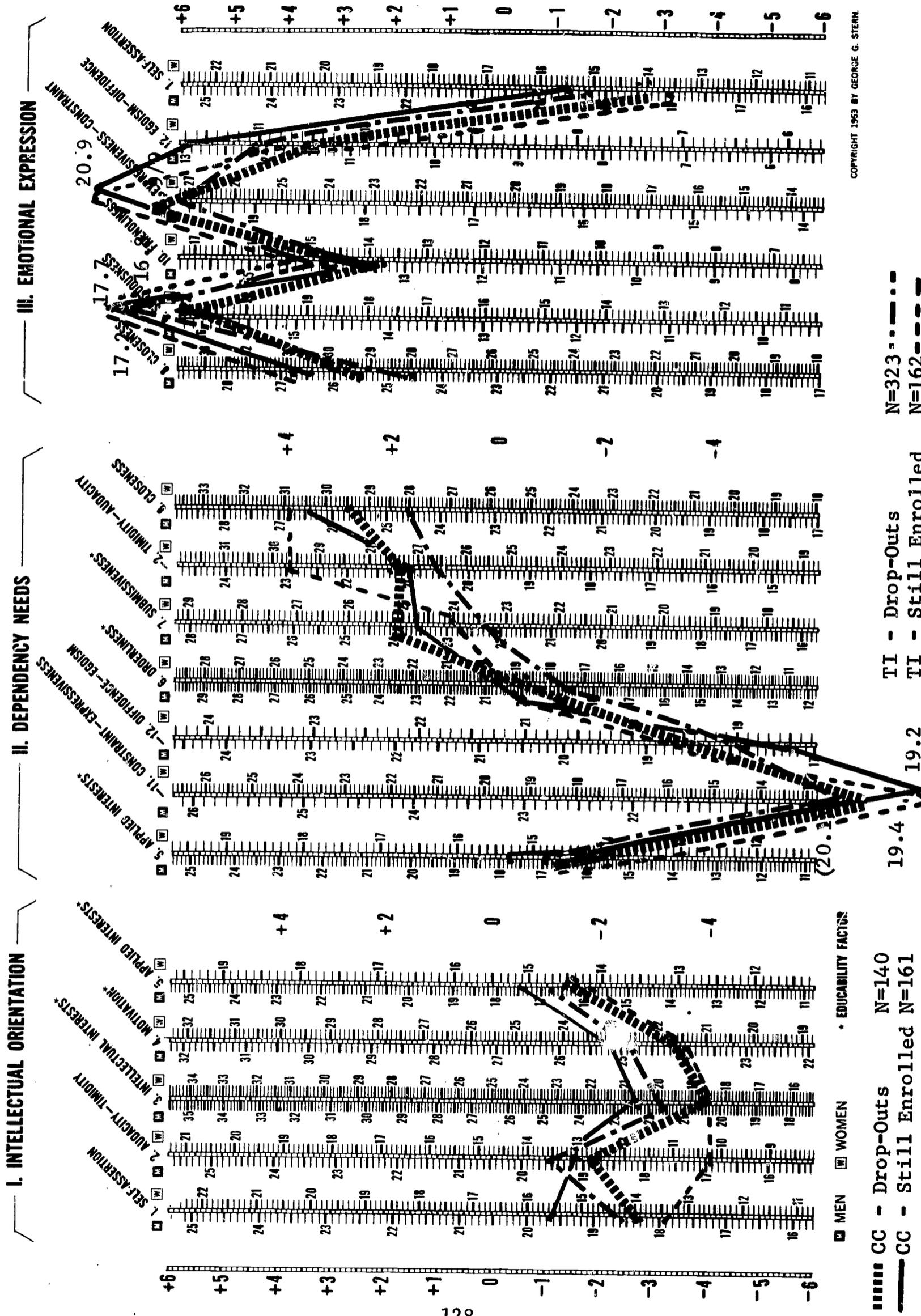
FACTOR	Dropped Out			Still Enrolled		
	N=323	\bar{X}	SD	N=162	\bar{X}	SD
Self-Assertion		18.56	6.64		17.94	7.05
Audacity-Timidity		19.62	6.69		16.90	6.38
Intellectual Interests		21.54	7.78		20.62	7.80
Motivation		24.82	6.10		24.09	6.54
Applied Interests		16.64	5.50		16.71	5.69
Orderliness		18.93	6.14		20.02	5.75
Submissiveness		22.12	5.91		22.81	5.56
Closeness		24.59	6.38		26.76	6.04
Timidity-Audacity		20.38	6.69		23.10	6.38
Constraint-Expressiveness		20.31	5.86		19.21	6.77
Diffidence-Egoism		17.88	4.34		18.25	4.05
Sensuousness		16.75	4.99		17.27	5.48
Friendliness		13.72	3.57		14.17	3.72
Expressiveness-Constraint		19.69	5.86		20.92	6.59
Egoism-Diffidence		12.12	4.34		11.75	4.05

FIGURE 22. Factor Mean Scores of Freshmen Dichotomized as Drop-Outs and Still Enrolled During Fourth Term By Institution

FACTOR SCORE PROFILE—COLLEGE STUDENT BODY (A I)

NORMS BASED UPON 558 MEN AND 518 WOMEN ENROLLED AS JUNIORS AND SENIORS IN 21 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



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TABLE 78. Educability Scores of Freshmen By Contributing Factors and Institution

	Community College		Technical Institute	
	Men	Women	Men	Women
Intellectual Interest	21.83	21.19	21.04	21.47
Motivation	24.94	24.24	24.96	24.16
Applied Interests	17.03	17.22	16.76	16.54
Orderliness	18.34	21.55	18.65	20.12
Submissiveness	21.93	25.83	20.74	24.38
Educability Score	104.07	110.03	112.15	106.67

TABLE 79. Educability Scores of Fourth Term Students by Contributing Factors and Institution

	Community College		Technical Institute	
	Men	Women	Men	Women
Intellectual Interest	24.18	23.21	23.08	21.14
Motivation	25.65	23.99	25.78	22.68
Applied Interests	17.91	16.98	16.97	15.05
Orderliness	18.38	20.16	17.17	17.82
Submissiveness	19.53	22.51	21.33	23.06
Educability Score	105.65	106.85	104.33	99.75

TABLE 80. Educability Scores of Freshmen by Dropping Out, Still Enrolled, Contributing Factors and Institution

	Community College		Technical Institute	
	Drop-Outs	Still Enrolled	Drop-Outs	Still Enrolled
Intellectual Interests	20.79	22.38	21.54	20.62
Motivation	24.10	25.14	24.82	24.09
Applied Interests	16.68	17.62	16.64	16.71
Orderliness	19.44	20.00	18.93	20.02
Submissiveness	23.88	23.38	22.12	22.81
Educability Score	104.89	108.52	104.05	104.25

Stern (1963) states that the personality need factors of intellectual interests, motivation, applied interests, orderliness and submissiveness constitute an educability dimension, however no normative data are available. In view of its potential relevance to dropping out or continuing in the program, educability scores were computed for all freshmen, fourth term students and drop-outs and still enrolled for each school.

Tables 78, 79 and 80 report the results.

As is evident from the above tables, educability scores of drop-outs varied only slightly from those still-enrolled in either school. Further, scores were nearly comparable to fourth term students in the community college, men in the technical institute and exceeded those for women who were in the fourth term at the technical institute.

Summary

1. Entering freshmen have much the same expectations for environmental press irrespective of school or curriculum. Therefore, apparently the two schools do not have images which differ sharply in the minds of the public, that serve to attract students which differ either in expectations for the college press or in personality needs.

2. Descriptions of press by fourth term students indicated that the two schools did differ in environmental press. Although the degree of variation differed between

curricula, data consistently indicated that the community college had an intellectual climate more supportive of intellectual pursuits than did the technical institute. Further, the community college was more supportive of treating students more like adults.

3. The disparity between expectations and experiences was greater generally for technical institute students than for community college students.

4. Personality need profiles indicated a high degree of similarity for all respondents irrespective of school. Variations did occur between curricula, showing electrical technology students and nurse students to be somewhat higher in intellectual orientation, interests and motivation, and dependency needs and slightly lower in the dimension of emotional expression than business administration and secretarial science students.

5. Comparison of data on personality need factors over time found a considerable stability in needs reported. Differences observable between freshmen in the four curricula tended to become somewhat more pronounced as fourth term students.

6. Comparisons of data from freshmen who subsequently dropped out of the curriculum with data from freshmen who continued found the expectations for environmental press to be very much the same. Similarly personality needs were very much alike in the areas of dependency needs and emotional expression. Differences did exist in intellectual interests and motivation. Freshmen who subsequently dropped out of the curricula consistently had lower mean scores than freshmen who continued in curricula at the community college. Drop-outs from the technical institute consistently had higher mean scores than freshmen who continued to study. The significance rests more in the consistency of direction in differences of means since only one difference was large enough to be statistically significant.

7. Educability scores of drop-outs were not significantly lower than those of comparison groups.

The following chapter presents findings pertaining to belief systems.

CHAPTER IV

BELIEF SYSTEMS

Rokeach's Dogmatism scale was included as a measure of open and closed belief system on the thesis that the nature of the individual's belief system may be linked to the type of environment most effective for his learning. The questions to be answered were:

- 1) did freshmen in the two schools differ significantly in the nature of their belief systems?
- 2) did freshmen who subsequently dropped out differ significantly from those who continued into the fourth term?
- 3) did significant variations exist among students in the four curricula?
- 4) did significant differences exist between freshmen and fourth term students, many of whom were the same persons eighteen months later?

The dogmatism scale is composed of forty items. Illustrative of questions on the dogmatism scale is: "Fundamentally the world we live in is a pretty lonely place." Respondents were asked to indicate the degree of agreement or disagreement by responding with a +3 (I agree very much), +2, +1, -1, -2, -3 (I disagree very much).

Scores are derived by adding a constant of 4 to eliminate negative numbers and summing responses. Reliability and validity data are reported fully in Rokeach's work. (Rokeach, 1960).

Freshmen

Total Population:

Table 81 reports the results of a comparison of mean dogmatism scores of freshmen by curriculum and institution.

Mean scores for freshmen in the two schools differed by .7, indicating that the two populations did not differ significantly in having open or closed belief systems. Mean scores for the two populations, at 156.3, community college and 157, technical institute, were

TABLE 81. Mean Dogmatism Scores of Freshmen by Curriculum and Institution

	Community College			Technical Institute		
	N	\bar{X}	SD	N	\bar{X}	SD
Business Administration	131	156.5	28.3	167	161.4	27.3
Electrical Technology	43	159.2	23.4	106	163.8	21.4
Nursing	42	141.6	30.2	56	145.2	25.9
Secretarial Science	88	161.7	24.4	157	152.1	25.0 *
Total	304	156.3	27.5	486	157.0	25.9

* 2.92 sign. at .01 level, 243 df.

approximately 13 points higher than the theoretical mean of the scale, i.e., 143.5, and approximately 15 points higher than the approximated mean of 141.3 for 207 students from New York Colleges. (Rokeach, 1960).

Specific Curricula:

Mean scores for community college business administration students at 156.5 was 4.9 points lower than that of students in this curriculum in the technical institute. The difference was not statistically significant.

Students in electrical technology at both schools had higher mean scores than business administration students in the same school. Between the two, community college students had a lower mean score (159.2) as compared to 163.8 for technical institute students. Once again the difference was small at 4.3.

Nurse students at both institutions had the lowest mean scores when compared with all other curricula. The mean score of community college nurse students was lower at 141.6 as compared to 145.2

Secretarial science students at the community college had a higher mean score at 161.7 than did those at the technical institute, 152.1. This was the only difference between respondents in the same curriculum which was statistically significant at the .01 level.

Variations in mean scores for the four curricula within the same institution attained statistical significance at the .01 level only for comparisons with nursing in the community college. Other variations were

not statistically significant. Within the technical institute, t-tests of mean score variations attained statistical significance at the .01 level between business administration and nursing, business administration and secretarial science, electrical technology and nursing, and electrical technology and secretarial science.

Thus, in answer to the first question posed, total student populations in the two schools were very much alike. Variations did occur between curricula compared between institutions. However only differences of secretarial science students attained statistical significance. Comparisons within each institution found nurse freshmen to have the lowest mean scores being indicative of more open belief systems. Variations among the remaining three curricula did not follow a consistent pattern.

Drop-Outs and Still Enrolled

Table 82 presents the mean scores for freshmen who dropped out as compared to those who remained. Differences in means for community college respondents were less than one at 156.69 for those still enrolled and 155.96 for those who dropped out. Differences of means for technical institute respondents were 2.25 with drop-outs having the higher mean score.

On the basis of these data, the two populations did not differ significantly in degree of dogmatism.

TABLE 82. Mean Dogmatism Scores of Freshmen by Dropping Out and Still Enrolled in Curricula During Fourth Term and Institution

	Community College			Technical Institute		
	N	\bar{X}	SD	N	\bar{X}	SD
Still Enrolled	161	156.69	26.31	158	155.58	25.12
Dropped Out	143	155.96	28.89	324	157.73	26.30
Total	304	156.3	27.5	482	157.00	25.9

Freshmen and Fourth Term Students

Tables 83 and 84 report mean scores for freshmen and fourth term students at the community college and technical institute respectively.

Total Populations:

Fourth term students had lower mean scores than freshmen in both schools. In neither case did the difference in means exceed 10 with community college means varying 9.9 and technical institute 6. Both attained statistical significance at the 1 percent level. The variances were small however, and thus raises a question as to the extent to which actual behavioral change occurred.

Specific Curricula:

Comparing students in specific curricula within each institution, it is evident that in the community college, mean scores increased for business administration and electrical technology students. The decrease in mean scores for the total occurred primarily for respondents in nursing and secretarial science, with nurse student mean scores continuing to be the lowest.

Within the technical institute, mean scores decreased for respondents in all curricula but nursing, which remained about the same.

In brief, although the mean scores decreased for total population of fourth term students in both schools, the reduction in dogmatism was likely effected among nurse and secretarial science students in the community college and more evenly among curricula in the technical institute. Comparing fourth term students in the two schools, technical institute students in each curricula except nursing had lower mean scores than did community college students in comparable curricula. The age difference between nurse students in the two schools, makes nurse students in the community college program a select group--even among nurse students. This may be an influential factor in the rather considerably lower mean dogmatism score. In conclusion, the degree of variation in mean scores indicates that the students entering and in the fourth term at the community college and technical institute were much alike. Nurse students consistently in both schools had more open belief systems.

TABLE 83. Mean Dogmatism Scores of Community College Freshmen and Fourth Term Students By Curriculum

	Freshmen			Fourth Term			
	N	\bar{X}	SD	N	\bar{X}	SD	
Business Administration	131	156.5	28.3	14	161.1	24.7	
Electrical Technology	43	159.2	23.4	8	160.6	26.2	
Nursing Secretarial Science	42	141.6	30.2	32	134.3	27.8	
	88	161.7	24.4	14	151.4	21.9	
Total	304	156.3	27.5	68	146.4	28.0	*

* t = 2.5 sign. at the 1% level

TABLE 84. Mean Dogmatism Scores of Technical Institute Freshmen and Fourth Term Students by Curriculum

	Freshmen			Fourth Term			
	N	\bar{X}	SD	N	\bar{X}	SD	
Business Administration	167	161.4	27.3	46	155.6	30.7	
Electrical Technology	106	163.8	21.4	35	153.9	24.9	
Nursing Secretarial Science	56	145.2	25.9	27	145.7	29.5	
	157	152.1	25.0	75	148.8	23.0	
Total	486	157.0	25.9	183	151.0	26.5	*

* t = 2.69 667 df sign. < 1% level

TABLE 85. Mean Dogmatism Scores of Fourth Term Students by Curriculum and Institution

	Community College			Technical Institute			
	N	\bar{X}	SD	N	\bar{X}	SD	
Business Administration	14	161.1	24.7	46	155.6	30.7	
Electrical Technology	8	160.6	26.2	35	153.9	24.9	
Nursing	32	134.3	27.8	27	145.7	29.5	
Secretarial Science	14	151.4	21.9	75	148.8	23.0	
Total	68	146.4	28.0	183	151.0	26.5	n. sign.

CHAPTER V

VALUES

In Fall, 1967, freshmen in both schools completed the Allport-Vernon-Lindsey Study of Values questionnaire. In Spring, 1969, students still enrolled in the curriculum during the fourth term were asked to complete the questionnaire a second time. The purpose was to ascertain the degree of similarity or difference between freshmen beginning the four curricula, in both schools; and to ascertain whether differences were evident for students near the completion of the programs. Of equal concern was whether the values of freshmen who would subsequently drop out of the programs differed significantly from the values of freshmen who would complete the program.

"The Study of Values", as described in the Manual, "aims to measure the relative prominence of six basic interests or motives in personality: the theoretical, economic, aesthetic, social, political and religious."

Each of these six basic interests are fully described in the manual, briefly, each is described as follows:

Theoretical: "The dominant interest of the theoretical man is the discovery of truth... he characteristically takes a 'cognitive attitude'."

Economic: "... characteristically interested in what is useful... This type is thoroughly 'practical' and conforms well to the prevailing stereotype of the average American business man."

Aesthetic: "The aesthetic man sees his highest value in form and harmony... he may be said to be interested in persons but not in the welfare of persons; he tends toward individualism and self-sufficiency."

Social: "The highest value of this type is love of people... (he) prizes other persons as ends and is therefore himself kind, sympathetic and unselfish."

Political: "The political man is interested primarily in power... whatever his vocation he betrays himself as a Machtmensch."

Religious: "The highest value of the religious man may be called unity. He is mystical and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality." (Allport, 1960).

Freshmen

Total Populations:

Table 86 presents mean scale scores for freshmen by school. Differences between freshmen entering the community college and the technical institute were slight with variations in mean scores less than or only slightly over one point. Standard deviations also were very similar. A comparison with general norms derived for college students indicated that where departure from the normative means occurred, community college students and technical institute students more closely resemble each other than does either resemble the normative group. Thus, means for both groups were slightly higher than normative means on the following scales:

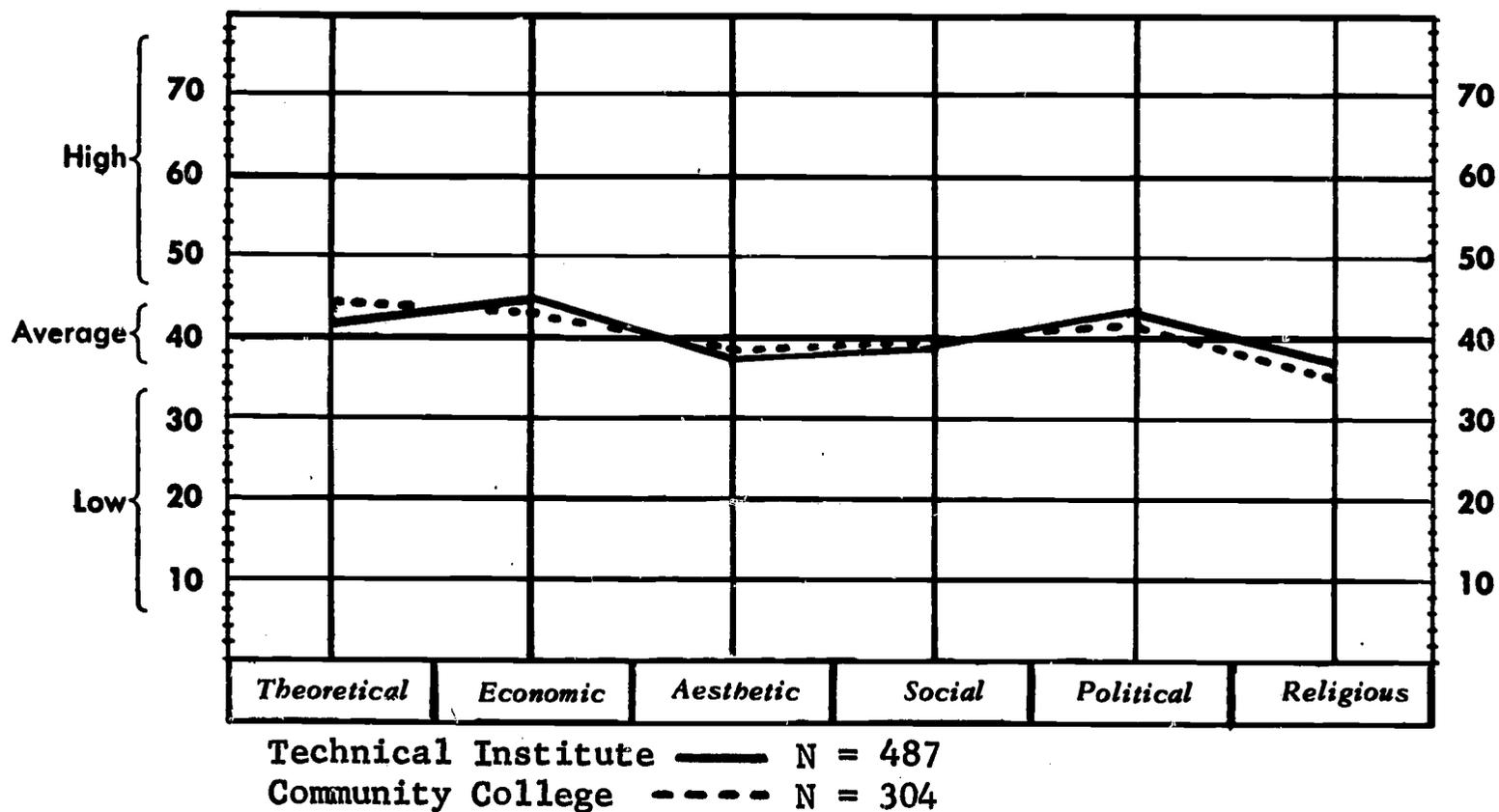
TABLE 86. Mean Scale Scores of Freshmen on Study of Values By Institution

	General Norms ¹ N = 8369	<u>Community College</u>		<u>Technical Institute</u>		
		N=299	\bar{X}	SD	N=471	\bar{X}
Theoretical	39.80		40.65	7.20	41.20	7.79
Economic	39.45		43.68	7.43	43.41	7.10
Aesthetic	40.29		36.11	7.85	37.21	7.21
Social	39.34		39.65	8.09	39.08	7.28
Political	40.61		42.06	6.55	42.12	6.59
Religious	40.51		38.45	9.08	37.38	9.30

¹Norms derived from 8369 college students, reported in Manual, p. 11.

FIGURE 23. Mean Scores of Community College and Technical Institute Students

PROFILE OF VALUES



theoretical, economic, and political. Means were lower than normative means on the aesthetic scale and the religious scale. Means for both groups closely approximate the norm on the social scale.

In brief, the two groups were very much alike relative to values as evidenced in Figure 23.

Specific Curricula:

Business Administration: An examination of mean scale scores for freshmen in business administration indicated that the similarity persists, however greater variation does occur between means on the religious value scale at 2.34 points.

Freshmen in both schools had means which closely approximated the norms derived from other students of business administration for the theoretical and religious scales; means of both were lower than the norms for the economic and political scales; and were higher than norms for the aesthetic and social scales.

Electrical Technology: For electrical technology freshmen in both schools, the largest variations in means, i.e., 1.25 and 3.17 points occurred for the aesthetic and religious value scales, with community college having a lower mean of 33.05 (closely approximating the norm at 33.41), than technical institute students with 36.22, on the aesthetic value scale. Relative to means on the religious value scale, community college freshmen had a mean of 35.14 as compared to 33.91 for technical institute freshmen. Both means were lower than the norm. Means for both groups were slightly higher than norms for the economic, and social value scales. In brief, differences between electrical technology freshmen in each school were small and occurred in the aesthetic and religious value areas.

Nursing: Table 89 reports mean scale scores for nurse students. Comparing community college nurse freshmen with technical institute nurse freshmen, mean scores were close, with the two largest variations of 1.81 and 1.34 occurring between means on the theoretical and political value scales. Community college students' means were higher on the theoretical scale and lower on the political value scale than for technical institute freshmen. Mean scores of freshmen in both schools were higher than the norm on the social value scale; slightly higher on the political and approximately 3 points lower than the norm on the religious value scale. In sum, variations between the two groups were relatively slight.

TABLE 87. Mean Scale Scores of Business Administration Freshmen on Study of Values by Institution

Scale	Norms ¹ N = 173	<u>Community College</u>		<u>Technical Institute</u>		
		N=127	\bar{X}	SD	N=161	\bar{X}
Theoretical	41.09		41.37	6.88	42.47	6.61
Economic	49.25		46.35	7.78	45.91	6.72
Aesthetic	32.58		35.71	9.10	35.16	6.22
Social	36.16		37.42	7.68	37.72	6.04
Political	45.68		44.46	6.34	44.72	6.19
Religious	35.24		36.57	10.25	34.14	8.67

¹ 173 Students of Business Administration at Boston University, Manual, p. 14.

TABLE 88. Mean Scale Scores on the Study of Values of Electrical Technology Freshmen by Institution

Scale	Norms ¹ N = 508	<u>Community College</u>		<u>Technical Institute</u>		
		N=43	\bar{X}	SD	N=104	\bar{X}
Theoretical	47.64		46.56	5.68	46.90	6.80
Economic	43.61		45.51	7.38	45.31	5.53
Aesthetic	33.41		33.05	6.16	36.22	7.90
Social	34.04		35.79	9.64	35.50	8.38
Political	42.76		42.91	5.92	42.83	6.85
Religious	38.28		35.14	7.33	33.91	8.89

¹ Engineering Students, p. 14 Manual

TABLE 89. Mean Scale Scores of Freshmen Nurse Students on Study of Values By Institution

	Norms ¹ N=53	Community College		Technical Institute			
		N=42	\bar{X}	SD	N=56	\bar{X}	SD
Theoretical	40.20		40.31	6.83		38.50	6.43
Economic	40.40		37.86	5.89		37.23	6.43
Aesthetic	37.00		37.57	7.06		38.59	6.51
Social	38.80		43.57	7.79		43.36	6.35
Political	36.10		37.12	5.58		38.46	5.85
Religious	46.90		43.33	8.30		43.86	8.25

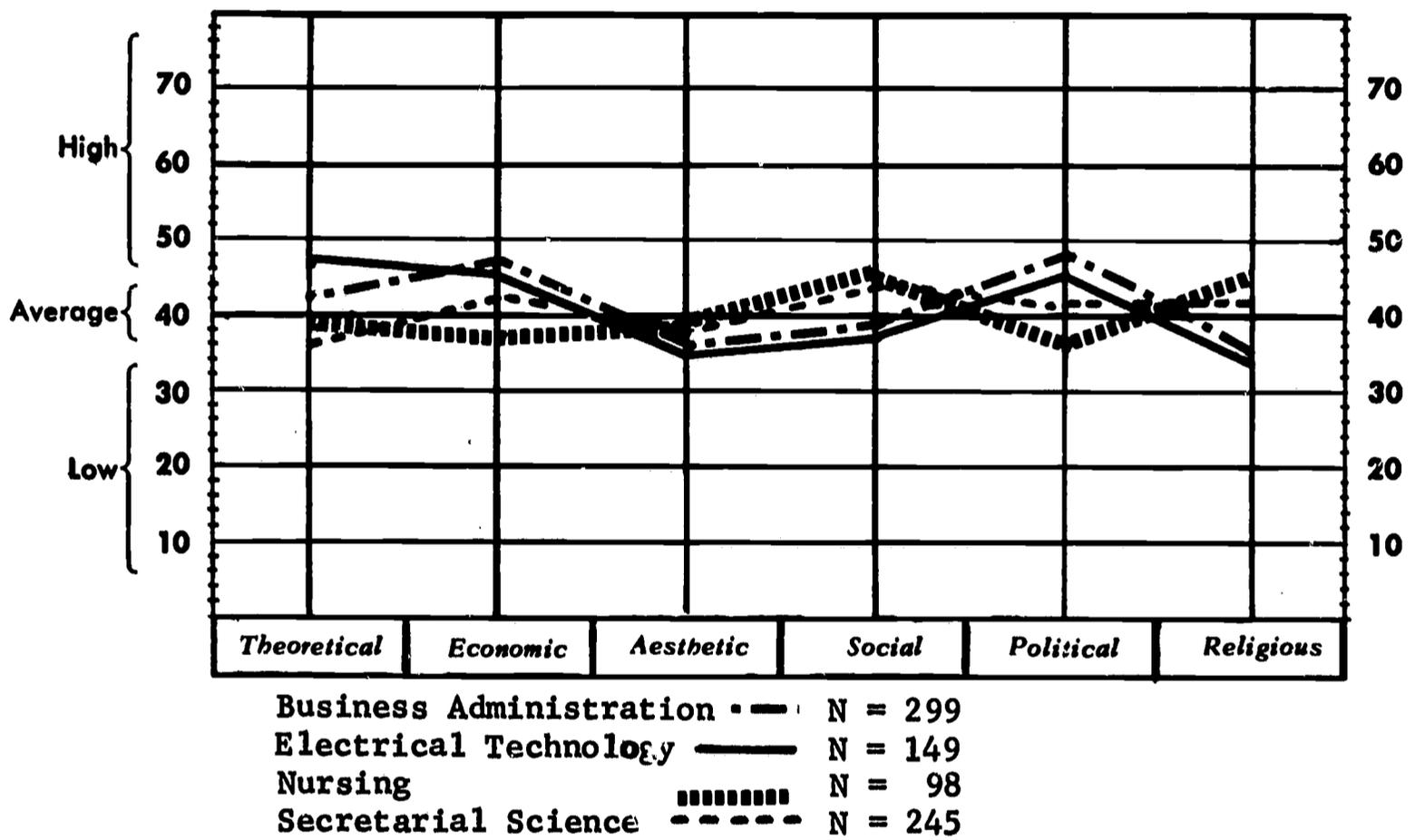
¹Manual, p. 15 means for 53 married nurses

TABLE 90. Mean Scale Scores of Secretarial Science Freshmen on Study of Values by Institution

Scale	N=87	Community College		Technical Institute		
		\bar{X}	SD	N=150	\bar{X}	SD
Theoretical		36.85	6.27		36.89	7.18
Economic		41.69	5.27		41.71	6.88
Aesthetic		37.49	6.48		39.58	7.22
Social		42.91	5.75		41.41	6.42
Political		40.55	5.88		40.21	5.86
Religious		40.45	6.80		40.85	8.05

FIGURE 24. Mean Scores of Community College and Technical Institute Students Combined by Curriculum

PROFILE OF VALUES



Secretarial Science: Table 90 presents mean scale scores for freshmen secretarial science students. Mean scale scores of community college students and technical institute students in this curriculum were approximately the same for four of the six value scales. The largest variations of 2.09 and 1.5 occurred in the aesthetic and social value areas respectively, with community college freshmen lower on the aesthetic and higher on the social value scale than technical institute students. No norms of a comparable occupational group were available for comparison.

Comparisons: Business administration freshmen as compared to electrical technology freshmen had lower means on the theoretical scale and higher means on the social and political scales. It is interesting to note that on the religious value scale, mean scores were closer for intra-school groups irrespective of curriculum, with community college freshmen having slightly higher means than freshmen in the technical institute. (See Tables 87 and 88).

Variations occurred between freshmen nurse and secretarial students, with the former having higher mean scores on the theoretical, social and religious value scales. Secretarial science freshmen had mean scale scores which exceeded those for freshmen nurse students on the economic and political value scales. Variations on the aesthetic value scale showed greater similarity intra-school irrespective of curriculum. Differences were slight in each case. (See Tables 89, 90).

A comparison of means for business administration, nursing and secretarial science, and electrical technology, nursing and secretarial science indicated that, consistent with findings of other studies using this measure, variations followed those to be expected in view of the predominance of men in two curricula, and women in the remaining two. Thus, both business administration and electrical technology respondents had higher mean scores on the theoretical, economic and political value subscales, and lower mean scores on the aesthetic, social, and religious than did either nurse or secretarial science respondents.

Commonalities between the two schools showed that students who continued had lower mean scores on the economic and political value scales, and higher means on the social and religious. There was lack of consistency for the theoretical and aesthetic value areas.

Drop-Outs Compared to Those Still Enrolled

Freshmen responses on the Study of Values were dichotomized on the basis of dropping out or continuing in the program during the fourth term. Mean scores on each of the six value scales were compared for each institution. Tables 91, 92, report the results.

Community college freshmen who dropped out had higher mean scores than freshmen who continued on the economic, aesthetic, and political value scales. Mean scores on the theoretical value scale were approximately the same. Drop-out mean scores were lower in the social and religious value scales.

Technical institute freshmen who dropped out had higher mean scores on the theoretical, economic and political value scales and lower mean scores on the aesthetic, social and religious value scales than did freshmen who continued in the programs.

Similarities between drop-outs from the two schools were evident in that each had higher mean scores on economic and political value scales and each had lower means on the social and religious values. Value areas in which differences were evident were the theoretical and aesthetic.

Freshmen Compared to Fourth Term Students

Total Population:

Mean scale scores of freshmen on the Study of Values were compared with those of fourth term students. Table 94 presents the results. For community college respondents, differences in means were 2.6 or less. Mean scores on the theoretical and aesthetic value scales were practically the same for both groups at 40.65 and 40.88 and 36.11 and 36.66 respectively for freshmen and fourth term students. On the economic and political value scales, freshmen mean scores were slightly higher at 43.68 as compared to 42.55, and 42.06 as to 39.48 respectively. On the social and religious value scales, freshmen mean scores were slightly lower.

For technical institute respondents, differences between scale means were 2.67 or less. Freshmen had higher mean scores than fourth term students on the theoretical (41.20 to 40.16); economic, (43.41 to 40.74) and the political scale (42.12 to 40.06). Mean scores were lower for freshmen on the aesthetic (37.21 to 39.17) the social (39.08 to 40.82) and the religious (37.28 to 39.26).

TABLE 91. Mean Scale Scores of Community College Freshmen on the Study of Values by Dropping Out and Still Enrolled in Curriculum During Fourth Term

Scale	N = 140	Dropped Out		Still Enrolled		
		\bar{X}	SD	N = 156	\bar{X}	SD
Theoretical		40.53	7.42		40.92	6.97
Economic		44.12	7.03		43.25	7.79
Aesthetic		36.38	7.79		35.90	7.95
Social		38.83	7.09		40.44	8.92
Political		43.05	6.41		41.03	6.52
Religious		37.62	8.70		39.15	9.44

TABLE 92. Mean Scale Scores of Technical Institute Freshmen on the Study of Values by Dropping Out and Still Enrolled in Curriculum During Fourth Term

Scale	N = 310	Dropped Out		Still Enrolled		
		\bar{X}	SD	N = 159	\bar{X}	SD
Theoretical		42.00	7.60		39.75	7.95
Economic		43.93	7.37		42.40	6.47
Aesthetic		36.89	7.03		37.82	7.56
Social		38.28	6.61		40.55	8.25
Political		42.64	6.54		41.13	6.59
Religious		36.49	9.18		39.05	9.38

TABLE 93. Summary of Direction¹ of Differences in Mean Scores on the Study of Values by Dropping Out and Still Enrolled in Curriculum During Fourth Term and Institution

Area	Community College		Technical Institute	
Theoretical	+		-	
Economic	-		-	
Aesthetic	-		+	
Social	+		+	
Political	-		-	
Religious	+		+	

¹ Base is the respondent still enrolled, to illustrate if mean scores of drop-outs on the theoretical scale exceeds that of those still enrolled, a - reflects this.

TABLE 94. Mean Scale Scores on Study of Values of Freshmen and Fourth Term Students by Institution

Scale	Community College		Technical Institute	
	Freshmen	Fourth Term	Freshmen	Fourth Term
	N=299 \bar{X}	N=89 \bar{X}	N=471 \bar{X}	N=184 \bar{X}
Theoretical	40.65	40.88	41.20	40.16
Economic	43.68	42.55	43.41	40.74
Aesthetic	36.11	36.66	37.21	39.17
Social	39.65	41.19	39.08	40.82
Political	42.06	39.48	42.12	40.06
Religious	38.45	39.27	37.28	39.26

¹ Variations in standard deviations for fourth term students as compared to freshmen were slight.

Comparing freshmen and fourth term students between the two schools differences of mean did not exceed 3.06. The value area in which the difference between means of freshmen was the largest at 1.17 was the religious value area, with community college freshmen having the higher mean. Relative to fourth term students in each school the difference in mean scores on the aesthetic scale was highest at 2.51 and second highest at 1.81 for means on the economic value scale. Technical institute fourth term students had the higher mean on the aesthetic value scale and community college students had a higher mean score on the economic value scale.

In sum, both mean scores and standard deviations pointed to much similarity between students in each school, whether as entering freshmen or in the fourth term.

Specific Curricula:

Business Administration: Within the community college, business administration respondents had the highest mean differences between freshmen and fourth term students on the following value scales: economic, 46.35 freshmen to fourth term 48.96; religious, 36.57 to 34.36; and theoretical 36.57, to 34.36. Thus, for fourth term students the mean score increased on the economic value, and decreased on the remaining two scales. Within the technical institute, in rank order of largest mean score differences were found between freshmen and fourth term students on the political, religious, theoretical, and aesthetic. Freshmen had the higher means on the theoretical, and political scales, and lower means on the aesthetic and religious scales. Between freshmen and fourth term students in each school differences of means did not exceed 3.68 points.

Electrical Technology: Freshmen and fourth term electrical technology students in the community college showed larger differences between mean scores than comparable categories in the technical institute, ranging from 3.84 to 1.84 as compared to 3.06 to .21. For community college respondents value scales, in rank order of highest to lowest differences of means were: aesthetic, political, religious, theoretical, social, and economic. Freshmen mean scores exceed those of fourth term students on the economic, political and religious value scales, with fourth term student means higher in the areas of theoretical, aesthetic, and social.

TABLE 95. Mean Scale Scores on Study of Values of Freshmen and Fourth Term Business Administration Students by Institution

Scale	Community College		Technical Institute	
	Freshmen	Fourth Term	Freshmen	Fourth Term
	N=127 \bar{X}	N=25 \bar{X}	N=161 \bar{X}	N=44 \bar{X}
Theoretical	41.37	39.80	42.47	39.68
Economic	46.35	48.96	45.91	45.14
Aesthetic	35.71	35.88	35.16	36.41
Social	37.42	37.32	37.72	38.43
Political	44.46	43.64	44.72	42.84
Religious	36.57	34.36	34.14	37.59

TABLE 96. Mean Scale Scores on Study of Values of Freshmen and Fourth Term Electrical Technology Students by Institution

Scale	Community College		Technical Institute	
	Freshmen	Fourth Term	Freshmen	Fourth Term
	N=43 \bar{X}	N=9 \bar{X}	N=104 \bar{X}	N=35 \bar{X}
Theoretical	46.56	49.22	46.90	47.11
Economic	45.51	43.67	45.31	44.29
Aesthetic	33.05	36.89	36.22	34.80
Social	35.79	38.11	35.50	35.89
Political	42.91	39.89	42.83	40.77
Religious	35.14	32.22	33.91	36.97

Among freshmen and fourth term students of electrical technology in the technical institute, difference in means in rank order from highest to lowest resulted on the following scales: religious (freshmen 33.91 to fourth term 36.97), political (42.83 to 40.77), aesthetic (36.22 to 34.80), economic (45.31 to 44.29), social (35.50 to 35.89) and last theoretical (46.90 to 47.11). As indicated freshmen mean scores were higher than fourth term students on the economic aesthetic, and political scales.

Freshmen entering this curriculum in each school had very similar mean scores, with the largest differences occurring on measures of aesthetic value (community college freshmen 33.05 as to 36.22 for technical institute) and religious value (community college, 35.14 to 33.91 for technical institute). Variations between fourth term students in each school were larger than for freshmen. The largest variation (at 4.75) occurred for religious value with community college students having a mean of 32.22, to 36.97 for those in the technical institute. Fourth term students in the community college had mean scores which exceeded those of technical institute students on the following scales: theoretical, aesthetic, and social. The converse was true for the economic, political, and religious value scales.

Nursing: Within the community college, differences in mean value scale scores between freshmen and fourth term nurse students ranged from 1.35 to .12. Variations between the groups, in rank order from largest to lowest differences between means, were as follows: aesthetic, economic, political, theoretical, religious and social. Freshmen students had higher mean scores on value scales measuring the aesthetic and political with fourth term students' means exceeding those of freshmen on the remaining scales.

Within the technical institute, variations between means of freshmen and fourth term students ranged from 2.15 to .77. Differences in mean scale scores, in rank order from largest to lowest differences, were religious, theoretical, political, aesthetic, social and economic. Mean scores of freshmen exceeded those of fourth term students on the economic, the political and religious.

Comparisons of freshmen nurse students between institutions, found variations between mean scale scores ranging from 1.81 to .05. The three largest differences occurred in the theoretical, political, and aesthetic areas, with community college students having a higher mean theoretical score, and technical

TABLE 97. Mean Scale Scores on the Study of Values of Freshmen and Fourth Term Nurse Students by Institution

Scale	Community College		Technical Institute	
	Freshmen	Fourth Term	Freshmen	Fourth Term
	N=42 \bar{X}	N=35 \bar{X}	N=56 \bar{X}	N=28 \bar{X}
Theoretical	40.31	41.00	38.50	40.25
Economic	37.86	39.06	37.23	36.46
Aesthetic	37.57	36.23	38.59	39.89
Social	43.57	43.69	43.36	44.54
Political	37.12	36.23	38.46	37.14
Religious	43.33	43.83	43.86	41.71

TABLE 98. Mean Scale Scores on the Study of Values of Freshmen and Fourth Term Secretarial Science Students by Institution

Scale	Community College		Technical Institute	
	Freshmen	Fourth Term	Freshmen	Fourth Term
	N=87 \bar{X}	N=20 \bar{X}	N=150 \bar{X}	N=77 \bar{X}
Theoretical	36.85	38.25	36.89	37.23
Economic	41.69	40.15	41.71	38.17
Aesthetic	37.49	38.30	39.58	42.48
Social	42.91	43.05	41.41	43.08
Political	40.55	39.80	40.21	39.21
Religious	40.45	40.60	40.85	40.36

institute freshmen having the higher means in the aesthetic and political.

Comparisons of fourth term students between institutions found variations in means ranging from 3.66 to .91. The value areas in which the three highest differences occurred were in the aesthetic, the economic and religious, with community college freshmen having higher mean scores on the economic and religious scales than the technical institute students.

Secretarial Science: Within the community college, differences in mean scores between freshmen and fourth term secretarial science students ranged from 1.54 to .15. Mean score differences approaching 1.5 were on the economic and theoretical scale, with freshmen having the higher mean on the economic, and fourth term students, on the theoretical.

Within the technical institute, variations in means were greater than in the community college and ranged from 3.54 to .35. Variations exceeded 1 in the following areas, listed in order from greatest to least differences: economic, aesthetic, social and political. Freshmen mean scores exceeded those of fourth term students in the economic and political scales.

Comparing freshmen secretarial science students between institutions, differences in means ranged from 2.09 to .02. Differences between means were or exceeded 1.5 on two scales, the aesthetic and the social. Differences between means on the remaining scales were less than .5. Technical institute freshmen had the higher mean score on the aesthetic scale, while community college freshmen had the higher mean on the social.

Comparing fourth term students between institutions, differences in means ranged from 4.18 to .03. The three value scales in which mean score differences exceeded 1 were, from greatest to lowest differences, aesthetic (technical institute higher), economic (community college higher) and theoretical (community college higher).

From the next table it is evident that the pattern of direction of differences in Study of Value Scale means is much the same, with a single discrepancy for the theoretical scale. Thus fourth term students in both schools tended to have lower mean scores on the economic and political value scales and higher mean scores on the aesthetic, social, and religious. Areas in which the pattern of direction of differences for specific curricula closely resemble that of the

TABLE 99. Summary of Direction¹ of Differences in Mean Scores on The Study of Values Between Freshmen and Fourth Term Students by Curriculum and Institution

Value Area	Total Populations		Business Administration		Electrical Technology		Nursing		Secretarial Science	
	CC	TI	CC	TI	CC	TI	CC	TI	CC	TI
Theoretical	+	-	-	-	+	+	+	+	+	+
Economic	-	-	+	-	-	-	+	-	-	-
Aesthetic	+	+	+	+	+	-	-	+	+	+
Social	+	+	-	+	+	+	+	+	+	+
Political	-	-	-	-	-	-	-	-	-	-
Religious	+	+	-	+	-	+	+	-	+	-

¹Fourth term students are the base, thus, to illustrate, fourth term students had lower mean economic and political value scores than did freshmen. This occurred in both schools.

total population were: political, social, aesthetic, and economic.

Comparison of Pre-Test and Post-Test Study of Value Mean Scores

A question of interest was whether change in values had occurred during the interval of approximately 1-1/2 years from the time of the first testing to the second. The financial resources of the project limited the analyses possible, however, students from whom data had been obtained in 1967 and 1969 were identified and treated as a separate group. Analysis of selected variables was completed to ascertain the degree to which means had changed from the first to second testing. Since some respondents did not complete all portions of the questionnaire the number of cases does vary in some instances between the pre-test and post-test. This constitutes an obvious limitation and as is evident, more so in some areas than in others.

Results of the analysis for the study of values for both institutions were as follows.

Total Population:

Within the community college, the range of variation in mean scores on the pre-test and post-test was from 1.60 to .19. The two larger differences occurred

in the value areas of religious and political respectively, with post-test scores being lower.

Within the technical institute the range of variation was greater than in the community college with it being from 2.68 to .24. The areas of three greater differences, in order from highest to lowest differences in means, were the economic, the aesthetic, and the political, with decreases in pre-test to post-test scores on economic and political and an increase in aesthetic scores.

Specific Curricula:

Business Administration: As evident in Table 101, the differences in mean scores ranged from 3.47 to .20 for community college respondents. Areas, in rank order of decrease from highest to lowest, were religious, aesthetic, social, economic, and political. In the area of theoretical there was a .20 increase from pre-test to post-test.

Within the technical institute, differences in means ranged from 3.33 to .21. The greatest difference was between pre-test and post-test means on the aesthetic value scale with post-test means being higher. The next three value areas of high differences were theoretical, economic, with post-test scores being lower, and the religious scale with post-test scores being higher.

Electrical Technology: Electrical technology students in the community college showed less than .5 of a difference in mean scores on the theoretical and economic value scales. Differences of means on the pre-test and post-test aesthetic scale showed an increase of 3.89, i.e., from 33 to 36.89. Social mean scores showed an increase of 2.44, while mean scores on the political value scale decreased by 2.22. Mean scores on the religious value scale decreased from the pre-test to post-test by 2.56.

Within the technical institute, differences in mean scores ranged from 2.67 to .02. Theoretical mean scores showed a .31 increase; for economic value scale, post-test mean scores decreased by .85. Negligible change occurred in the aesthetic value area. Mean scores on the social value scale decreased by 1.15; while mean scores on the political value scale showed a decrease of 2.67. Mean scores on the religious value scale increased by .76.

TABLE 100. Pre-Test and Post-Test Mean Scale Scores on the Study of Values by Institution

Scale	Community College				Technical Institute			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Theoretical	40.89	6.74	41.08	7.43	40.37	8.87	40.61	7.36
Economic	43.56	7.86	42.90	8.46	43.18	7.62	40.50	7.67
Aesthetic	36.42	9.04	36.88	7.55	37.50	7.54	39.74	7.67
Social	40.59	7.82	41.29	7.30	40.24	8.27	40.86	7.35
Political	40.14	6.59	38.99	7.69	41.02	6.61	39.81	6.19
Religious	40.49	10.73	38.89	11.17	39.36	10.43	38.63	8.30

TABLE 101. Pre-Test and Post-Test Mean Scale Scores on the Study of Values of Business Administration Students By Institution

Scale	Community College				Technical Institute			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Theoretical	40.45	5.66	40.65	6.74	42.38	7.30	40.31	6.99
Economic	49.36	8.98	48.13	9.36	46.52	6.09	44.68	7.92
Aesthetic	37.77	12.57	36.13	8.78	34.90	6.34	38.23	6.70
Social	39.18	9.80	37.74	7.86	37.92	5.80	38.13	7.40
Political	43.55	5.44	43.04	8.35	44.02	5.74	43.32	6.23
Religious	37.73	13.39	34.26	11.05	34.47	7.55	35.58	8.50

TABLE 102. Pre-Test and Post-Test Mean Scale Scores on the Study of Values of Electrical Technology Students by Institution

Scale	Community College				Technical Institute			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Theoretical	46.67	5.57	49.22	8.48	47.85	10.24	48.16	5.36
Economic	43.22	5.95	43.67	9.14	45.35	5.49	44.50	8.16
Aesthetic	33.00	6.33	36.89	6.75	34.08	10.33	34.06	7.30
Social	35.67	4.61	38.11	5.78	36.96	14.28	35.81	6.33
Political	42.11	5.40	39.89	6.88	43.23	8.43	40.56	5.96
Religious	34.78	10.17	32.22	12.17	35.77	13.01	36.53	7.09

TABLE 103. Pre-Test and Post-Test Mean Scale Scores on the Study of Values of Nurse Students by Institution

Scale	Community College				Technical Institute			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Theoretical	41.12	6.23	40.38	6.37	38.71	6.36	40.26	8.29
Economic	38.80	4.87	39.50	5.48	38.04	6.63	36.37	4.96
Aesthetic	37.08	8.01	36.21	7.20	38.07	6.10	39.93	5.45
Social	42.00	7.61	44.50	6.88	43.79	6.32	44.81	6.27
Political	36.96	5.85	34.83	5.78	36.32	5.64	37.04	5.44
Religious	43.64	9.35	44.58	11.05	45.07	9.65	41.59	9.26

Nursing: Differences in pre-test and post-test mean scores of community college nurse students ranged from 2.50 to .70. Post-test mean scores were lower on the theoretical, aesthetic, and political value scales, and were higher on the economic, social, and religious. Within the technical institute differences in mean scores ranged from 3.48 to .72. Post-test mean scores were lower on the economic, and religious; and were higher on the theoretical, aesthetic, social, and political.

Secretarial Science: Community college secretarial science students had differences in pre-test and post-test mean scores ranging from 1.88 to .30. Mean scores showed increases in the theoretical, aesthetic, and social areas. Decreases occurred in the economic, political and religious areas.

Differences in mean scores for technical institute students ranged from 4.08 to .53. Mean scores increased in the theoretical, aesthetic, and social. Decreases occurred in the economic, political and religious.

In conclusion, although differences in means occurred between pre-test and post-test results, in every case but one, the scores remained within the boundaries of 50 percent of all male and female scores on the specific value.¹ The single exception occurred for secretarial science freshmen in the community college, where pre-test mean score on the aesthetic value was 35.53, 1.47 points outside the lower boundary point of 37 for women. The post-test mean was 38.82, thus indicating that changes which had occurred placed the mean score within the range of 50 percent of all female scores. As indicated in the summary table below, patterns of shifts, disregarding the degree of shifts were the same for both schools. Each showed gains in the theoretical, aesthetic and social, and each showed decreases in the economic, political and religious.

¹Range of 50 percent of all scores by sex and scale. (Allport, 1960).

	Male	Female
Theoretical	39 - 49	31 - 41
Economic	37 - 48	33 - 43
Aesthetic	29 - 41	37 - 47
Social	32 - 42	34 - 42
Political	38 - 47	34 - 42
Religious	32 - 44	37 - 50

TABLE 104. Pre-Test and Post-Test Mean Scale Scores on the Study of Values of Secretarial Science Students by Institution

Scale	Community College				Technical Institute			
	Pre-Test N=17		Post-Test N=17		Pre-Test N=67		Post-Test N=70	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Theoretical	36.47	4.91	38.35	6.72	36.97	8.11	37.50	5.33
Economic	43.24	6.06	40.24	7.20	42.49	8.30	38.41	6.55
Aesthetic	35.53	5.79	38.82	6.90	40.13	6.53	42.94	7.39
Social	42.94	5.13	43.24	5.19	41.40	6.17	42.84	6.54
Political	39.35	7.47	38.88	6.95	40.34	5.42	38.99	5.89
Religious	42.47	7.19	40.65	5.95	41.28	9.53	39.79	7.84

TABLE 105. Summary of Direction of Change from Pre-Test to Post-Test Mean Scores on the Study of Value Scales by Curriculum and Institution

Value Scale	Total Population		Business Administration		Electrical Technology		Nursing		Secretarial Science	
	CC	TI	CC	TI	CC	TI	CC	TI	CC	TI
N=	73	160	22	31	9	26	24	27	17	67
Theoretical	+	+	+	-	-	+	-	+	+	+
Economic	-	-	-	-	+	-	+	-	-	-
Aesthetic	+	+	-	+	+	-	-	+	+	+
Social	+	+	-	+	+	-	+	+	+	+
Political	-	-	-	-	-	-	-	+	-	-
Religious	-	-	-	+	-	+	+	-	-	-

Patterns of shifts for specific curricula differed from that of total populations except for the secretarial science curricula. The fewest departures from the pattern for the total populations was in the political value area, with one departure in the technical institute nurse curriculum. Both in the economic and social value areas, two deviations from the pattern occurred.

In summary, mean scores on the theoretical, economic, aesthetic, social, political, and religious scales for freshmen and fourth term students were with few exceptions in the normative range. A comparison of freshmen mean scores with those of fourth term students, 1-1/2 years later showed slight changes with economic and political value means generally decreasing and theoretical, social, aesthetic and religious more frequently showing slight increases. Minimal variations occurred between students in the community college and technical institute. Variations did occur between students enrolled in the four curricula and generally showed choice of curriculum to be more influential in value of mean scores than school.

Chapter VI presents findings pertaining to vocational values.

CHAPTER VI

VOCATIONAL VALUES

With varying degrees of generality and specificity, the variables described and findings reported in this chapter are related to the area of vocational values. The sequence of presentation starts with the more general, present-future orientations of respondents and concludes with the more specific, namely respondents propensities to choose risk-taking rather than security-seeking alternatives in a job context. Findings about expectations, preferences and perceived chances of achieving both are reported before findings on the place of occupational advancement in a hierarchy of competing values. The questions to be answered remain the same as those posed in relation to other variables, namely, "Do respondents in the two schools and four curricula differ significantly?" and "Do freshmen who continue in the curricula differ significantly from those who subsequently drop out?"

Present-Future Orientations: Freshmen

Each respondent was asked whether he had plans for the future, if "yes" to tell briefly what these were, and to indicate the length of time in which he hoped to achieve his plans. Responses were coded in terms of having plans, length of time to achieve these, and content of plans.

Total Populations:

Time: Approximately 12 percent of students in both schools reported "having no plan". Of those reporting plans, for both groups of students, approximately 40 percent were planning for the next 3-4 years; slightly over 1/5 were planning for the next 1 to 2 years; and another 1/5 were planning in terms of 5 or more years. Between 1-1/2 to 2 percent were planning in terms of the next few months. In sum, about 13 to 14 percent can be described as more oriented towards the present, with approximately 60 percent engaged in planning for the next 3 to 5 years. Differences between students in the two schools were slight.

TABLE 106. Percent of Community College Freshmen in Present-Future Orientation Categories by Curriculum

	Planning for the next					
	No Plans	1-6 Months	1-2 Years	3-4 Years	5 or more Years	
	N	Percent ¹	Percent	Percent	Percent	Percent
Business						
Administration	131	16.0	2.3	13.0	35.1	32.1
Electrical						
Technology	43	14.0	2.3	9.3	51.2	23.3
Nursing						
Secretarial	42		2.4	40.5	33.3	16.7
Science						
Science	88	9.1		33.0	45.5	12.5
Total	304	11.5	1.6	22.0	40.1	23.0

¹Percent less than 100 indicates rate of no response.

TABLE 107. Percent of Technical Institute Freshmen in Present-Future Orientation Categories by Curriculum

	Planning for the next					
	No Plans	1-6 Months	1-2 Years	3-4 Years	5 or more Years	
	N	Percent ¹	Percent	Percent	Percent	Percent
Business						
Administration	168	23.8	.6	8.9	35.1	27.4
Electrical						
Technology	106	11.3	3.8	5.7	37.7	35.8
Nursing						
Secretarial	56	1.8	5.4	23.2	53.6	14.3
Science						
Science	157	4.5	1.3	45.2	40.8	6.4
Total	487	12.3	2.0	21.6	39.6	20.9

¹Percent less than 100 indicates rate of no response

Content: As reported in Table 108, the largest proportions of students in both schools (community college, 53.6 percent; technical institute, 55.6) referred to occupational goals in plans described. Approximately one-fourth referred to further education. Slightly over two percent specified personal or social plans such as marriage or entering armed forces. Excluding approximately 12 percent who indicated "no plans", the proportion who did not respond was approximately 6-1/2 percent for both schools. Variation between the two schools was slight.

Specific Curricula:

Time: Business administration students in both schools had the largest proportion of all curricula reporting "no plans" (16 percent of community college students; 23.8 percent of technical institute students). The proportions planning for 3 to 5 years was consistent with results for total populations with 67.2 percent of those at the community college and 62.5 percent of those at the technical institute.

Electrical technology students ranked second to business administration in the proportions reporting "no plans", (community college, 14 percent; technical institute, 11.3 percent). The proportions planning from 3-5 years exceeded those for all other curricula with 74.5 percent for community college and 73.5, technical institute.

By far the larger proportion of nurse and secretarial science students tended to plan in terms of 1 to 4 years. Variations between community college nurse students and technical institute nurse students indicated that a larger proportion of community college students (40.5) planned in terms of 1 to 2 years whereas the larger proportion of technical institute students (53.6) planned from 3-4 years. This may be a function of the age difference in the two groups noted previously.

A larger proportion (9.1 percent) of community college secretarial science students reported no plans, than did technical institute students (4.5). Whereas 78 percent of community college students planned for 1-4 years, about 86 percent of technical institute students reported plans for this period.

Content: The largest proportion of community college and technical institute business administration students reported occupational goals, 48.9 and 37.7 percent respectively. Approximately 26 percent of both described educational plans; 1.6 percent of community college students and 5.4 percent of technical institute students

TABLE 108. Percent of Community College and Technical Institute Freshmen by Content of Plans and Curriculum

	Community College				Technical Institute			
	Occupational ¹		Educa- tional		Occupational		Educa- tional	
	N	Percent	Percent	Other ² Percent	N	Percent	Percent	Other Percent
Business Administration	131	48.9	26.0	1.6	168	37.7	26.3	5.4
Electrical Technology	43	30.2	37.2	9.3	106	39.4	36.5	7.7
Nursing Secretarial Science	42	47.6	38.1	9.5	56	55.4	39.3	1.8
	88	75.0	11.4	2.3	157	85.4	6.4	
Total	304	53.6	25.0	2.6	487	55.6	23.6	2.5

¹Percent less than 100 indicates rate of no response

²Other category includes personal-social, eg marriage, and armed forces.

referred to personal-social plans. Table 108 reports the results.

Of electrical technology students, the largest difference in proportions occurred in those describing occupational plans, with 30.2 percent of community college students and 39.4 percent of technical institute students.

A lower proportion, 47.6 percent of community college nurse students reported occupational plans than did technical institute nurse students (55.4). Approximately the same proportion (38.1 community college students, 39.3 technical institute students) referred to educational plans.

Secretarial science students at both institutions differed from those in other curricula, in that 75 percent of community college students and 85 percent of technical institute students described occupational plans. These curricula had the lowest proportions, 11.4 community college students and 6.4 technical institute students describing plans involving education.

In sum, although variations did occur between curricula and institutions, these were slight, except for the secretarial science students emphases on occupational plans, with few including further education. The consistency which appeared was for slightly larger proportions to describe occupational plans, generally, with a lower proportion referring to education.

Present-Future Orientations: Drop-Outs and Still Enrolled

Freshmen responses to the questions pertaining to plans for the future, the content of those plans and the time period in which these were to be achieved were dichotomized on the basis of dropping out or continuing in curriculum. The results of that analysis are reported in Tables 109 and 110.

Time: Of drop-outs, 15 percent or less reported "no plans" in both schools. A lower proportion of students still enrolled (8.7 percent of the community college; 11.1 percent of the technical institute) reported "no plans". Approximately 3 percent or less reported plans to be achieved within 1 to 6 months. For both drop-outs and those still enrolled in both schools over 80 percent reported plans for from 1 to 5 years; specifically of community college drop-outs 82.9 percent; of those still enrolled, 87.6 percent; of technical institute drop-outs 81.4 percent as compared to 82.7 percent

TABLE 109. Percent of Community College Freshmen in Present - Future Orientation Categories by Dropping Out and Still Enrolled in Curriculum During Fourth Term

	N	Planning for the next				
		No Plans Percent	1 - 6 months Percent	1 - 2 years Percent	3 - 4 years Percent	5 or more years Percent
Dropping Out	140	15.0	2.1	20.7	42.9	19.3
Still Enrolled	161	8.7	1.2	23.6	37.9	26.1
No Data	2				50.0	
Total	303	11.6	1.7	22.1	40.3	22.8

1. Percent less than 100 indicates rate of no response

TABLE 110. Percent of Technical Institute Freshmen in Present - Future Orientation Categories By Dropping Out and Still Enrolled in Curriculum During Fourth Term

	N	Planning for the next				
		No Plans Percent	1 - 6 months Percent	1 - 2 Years Percent	3 - 4 Years Percent	5 or more Years Percent
Dropping Out	323	13.0	2.7	21.1	36.5	23.8
Still Enrolled	162	11.1	.6	22.2	45.7	14.8
No Data	1				100.0	
Total	486	12.3	2.0	21.4	39.7	20.8

of those still enrolled. Slight proportional variations occurred but in no consistent direction among the longer time period categories.

Content; When the content of plans described were analyzed, over 50 percent of drop-outs and of those still enrolled referred to occupational plans. Table 111 presents the specifics.

Comparing community college drop-outs with technical institute drop-outs, proportional variations for each category did not exceed 5 percent. This was also the case when comparing community college drop-outs with those still enrolled at the community colleges. Variations between schools for students enrolled ranged from .8 to 13 percent. Note that whereas 52.2 percent of those enrolled at the community college referred to occupational plans, 65 percent of those in the technical institute did. Whereas 27.3 percent of community college students referred to educational plans, so did 18.8 percent of technical institute students. These responses, as do those to questions pertaining to expectations and preferences, consistently suggest that a larger proportion of community college students planned for and preferred further education, than did technical institute students who in larger proportions would like or prefer further education, but apparently for some reason considered it a less realistic expectation.

Expectations and Perceived Chances Freshmen Compared With Fourth Term Students

Responses of freshmen to questions pertaining to expectations and perceived chances were compared to responses of fourth term students provided in Spring, 1969. Due to the small number of community college students responding, responses of business administration students were combined with those from electrical technology students and responses from nurse students were combined with those in secretarial science. The number of respondents in each curriculum from the technical institute was sufficient so that combining curricula was not necessary. The question to be answered by this analysis was: "To what extent do expectations and perceived chances of freshmen differ from those of students near completion of the program?"

Total Population: Expectations

Community College: Tables 112-113 report the results for community college respondents. Approximately 6 percent more of community college fourth term students than freshmen expected a job consistent with the curriculum (42.4 percent to 36.3 percent respectively).

TABLE 111. Content of Plans of Freshmen by Institution and By Dropping Out and Still Enrolled in Curriculum During Fourth Term

	Community College				Technical Institute			
	Occupational	Educational	Other ²	Other ²	Occupational	Educational	Other	Other
	N	Percent ¹	Percent	Percent	N	Percent	Percent	Percent
Dropped Out	140	55.7	22.9	3.5	322	50.6	25.8	5.6
Still Enrolled	161	52.2	27.3	5.0	160	65.0	18.8	3.1
No Data	2				1	100.0		
Total	303	53.5	25.1	4.3	483	55.5	23.4	3.1

¹ Percent less than 100 indicates rate of no response

² Includes personal-social, e.g. marriage and armed forces

TABLE 112. Percent of Community College Freshmen Indicating What They Expect to Be Doing Five Years Later By Curriculum

Expectations	N ¹	Job consis-	Job advance-	Job diff-	Marriage	Marriage
		tent with curriculum Percent	ment by more education Percent	erent from curriculum Percent	plus job Percent	only Percent
Business Administration	124	25.0	46.8	26.6	1.6	
Electrical Technology	41	36.6	34.1	29.3		
Nursing	42	42.9	28.6	7.2	21.4	
Secretarial Science	88	48.9	19.3	3.4	17.0	11.4
Total	295	36.3	34.2	17.3	8.8	3.4

¹Total N responding on which percents were computed

TABLE 113. Percent of Community College Freshmen and Fourth Term Students Indicating What They Expect To Be Doing Five Years Later by Combined Curricula

	Expectations															
	Job Consistent with Curriculum				Job Advancement by more Education				Job different from Curriculum				Marriage Plus Job		Marriage Only	
	Percent		Percent		Percent		Percent		Percent		Percent		Percent		Percent	
¹ N	F	G	F	G	F	G	F	G	F	G	F	G	F	G	F	G
Business Administration & Electrical Technology	165	21	27.9	33.3	37.6	28.6	27.3	38.1	1.2							
Nursing & Secretarial Science	130	45	46.9	46.7	22.3	24.4	4.6	8.9	18.5	11.1	7.7	8.9				
Total	295	66	36.3	42.4	34.2	25.8	17.3	18.2	8.8	7.6	3.4	6.1				

¹Total N responding on which percents computed

²F = Freshmen

³G = Graduates = Fourth Term

Slightly over one quarter expected job advancement through more education whereas slightly over one third of freshmen had this expectation--a reduction of 8 percent. The proportion of those expecting a job different from the curriculum increased by less than 1 percent (18.2 percent, fourth term; 17.3 percent freshmen). Whereas 8.8 percent of freshmen expected marriage plus a job, 7.6 percent of fourth term students did. Whereas 3.4 percent of freshmen expected marriage only, 6.1 percent of fourth term students did.

Technical institute: With reference to the technical institute, examination of Tables 114 and 115 below show that there was about a 10 percent decrease in the proportion of fourth term students (29.3) expecting a job consistent with curriculum as compared to freshmen (39.1). A slight decrease of 3.2 percent occurred also as a lower proportion (23.6) of fourth term students expected job advancement through education than did freshmen (26.8 percent). Whereas 14.9 percent expected a job different from curriculum, 18.1 percent of freshmen held this expectation. Higher proportion of fourth term students expected to combine marriage and a job (14.9 percent) than freshmen (11.5 percent). The single largest increase occurred with 17.2 percent of fourth term students expecting marriage only, as contrast to 4.5 percent of freshmen. It is pertinent to remember that women were disproportionately represented among those continuing in programs at the technical institute, which partially explains this increase.

Comparison: Comparing all community college respondents with technical institute respondents, approximately 13 percent more of fourth term community college students (42.4 percent) expected jobs consistent with the curriculum, than did those at the technical institute (29.3). Close to the same proportions (25.8 percent, community college; and 23.6 percent technical institute) expected job advancement through more education; while 18.2 percent of community college respondents expected a job different from curriculum as did 14.9 percent of technical institute respondents. Marriage seemed to be an important part of expectations for larger proportions of technical institute respondents than community college respondents.

Specific Curricula: Expectations

Community college: The combined responses of business administration and electrical technology students at the community college showed shifts between expectations of freshmen and fourth term students in directions consistent with those reported for all respondents. Thus

TABLE 114. Percent of Technical Institute Freshmen Indicating What They Expect to be Doing Five Years Later by Curriculum

Expectations	N	Job consis-	Job advance-	Job diff-	Marriage	Marriage
		tent with curriculum Percent	ment by more education Percent	erent from curriculum Percent	plus job Percent	only Percent
Business Administration	160	30.	33.7	32.4	3.8	
Electrical Technology	101	25.7	49.5	24.8		
Nursing	54	53.7	27.8		14.9	3.7
Secretarial Science	155	52.3	4.5	5.2	25.8	12.3
Total	470	39.1	26.8	18.1	11.5	4.5

¹Total N responding on which percents were computed

TABLE 115. Percent of Technical Institute Fourth Term Students Indicating What They Expect To Be Doing Five Years Later by Curriculum

	N	Expectations			
		Job consis- tent with Curriculum	Job advance- ment by education	Job differ- ent from Curriculum	Marriage plus job only
		Percent	Percent	Percent	Percent
Business Administration	43	25.6	37.2	27.9	7.0
Electrical Technology	33	51.5	33.3	12.1	3.0
Nursing	25	48.0	28.0	4.0	20.0
Secretarial Science	73	15.1	9.6	12.3	37.0
Total	174	29.3	23.6	14.9	17.2

¹Total N responding on which percents were computed

whereas 27.9 percent of freshmen expected a job consistent with curriculum, 33.3 percent of fourth term students did; whereas 37.6 percent of freshmen expected job advancement through education, 28.6 percent of fourth term students did; and 27.3 percent of freshmen expected a job different from curriculum as compared to 38.1 percent. The very small number of women in these curricula is reflected in the low proportion referring to marriage as a part of expectations.

For nurse students and secretarial science students, variations between freshmen and fourth term students were slight for the first two categories of job consistent with curriculum and job advancement through education, with 46.9 and 46.7 percent respectively, and 22.3 and 24.4 percent. An increase of 4.3 percent occurred in the proportion of fourth term students expecting a job different from curriculum (8.9 percent) when compared with freshmen, (4.6 percent). There was a decrease in the proportion citing marriage plus job with 11.1 percent as compared to 18.5 percent of freshmen. Approximately 9 percent of fourth term students expected marriage only as compared to 7.7 percent of freshmen.

Technical institute: Within the technical institute, shifts in expectations of freshmen business administration students and fourth term students were in the direction of a slightly lower proportion expecting a job consistent with the curriculum (25.6 percent as to 30 percent of freshmen) and a slightly larger proportion expecting job advancement through education (37.2 percent as contrast to 33.7 percent of freshmen). Approximately 28 percent of fourth term students expected a job different from curriculum as did 32.4 percent of freshmen.

Variations in expectations of electrical technology freshmen and graduates differed from those in business administration. Note that whereas 25.7 percent of freshmen in this curriculum expected a job consistent with the curriculum, 51.5 percent of advanced students held this expectation. Further whereas almost 1/2 of the freshmen expected job advancement through education, approximately 1/3 of fourth term students did. Almost 1/4 of freshmen expected a job different from curriculum as compared to 12 percent of fourth term students.

For nurse students, in the technical institute, freshmen and fourth term student expectations differed slightly in that 53.7 percent of the former and 48 percent of the latter expected a job consistent with the curriculum; 27.8 percent of freshmen as to 28 percent expected job advancement through education; whereas no freshmen expected a job different from curriculum, 4 percent of

fourth term students did; and whereas 15 percent of freshmen expected marriage combined with a job, 20 percent of the fourth term students held this expectation. While 3.7 percent of freshmen expected to be housewives without other employment, no fourth term students reported this expectation.

Some of the most pronounced changes occurred between freshmen and fourth term students in secretarial science in the technical institute, for whereas 52.3 percent of the freshmen expected a job consistent with the curriculum, only 15.1 percent of fourth term students did. Of freshmen, 4.5 percent expected job advancement through education, as compared to 9.6 percent of fourth term students. Whereas 5.2 percent of freshmen expected a job different from curriculum, 12.3 percent of fourth term students reported this expectation. Further, 25.8 percent of freshmen expected to combine marriage and a job as did 26 percent of fourth term students. Only 12.3 percent of freshmen expected marriage only; as contrast to 37 percent of fourth term students.

Comparisons of expectations of nurse students and secretarial science students in the technical institute suggested that a larger proportion of nurse students were committed to a vocation than were secretarial science students.

Total Population: Chances

When ratings of perceived chances of attaining expectations by freshmen and fourth term students in the community college were compared, it was evident that although freshmen could be described as generally optimistic, fourth term students were even more so. Thus, whereas 25.7 percent of freshmen rated chances as excellent, 57.6 percent of fourth term students did so; 60.9 percent of freshmen rated chances as good compared to 36.4 percent; 11.2 percent of freshmen rated chances as fair compared to 6.1 percent; lastly .3 percent of freshmen saw chances as poor while no fourth term students gave such a rating.

Examination of Tables 118 and 119 show shifts in the same direction but with smaller magnitude for technical institute freshmen and fourth term students. For while 27.6 percent of freshmen gave a rating of excellent, 37.5 percent of fourth term students did; 62.3 percent freshmen gave a rating of good as compared to 46.4 percent; 6.8 percent freshmen gave a rating of fair as to 7.3 percent; lastly, .6 percent of freshmen gave a rating of poor, while no fourth term students did.

TABLE 116. Percent of Community College Freshmen Indicating Perceived Chances of Attaining Expectations by Curriculum

	Perceive Chance As				
	N	Excellent Percent ¹	Good Percent	Fair Percent	Poor Percent
Business Administration	131	20.6	61.8	13.7	.8
Electrical Technology	43	25.6	58.1	14.0	
Nursing	42	40.5	54.8	2.4	2.4
Secretarial Science	88	26.1	63.6	10.2	
Total	304	25.7	60.9	11.2	.3

¹Percent less than 100 indicates rate of no response.

TABLE 117. Percent of Community College Fourth Term Students Indicating Perceived Chances of Attaining Expectations by Combined Curricula

	Perceived Chance As				
	N ¹	Excellent Percent	Good Percent	Fair Percent	Poor Percent
Business Administration & Electrical Technology	21	47.6	47.6	4.8	
Nursing & Secretarial Science	45	62.2	31.1	6.7	
Total	66	57.6	36.4	6.1	

¹Total N responding and base of percent computations.

TABLE 118. Percent of Technical Institute Freshmen Indicating Perceived Chances of Attaining Expectations by Curriculum

	Perceive Chance As				
	N	Excellent Percent	Good Percent	Fair Percent	Poor Percent
Business Administration	168	31.5	56.0	7.1	1.2
Electrical Technology	106	20.8	63.2	10.4	.9
Nursing	55	29.1	67.3	3.6	
Secretarial Science	156	27.6	66.7	5.1	
Total	485	27.6	62.3	6.8	.6

¹Percent less than 100 indicates rate of no response.

TABLE 119. Percent of Technical Institute Fourth Term Students Indicating Perceived Chances of Attaining Expectations by Curriculum

	Perceived Chance As				
	N	Excellent Percent	Good Percent	Fair Percent	Poor Percent
Business Administration	48	29.2	52.1	8.3	
Electrical Technology	37	43.2	35.1	13.5	
Nursing	29	34.5	44.8	6.9	
Secretarial Science	78	41.0	48.7	3.8	
Total	192	37.5	46.4	7.3	

¹Percent less than 100 indicating rate of no response.

Specific Curricula: Chances

Among community college respondents, the shift for the total population was evident for the combined business administration and electrical technology curricula and the nurse and secretarial science curricula. The magnitude of the shift was greater for the latter, however, with 22.8 percent of freshmen business administration and electrical technology students rating chances as excellent compared to 47.6 percent of fourth term students as compared to 30.8 percent of nurse and secretarial science freshmen giving this rating and 62.2 percent of fourth term students.

Within the technical institute, variations occurred between curricula. Note that for freshmen and fourth term students in business administration, the shifts were slight and in the reverse direction. For 31.5 percent of freshmen gave a rating of excellent, while only 29.2 percent of fourth term students did; 56 percent of freshmen gave a rating of good, compared to 52.1 percent; 7.1 of freshmen gave a rating of fair as did 8.3 percent of fourth term students; and 1.2 percent rated chances as poor while freshmen, while no fourth term students did.

For electrical technology, note that where 20.8 percent of freshmen rated chances as excellent, 43.2 percent of fourth term students did so; 63.2 percent of freshmen rated chances as good compared to 35 percent. A slight reversal occurred with 10.4 percent of freshmen rating chances as fair, compared to 13.5 percent of fourth term students.

For nurse students, only 29 percent of freshmen rated chances as excellent compared with 34.5 percent of fourth term students; 67.3 percent, good compared to 44.8 percent; 3.6 percent of freshmen rated chances fair, as compared to 6.9 percent.

Secretarial science students in the technical institute as freshmen had 27.6 percent rating chances as excellent as did 41 percent of those in the fourth term. Almost 67 percent of freshmen checked chances as good, compared to 48.7 percent; 5.1 percent of freshmen and 3.8 percent of fourth term students rated chances as fair.

In sum, increased optimism in terms of perceived chances was evident for increased proportions of students, as fourth term in all curricula in the community college, and in three curricula in the technical institute.

Preferences and Perceived Chances Freshmen Compared to Fourth Term Students

Responses to the question, "What would you like to be doing five years from now?" were compared for freshmen and fourth term students.

Total Population: Preferences

Community College: Preferences compared with expectations. Comparing fourth term student preferences with expectations for all community college respondents (see Tables 113 and 120), there is a decrease of approximately 7 percent between those preferring a job consistent with curriculum and expecting a job consistent with curriculum, i.e., 35.5 percent as compared to 42.4 percent. The same proportions, 25.8 percent report a preference and expectation for job advancement by more education; similarly slightly over 18 percent report preferring and expecting a job different from curriculum. The proportion preferring marriage plus job increases from 7.6 percent who expect it to 12.9 percent. The proportion preferring and expecting marriage only was slightly over 6 percent. Compared with freshmen responses, as evident in Table 113, larger proportions of fourth term students preferred a job consistent with curriculum, i.e., 35.5 percent as to 28.8 percent. A small proportion, however, preferred job advancement by more education (25.8 percent) than did freshmen (37.5 percent). Slightly larger proportions preferred a job different from curriculum (19.4 percent as to 16.5 percent of freshmen) and marriage plus job (12.9 percent as to 10.9 percent of freshmen).

Technical Institute: For all technical institute respondents in the fourth term, the proportion preferring a job consistent with curriculum (18.1 percent) decreased 11.2 percent from those expecting (29.3 percent) a job consistent with curriculum (Table 115). A proportional increase of less than 2 percent occurred between those preferring job advancement through more education (25.3 percent) and those expecting it (23.6 percent). The proportion preferring a job different from curriculum (19.9 percent) increased 5 percent from those expecting a job different from curriculum (14.9 percent) although 14.9 percent expected marriage plus a job only 13.2 percent preferred it. The proportion preferring marriage only (23.5 percent) was a 6.3 percent increase over those expecting it (17.2 percent).

When preferences of fourth term technical institute students were compared with those expressed as freshmen, a drop in the proportions (18.1 percent fourth

TABLE 120. Percent of Community College Freshmen and Fourth Term Students Indicating What They Would Like to Be Doing Five Years Later by Combined Curricula

	Would Like										
	Job Consistent With Curriculum		Job Advancement by more Education		Job different from Curriculum		Marriage Plus Job		Marriage Only		
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent		
1	2	3	F	G	F	G	F	G	F	G	
Business Administration & Electrical Technology	157	20	29.3	35	51.6	30.	22.3	35	2.5		.6
Nursing & Secretarial Science	128	42	35.9	35.7	20.3	23.8	9.4	11.9	21.1	19.0	13.3
Total	285	62	28.8	35.5	37.5	25.6	16.5	19.4	10.9	12.9	6.3
											6.5

¹Total N responding and base for computing percent

²F = Freshmen

³G = Graduates - Fourth Term Students

TABLE 121. Percent of Community College Freshmen Indicating What They Would Like to be Doing Five Years Later by Curriculum

Would like	N ¹	Job consis-	Job advance-	Job diff-	Marrige	Marrige
		tent with curriculum Percent	ment by more education Percent	erent from curriculum Percent	plus job Percent	only Percent
Business Administration	119	19.3	52.1	24.3	4.2	.8
Electrical Technology	38	34.2	50.0	15.8		
Nursing	41	46.3	26.8		26.9	4.9
Secretarial Science	87	31.0	17.2	13.8	37.8	17.2
Total	285	28.8	37.5	16.5	17.2	6.3

¹Total N responding on which percents were computed

TABLE 122. Percent of Technical Institute Fourth Term Students Indicating What They Would Like To be Doing Five Years Later by Curriculum

	Would like					
	N	Job Consis-	Job advance-	Job differ-	Marriage	Marriage
		Percent	tent with Curriculum	ment by more education	ent from curriculum	plus job
		Percent	Percent	Percent	Percent	Percent
Business Administration	42	11.9	42.9	31.	2.4	11.9
Electrical Technology	32	34.4	34.4	31.2		
Nursing	23	30.4	30.4	4.3	17.4	17.4
Secretarial Science	69	10.1	8.7	13.0	24.6	43.5
Total	166	18.1	25.3	19.9	13.2	23.5

¹Total N responding on which percents were computed

term from 32.7 percent of freshmen) preferring a job consistent with curriculum was evident. Similarly, whereas 34 percent of freshmen expressed preferences for job advancement through more education, only 25.3 percent of fourth term students did so. Fifteen percent of the freshmen preferred a job different from curriculum, in comparison to 19.9 percent of fourth term students. Both categories including marriage plus job or marriage only increased from 2 to 16 percent, i.e., from 11.5, freshmen to 13.2 percent fourth term, and, 6.9, freshmen to 23.5 percent fourth term.

The disproportionate number of women among students still enrolled in the secretarial science curriculum was reflected in the shifting proportions from vocational preferences to marriage. A similar shift, but of less magnitude occurred for nurse students.

Comparison: Comparing fourth term community college respondents with fourth term technical institute respondents, it is interesting to note, that whereas variations among freshmen in the two schools were relatively slight, while 35.5 percent of community college respondents preferred a job consistent with curriculum only 18 percent of technical institute respondents shared this preference. The proportions of both groups of respondents preferring advancement by more education is almost equal at 25.3 as to 25.3 percent. For the category, job different from curriculum, 19.4 percent of community college respondents were in this category as were 19.9 percent of the technical institute respondents. The second largest variation was for those preferring marriage only, with 6.5 percent of community college respondents expressing this preference as compared to 23.5 percent of technical institute students. A variation in the populations provides a partial explanation of this, namely the higher proportion of older married nurse students in the community college.

Specific Curricula: Preferences

Community College: An examination of Table 120 suggests that preferences expressed by fourth term business administration and electrical technology students in the community college differed from those expressed as freshmen with more of the former preferring a job consistent with curriculum, and a reduction in the proportion preferring job advancement by more education. Thus for freshmen, 29.3 percent preferred a job consistent with curriculum in comparison to 35 percent of fourth term students. Whereas 51.6 percent of freshmen expressed a preference for advancement through more

TABLE 123. Percent of Technical Institute Freshmen Indicating What They Would Like to be Doing Five Years Later by Curriculum

Would like	N	Job consis-	Job advance-	Job diff-	Marriage
		tent with curriculum Percent	ment by more education Percent	erent from curriculum Percent	plus job only Percent
Business Administration	156	23.7	44.9	25.6	4.5
Electrical Technology	98	24.5	63.3	11.2	1.0
Nursing	55	49.1	25.5	1.8	18.1
Secretarial Science	153	41.2	7.2	11.1	22.8
Total	462	32.7	34.0	15.0	11.5
					6.9

¹ Total N responding on which percents were computed

education, only 30 percent of fourth term students did so. Further, 35 percent of fourth term students preferred a job different from curriculum as compared to 22.3 percent of freshmen.

With reference to combined curricula, nursing and secretarial science, variations were small between freshmen and fourth term students. Note that almost 36 percent of both preferred a job consistent with the curriculum. Between 20 and 24 percent of each preferred job advancement through education--in each case a lower proportion than for business administration and electrical technology. Twenty-one percent of freshmen compared to 19 percent of fourth term students wanted marriage plus a job; and whereas 13 percent of freshmen would like marriage only, 9.5 percent of fourth term students preferred this.

Technical Institute: Among curricula in the technical institute variations did occur. Looking at Table 122 note that fourth term students in business administration had the largest proportions preferring job advancement by more education (42.9) or a job different from curriculum, 31 percent. Note that for secretarial science students, the lowest proportion (of all four curricula) preferred a job consistent with curriculum, while 43.5 percent preferred marriage only. In contrast electrical technology students and nurse students had over 30 percent preferring a job consistent with the curriculum or job advancement by more education. Approximately 31 percent of electrical technology students preferred a job different from curriculum, and slightly over 34 percent of nurse students would like marriage plus job or marriage only.

When compared with preferences expressed as freshmen (see Table 123) for business administration students there was a decrease of 11.8 percent who would like a job consistent with the curriculum, and an increase of 6 percent who preferred a job different from the curriculum. For electrical technology students, the proportion preferring a job consistent with curriculum increased from 24.5 percent for freshmen to 34.4 percent for fourth term students; a decrease from 63.5 to 34.4 who would like to seek job advancement through more education, and an increase from 11.2 to 31.2 percent in those preferring a job different from curriculum. Variations of responses expressed by freshmen nurse students and those expressed as fourth term students reflect a decrease from 49.1 to 30.4 who preferred a job consistent with curriculum, an increase from 25.5 to 30.4 of those seeking job advancement through more education, and an increase from 5.5 percent

to 17.4 percent preferring marriage only. Variations for secretarial science students were considerable between preferences expressed as freshmen and those expressed as fourth term students. While 41.2 percent expressed preference for a job consistent with curriculum as freshmen, only 10.1 percent did so as fourth term students. While as freshmen 7.2 percent preferred job advancement through more education, 8.7 percent did as fourth term students. Of freshmen, 11.1 percent preferred a job different from curriculum while 13 percent of fourth term students did. Of freshmen, 22.8 percent preferred marriage plus a job, as did 24.6 percent of fourth term students; where 17.6 percent of freshmen preferred marriage only, 43.5 percent of graduates did.

Variations in curricula between institutions are difficult to assess since the small number of community college respondents made it necessary to combine curricula.

Total Population: Chances

A comparison of ratings as freshmen and fourth term community college students on chances of attaining preferences is reported in Tables 124 and 125. Note from Table 125 that as freshmen 76.8 percent rated chances excellent to good with the larger proportion rating them good; 77.2 percent of fourth term students rated chances as excellent or good with the larger proportion rating them excellent. Variations in proportion rating chances as fair or poor are slight, with 23.1 percent of the freshmen as to 22.7 percent of the fourth term students. In both groups the larger proportion rated chances fair rather than poor.

As for technical institute fourth term students, Table 127 presents the results. An examination of Tables 126 and 127 enables a comparison of variations in proportional responses as freshmen and fourth term students. Whereas 71.9 percent of ratings as freshmen were either excellent or good, 76.5 percent of ratings as fourth term students were in this category. For both groups the larger proportion rated chances as good (54.0 percent of freshmen as to 40.8 percent of fourth term students). Slightly over 20 percent of each rated chances as either fair or poor. Of both freshmen and fourth term students the larger proportion rated chances as fair rather than poor.

In sum, larger proportions of fourth term students tended to be somewhat more optimistic about chances of attaining preferences than as freshmen. This direction is evidenced by larger proportional differences between

TABLE 124. Percent of Community College Freshmen Indicating Perceived Chances of Attaining What They Would Like by Curriculum

Perceive chance as

	N	Excellent	Good	Fair	Poor
		Percent	Percent	Percent	Percent
Business Administration	131	13.7	48.1	21.4	7.6
Electrical Technology	43	11.6	55.8	14.0	11.7
Nursing	42	35.7	54.8	4.8	
Secretarial Science	88	19.3	61.4	15.9	1.1
Total	304	18.1	53.9	16.4	5.3

¹Percent less than 10 indicates rate of no response

community college students than technical institute students.

Specific Curricula: Chances

For community college fourth term students, a larger proportion (54.5) of nurse and secretarial science students rated chances as excellent than did business administration and electrical technology (27.3). Variations among curricula in the technical institute were comparatively slight, with the proportion of business administration students being between 7 and 9 percent less than that of other curricula rating chances as excellent. The largest proportion rating chances as good was in secretarial science and exceeded proportions for other curricula from 9 to 12 percent. Almost 19 percent of electrical technology students rated their chances as fair and exceeded that for other curricula by 8.5 to 5 percent. Almost 17 percent of business administration students rated their chances as poor, as did 10 percent of nurse students, 5 percent of electrical technology and approximately 4 percent of secretarial science.

TABLE 125. Percent of Community College Freshmen and Fourth Term Students Indicating Perceived Chances of Attaining What They Would Like by Combined Curricula

		Perceive Chance As											
		Excellent			Good			Fair			Poor		
		Percent			Percent			Percent			Percent		
N	F	G	F	G	F	G	F	G	F	G	F	G	
Business Administration & Electrical Technology	159	22	14.5	27.3	54.7	45.5	21.4	18.2	9.43	9.1			
Nursing & Secretarial Science	126	44	25.4	54.5	61.1	25.0	12.7	15.8	.7	4.5			
Total	285	66	19.3	45.4	57.5	31.8	17.5	16.6	5.6	6.1			

¹Total N responding and base for computing percents

²F = Freshmen

³G = Graduates - Fourth Term Students

TABLE 126. Percent of Technical Institute Freshmen Indicating Perceived Chances of Attaining What They Would Like By Curriculum

	N	Perceive Chance As			
		Excellent Percent	Good Percent	Fair Percent	Poor Percent
Business Administration	168	16.7	47.6	19.0	6.6
Electrical Technology	106	10.4	49.1	24.5	2.8
Nursing Secretarial Science	56	23.2	67.9	5.4	1.8
	157	22.3	59.2	12.7	1.9
Total	487	17.9	54.0	16.6	3.7

¹ Percent less than 100 indicates rate of no response.

TABLE 127. Percent of Technical Institute Fourth Term Students Indicating Perceived Chances of Attaining What They Would Like by Curriculum

	N	Perceive Chance As			
		Excellent Percent	Good Percent	Fair Percent	Poor Percent
Business Administration	48	20.8	37.5	12.5	16.7
Electrical Technology	37	27.0	37.8	18.9	5.4
Nursing Secretarial Science	29	27.6	34.5	13.8	10.3
	77	29.9	46.8	10.4	3.9
Total	191	26.7	40.8	13.1	8.4

¹ Percent less than 100 indicates rate of no response.

Expectations, Preferences, Perceived Chances Drop-Outs and Still-Enrolled

Expectations

Responses of freshmen to questions asking what each expected to be doing five years later and their rating of chances for attaining expectations were dichotomized on the basis of dropping out of curriculum or being still enrolled during fourth term.

Community College: Tables 128 and 129 present results for community college respondents. As evident, proportional variations were very slight. Of those dropping out, 35 percent had expected a job consistent with curriculum, as compared to 37 percent of those still enrolled; 36.5 percent had expected job advancement as compared to 32.3 percent and approximately 14 percent expected a job different from the curriculum in which enrolled, as did 20 percent of those still enrolled. Slightly larger proportions of drop-outs expected marriage plus a job and marriage only than did those still enrolled; with 10.3 and 4.4 percent as to 7.7 and 2.6 percent respectively. As evident from Table 129, over 85 percent of both drop-outs and students were optimistic about the chances of achieving their expectations. Of drop-outs, 23.6 rated chances as excellent as compared to 28.0 of those still enrolled and 63.6 percent, rated them as good as compared to 57.8 of those still enrolled. Approximately 11 percent of drop-outs rated the chances as fair, as did 11.8 percent of those still enrolled. Slightly over 1 percent of those still enrolled rated chances as poor.

In sum differences between drop-outs and those still enrolled at the community college were slight both in terms of expectations and perceived chances of achieving them.

Technical Institute: Tables 130 and 131 present results for the technical institute. As with community college respondents, proportional variations between drop-outs and continuing students at the technical institute were slight, with 39 percent of drop-outs expecting a job consistent with curriculum, as did 38.7 percent of those still enrolled; 28.5 expected job advancement through more education, as compared to about 24 percent; and 20 percent of drop-outs expected a job different from curriculum as compared to 13.5 percent of those still enrolled. Lower proportions of students dropping out expected marriage plus job (8.9 percent) or marriage only (3.2 percent) than did those still enrolled with 16.8 and 7.1 percent respectively.

TABLE 128. Percent of Community College Freshmen Indicating What They Expect to Be Doing Five Years Later By Dropping Out And Still Enrolled in Curricula During Fourth Term

	Expect					
	N	Job consis- tent With Curriculum Percent	Job Advance- ment by More Education Percent	Job differ- ent from Curriculum Percent	Marriage Plus Job Percent	Marriage Only Percent
Dropped Out	137	35.0	36.5	13.9	10.3	4.4
Still Enrolled	155	37.4	32.3	20.0	7.7	2.6
Total	294	36.4	34.0	17.3	8.8	3.4

TABLE 129. Percent of Community College Freshmen Indicating Perceived Chances of Attaining Expectations by Dropping Out and Still Enrolled in Curricula During Fourth Term

	Perceive Chance As				
	N	Excellent Percent	Good Percent	Fair Percent	Poor Percent
Dropped Out	140	23.6	63.6	10.7	
Still Enrolled	161	28.0	57.8	11.8	1.2
Total	301	25.7	60.7	11.2	.6

TABLE 130. Percent of Technical Institute Freshmen Indicating What They Expect to Be Doing Five Years Later by Dropping Out Or Still Enrolled in Curricula During Fourth Term

	N	Expect				
		Job consis- tent With Curriculum Percent	Job Advance- ment by More Education Percent	Job differ- ent From Curriculum Percent	Marriage Plus Job Percent	Marriage Only Percent
Dropped Out	312	39.1	28.5	20.3	8.9	3.2
Still Enrolled	155	38.7	23.9	13.5	16.8	7.1
Total	468	39.1	26.9	18.0	11.5	4.5

¹Total N responding on which percents were computed

TABLE 131. Percent of Technical Institute Freshmen Indicating Perceived Chances of Attaining Expectations by Dropping Out or Still Enrolled in Curricula During Fourth Term.

	N	Perceive Chance As			
		Excellent Percent	Good Percent	Fair Percent	Poor Percent
Dropped Out	322	26.4	63.4	6.5	.6
Still Enrolled	161	29.8	59.6	7.5	.6
Total	484	27.5	62.2	6.8	.6

¹Percent less than 100 indicates rate of no response

Over 89 percent of both drop-outs and those still enrolled rated their chances of achieving expectations as excellent or good. Proportions of drop-outs rating their chances as fair or poor were almost equal to those still enrolled.

Comparison: A comparison of the two schools, showed that almost consistently approximately 7 percent more of community college respondents, whether drop-out or still-enrolled expected job advancement through further education, than did drop-outs or those still enrolled at the technical institute. Further directions of proportions specifying expectations for marriage plus job or marriage only were reversed for the two schools. This may well be a result of the older nurse students at the community college, of which a sizeable proportion were married. Apart from these two minor variations, the respondents from each school were more similar than dissimilar.

Preferences

Responses to the questions, "What would you like to be doing five years from now?" and "rate your chances", were analyzed in relation to dropping out or continuing in the curriculum.

Community College: Tables 132 and 133 report results for the community college.

Somewhat larger variations occurred in response to the first question. Note that 23.1 percent of drop-outs would like a job consistent with curriculum whereas 34.2 percent of those still enrolled did. When compared with expectations, it is a decrease of 12 percent for drop-outs. The decrease in this category appears to have shifted to indicating a preference for job advancement through further education and even more so a job different from curriculum, marriage plus job and marriage only. The variations for students still enrolled show a decrease in the proportion preferring a job different from curriculum, and an increase in preference for job advancement through further education. These variations between what respondents expected (Table 128) and what they would like (Table 132) suggest that a somewhat smaller proportion of drop-outs were at the time of entering the curricula preferring a job consistent with the curriculum than were those who continued.

Approximately 72 percent of both drop-outs and those still-enrolled perceived their chances as excellent or good. Approximately the same proportions saw their chances as fair (drop-outs, 15.7, still-enrolled, 16.8) or poor (drop-outs, 4.3 percent and still-enrolled, 6.2 percent).

TABLE 132. Percent of Community College Freshmen Indicating What They Would Like to Be Doing Five Years Later by Dropping Out and Still Enrolled in Curricula During Fourth Term.

	Would like					
	N	Job consis- tent with curriculum Percent	Job advance- ment by more education Percent	Job differ- ent from curriculum Percent	Marriage Plus job Percent	Marriage Only Percent
Dropped Out	130	23.1	38.5	17.6	13.8	6.9
Still Enrolled	152	34.2	36.8	15.8	7.9	5.3
Total	282	28.9	37.3	16.6	11.0	6.3

TABLE 133. Percent of Community College Freshmen Indicating Perceived Chances of Attaining What They Would Like by Dropping Out and Still Enrolled in Curricula During Fourth Term

	Perceive chance as				
	N	Excellent Percent	Good Percent	Fair Percent	Poor Percent
Dropped Out	140	17.9	54.3	15.7	4.3
Still Enrolled	161	18.6	53.4	16.8	6.2
Total	301	18.2	53.8	16.5	5.3

Technical Institute: A slightly different picture emerges for technical institute respondents, as presented in Table 134 as compared with Table 130. For drop-outs the 7 percent decrease in the proportions expecting a job consistent with curriculum (39.1 percent) to preferring a job consistent with curriculum (32.5) seems to appear as a preference for job advancement by more education (from 28.5 expected to 37.4 percent preferred) and other categories involving marriage. For students still enrolled, the decrease of 5 percent from expecting a job consistent with curriculum (38.7) to preferring a job consistent with curriculum (33.1 percent) seems to appear as slight increases in preferences for job advancement through more education, a job different from curriculum and marriage only. The fact reported earlier that women were disproportionately represented in students still enrolled may be a partial explanation.

Over 70 percent of drop-outs and 74 percent of those still enrolled rated chances of attaining what they would like as excellent or good. Of drop-outs, 18 percent rated their chances as fair as compared to 13.6 percent of those still enrolled; and 3.1 percent rated chances as poor as compared to 4.9 percent of those still enrolled. For all categories of drop-outs and still enrolled, at both schools, the proportions rating chances as excellent was 23 to 30 percent for attaining expectations and dropped to between 16 and 21 percent for rating chances of attaining preferences as excellent.

In sum, variations between drop-outs and those still enrolled were very slight in terms of expectations and preferences, optimism or pessimism. Slight differences occurring between institutions suggested a lower proportion of drop-outs from the community college viewed a job consistent with the curriculum as preferred, than did those still enrolled. Further slight variations suggest that community college respondents in both categories, at time of entrance, were more oriented toward job advancement through more education and expected this during a five year period. Lower proportions of technical institute students expected it, but increased proportions specified it as preferred.

Valuing Occupational Advancement

Since the focus of this study was on students in occupational curricula in a community college and technical institute, it was thought that the value placed on occupational advancement might be significantly related to choosing to study in a community college or technical institute as well as to dropping out or completing the program. In addition to questions relative to expectations

TABLE 134. Percent of Technical Institute Freshmen Indicating What They Would Like to be Doing Five Years Later by Dropping Out or Still Enrolled in Curricula During Fourth Term

	N	Would Like				
		Job Consistent With Curriculum Percent	Job Advancement by More Education Percent	Job Different From Curriculum Percent	Marriage Plus Job Percent	Marriage Only Percent
Dropped Out	302	32.5	37.4	14.6	9.9	5.6
Still Enrolled	157	33.1	26.8	15.9	14.6	9.6
Total	459	32.6	33.9	15.0	11.5	7.0

¹Total N responding on which percents were computed.

TABLE 135. Percent of Technical Institute Freshmen Indicating Perceived Chances of Attaining What They Would Like By Dropping Out or Still Enrolled in Curricula During Fourth Term

	N	Perceive Chance as			
		Excellent Percent	Good Percent	Fair Percent	Poor Percent
Dropped Out	323	16.1	54.2	18.0	3.1
Still Enrolled	162	21.6	53.1	13.6	4.9
Total	485	17.9	53.9	16.5	3.7

¹Percent less than 100 indicates rate of no response.

and likes, plans and perceived chances of attainment, respondents were asked to check how important various considerations would be in stopping them from making an occupational advance. Alternative choices for each of the eleven considerations were: would stop me; might stop me from making the change; would be a serious consideration but wouldn't stop me; and wouldn't matter at all. Analysis was limited to the last response category -- "wouldn't matter at all". Following Reissman's logic that ... "because it requires the most clearly definitive stand by the respondent, there is some assurance that those who believe any item does not matter at all, are expressing a more stable commitment--one that is more clearly removed from any further consideration." According to Reissman (1953) who devised the measure, it provides for comparisons based upon the percentages within each group of subjects, that reject each of the eleven items or consider them as desired alternatives to occupational mobility. The "level of aspiration" he continues, "should be interpreted in terms of the relative ranking of the groups of the subjects or the items themselves rather than in terms of an absolute score."

Results of analysis for freshmen as compared to fourth term students, comparisons between curricula and institutions, and between drop-outs and those still enrolled follow.

Freshmen Compared to Fourth Term

Total Population: Level of aspiration data were obtained in the Fall, 1967 from entering freshmen and again from fourth term students in the Spring, 1969. The variations between these two groups could result from the greater selectivity of persons who remain to the fourth term and also from change in actual level of aspirations. The reader should remember that the results reported are derived from measurement on two occasions and that many, but not necessarily all of the fourth term students had responded to the question twice, once as freshmen, and a second time approximately 1-1/2 years later.

A comparison of responses of community college freshmen with those of fourth term students, found some variations, but did not point consistently to one valuing occupational advancement more than the other. Thus, we note that higher proportions of freshmen indicated that six of the eleven considerations wouldn't matter at all, than did fourth term students. These six considerations were: leaving family, leaving friends, giving up leisure, keeping quiet about religious views, working harder, and taking on more responsibility. In the remaining areas of endangering health, moving around the country, leaving

TABLE 136. Percentages Indicating Items That "Wouldn't Matter" In a Possible Occupational Advance by Freshmen and Fourth Term Students and Institution

Considerations	<u>Community</u>	<u>College</u>	<u>Technical</u>	<u>Institute</u>
	Freshmen	Fourth Term Students	Freshmen	Fourth Term Students
Endanger your health	3.6	4.4	2.9	.6
Leave your family for some time	17.4	16.2	12.3	18.9
Move around the country a lot	37.2	41.2	32.2	32.9
Leave your community	56.9	63.2	54.4	63.1
Leave your friends	33.6	27.9	27.3	26.8
Give up leisure time	42.1	25.0	38.6	25.7
Keep quiet about political views	39.1	41.2	36.3	35.7
Keep quiet about religious views	36.8	35.2	31.2	34.6
Learn a new routine	78.9	86.8	76.6	84.3
Work harder than you are now	74.5	64.7	69.4	68.7
Take on more responsibility	68.8	66.1	62.7	62.0
Total number of cases	304	68	487	179

community, keeping quiet about political views, learning a new routine, the proportions of fourth term students exceeded those of freshmen. Health, family, friends, and religious views appeared to be relatively strong values competing with occupational advancement for both groups. Use of leisure was important also to fourth term students, and considerably less so to freshmen. (Table 136).

With respondents in the technical institute, proportions of freshmen exceeded that of fourth term students in six areas which are: health, leaving friends, giving up leisure, keeping quiet about political views, working harder, and assuming more responsibility. In the remaining five areas proportions of fourth term students exceeded freshmen. For both groups at the technical institute, health, leaving family, moving around the country, leaving friends, giving up leisure, political and religious views were quite competitive with the value of occupational advancement.

Comparing community college freshmen with technical institute freshmen, higher proportions of community college freshmen indicated each of the eleven considerations wouldn't matter than did technical institute freshmen. Comparing fourth term students in both schools a higher proportion of community college students indicated that eight of the eleven considerations wouldn't matter than did those in the technical institute.

These data suggest that community college students both as freshmen and fourth term students placed greater value on occupational advancement than those in the technical institute, for though proportional differences were small in a number of comparisons, the consistency in direction was evident.

Specific Curricula: Comparing business administration respondents within the community college as freshmen and as fourth term students, the proportion of fourth term students exceeded that for freshmen for seven of the eleven areas, i.e., health, leaving family, moving around the country, leaving community, leaving friends, learning a new routine, and taking on more responsibility. The degree of proportional variation as noted in Table 137 ranged from slight to sizeable differences.

Similar comparisons for business administration respondents at the technical institute showed fourth term students having higher proportions indicating eight of the eleven areas wouldn't matter, as compared to freshmen.

Thus for both schools, business administration respondents in the fourth term appeared more committed to occupational advancement than as freshmen.

TABLE 137. Percentage of Business Administration Respondents Indicating Items That "Wouldn't Matter" in a Possible Occupational Advance By Freshmen and Fourth Term Students and Institution.

Considerations	Community College		Technical Institute	
	Freshmen	Fourth Term Students	Freshmen	Fourth Term Students
Endanger your health	3.1	7.1	4.2	
Leave your family for some time	20.6	21.5	14.9	20.4
Move around the country a lot	36.6	71.5	33.3	45.4
Leave your community	55.7	85.7	51.8	63.6
Leave your friends	34.4	50.0	23.2	25.0
Give up leisure time	39.7	14.2	39.9	25.0
Keep quiet about political views	35.9	35.7	31.0	27.2
Keep quiet about religious views	32.8	28.5	32.7	36.3
Learn a new routine	72.5	78.5	73.2	79.5
Work harder than you are now	72.3	50.0	67.9	77.3
Take on more responsibility	70.2	71.4	64.3	86.4
Total number of cases	304	14	485	44

Comparing community college business administration freshmen with technical institute freshmen, the proportions of the former exceeded the latter for eight of the eleven areas. A comparison of fourth term students, showed higher proportions of those in the community college indicating six of the eleven areas wouldn't matter than did fourth term technical institute respondents. The low rate of response for fourth term business administration students at the community college requires these results be viewed as purely suggestive.

For respondents in the electrical technology curriculum, community college freshmen had a higher proportion in seven of the eleven areas indicating that it "wouldn't matter" than did fourth term students. This did not hold for technical institute respondents, with fourth term students having higher proportions for nine of the eleven areas.

Comparing community college and technical institute electrical technology freshmen, those in the community college consistently for ten of the eleven areas had higher proportions indicating that each area wouldn't matter. Comparing fourth term students in the two schools, the reverse pattern was evident with those in the technical institute exceeding those in the community college in seven of the eleven areas. In brief, of all four categories, freshmen entering electrical technology at the community

TABLE 138. Percentage of Electrical Technology Respondents Indicating Items "Wouldn't Matter" in a Possible Occupational Advance By Freshmen and Fourth Term Students and Institution

Considerations	<u>Community</u>	<u>College</u>	<u>Technical</u>	<u>Institute</u>
	Freshmen	Fourth Term Students	Freshmen	Fourth Term Students
Endanger your health	2.3		4.7	2.9
Leave your family for some time	23.3	25.0	17.0	23.5
Move around the country a lot	48.8	37.5	28.3	41.1
Leave your community	69.8	62.5	56.6	61.7
Leave your friends	41.9	12.5	23.6	32.3
Give up leisure time	39.5		31.1	32.3
Keep quiet about political views	48.8	50.0	38.7	44.1
Keep quiet about religious views	58.1	62.5	35.8	41.1
Learn a new routine	72.1	75.0	71.7	85.2
Work harder than you are now	69.8	62.5	66.0	64.7
Take on more responsibility	65.1	50.0	58.1	64.7
Total number of cases	43	8	106	34

college seemed to have the largest proportion committed to occupational advancement, with fourth term technical institute students being second.

Comparison of nurse student respondents showed the proportion of community college freshmen exceeded the proportion of fourth term students on seven of the eleven areas. For those in the technical institute proportions of freshmen exceeded proportions of fourth term students in nine areas. Comparing freshmen to freshmen, community college freshmen exceeded technical institute freshmen in six areas; while proportions of community college fourth term respondents exceeded those in the technical institute in nine areas. The variation in age in nurse students in the two schools with those in the community college being older, may be a factor which influenced the direction of greater commitment to occupational advancement indicated for the community college groups.

For secretarial science respondents, freshmen in the community college had higher proportions than fourth term students in six of the eleven areas; for technical institute respondents, fourth term students had higher proportions in six areas than did freshmen. Comparing freshmen between schools, community college freshmen had higher proportions in nine areas as compared to those in

TABLE 139. Percentage of Nurse Students Indicating Items "Wouldn't Matter" In a Possible Occupational Advance by Freshmen and Fourth Term Students and Institution.

Considerations	<u>Community</u>	<u>College</u>	<u>Technical</u>	<u>Institute</u>
	Freshmen	Fourth Term Students	Freshmen	Fourth Term Students
Endanger your health	7.1	6.3	1.8	
Leave your family for some time	14.3	9.4	8.9	22.2
Move around the country a lot	31.0	31.3	42.9	25.9
Leave your community	50.0	53.1	58.9	51.8
Leave your friends	38.1	28.1	37.5	29.5
Give up leisure time	45.2	34.3	46.4	14.8
Keep quiet about political views	40.5	31.2	41.1	25.9
Keep quiet about religious views	38.1	31.2	25.0	29.6
Learn a new routine	88.1	96.8	89.3	85.1
Work harder than you are now	85.4	75.0	78.6	66.6
Take on more responsibility	71.4	71.8	66.1	29.6
Total number of cases	42	32	56	27

TABLE 140. Percentage of Secretarial Science Students Indicating Items "Wouldn't Matter" in a Possible Occupational Advance by Freshmen and Fourth Term Students and Institution

Considerations	<u>Community</u>	<u>College</u>	<u>Technical</u>	<u>Institute</u>
	Freshmen	Fourth Term Students	Freshmen	Fourth Term Students
Endanger your health	3.4		.6	
Leave your family for some time	11.4	21.5	7.6	14.8
Move around the country a lot	35.2	35.7	29.9	24.3
Leave your community	55.7	64.2	54.1	67.5
Leave your friends	26.1	14.2	30.6	24.3
Give up leisure time	45.5	28.5	39.5	27.0
Keep quiet about political views	38.6	64.3	38.9	40.5
Keep quiet about religious views	31.8	35.7	28.7	32.4
Learn a new routine	87.5	78.5	79.0	86.4
Work Harder than you are now	75.0	57.1	69.4	66.2
Take on more responsibility	67.0	57.1	62.8	66.2
Total number of cases	88	14	156	74

the technical institute. For fourth term students, proportions of the community college students exceeded those of technical institute students in leaving family, moving around the country, giving up leisure, keeping quiet about political views, and religious views. While proportions of technical institute students exceeded those of the community college in the areas of leaving community, friends, learning new routine, working harder, and taking on more responsibility.

Drop-Outs and Still-Enrolled

Responses of freshmen were dichotomized on the basis of dropping out of the program or continuing until the fourth term. The results are reported in Table 141.

A comparison showed that the proportion of community college drop-outs exceeded those of students enrolled for ten of the eleven areas designated as "wouldn't matter". The single exception occurred for keeping quiet about religious views where 37.3 percent of those still enrolled indicated it wouldn't matter as contrast to 37.1 percent of drop-outs. Thus suggesting higher commitment to occupational advancement for drop-outs.

For technical institute respondents, proportions of those still enrolled exceeded that of drop-outs in these

TABLE 141. Percentage Indicating Items That "Wouldn't Matter" in a Possible Occupational Advance by Still Enrolled or Dropping Out and Institution

Considerations	<u>Community</u>	<u>College</u>	<u>Technical</u>	<u>Institute</u>
	Still Enrolled	Dropped Out	Still Enrolled	Dropped Out
Endanger your health	3.1	4.3	3.1	2.8
Leave your family for some time	16.1	18.6	9.9	13.6
Move around the country a lot	36.0	39.3	30.2	32.8
Leave your community	52.2	62.1	51.9	55.4
Leave your friends	28.6	39.3	30.2	26.0
Give up leisure time	37.9	47.1	36.4	39.6
Keep quiet about political views	37.3	42.1	37.7	35.9
Keep quiet about religious views	37.3	37.1	29.6	32.3
Learn a new routine	75.8	82.9	79.0	75.5
Work harder than you are now	70.6	78.4	72.2	68.1
Take on more responsibility	65.6	72.1	64.6	61.2
Total number of cases	161	140	162	323

six areas: health, leaving friends, keeping quiet about political views, learning a new routine, working harder and taking on more responsibility.

Percentage variations between drop-outs and still-enrolled were larger more frequently for community college respondents than for technical institute respondents.

Pre-Test Compared to Post-Test

Data on levels of aspiration, in terms of the importance of occupational advancement obtained in the 1967 data collection were compared with data obtained in 1969 for the same respondents. As stated previously, due to the fact that some respondents did not complete all portions of the questionnaire the N varies between pre-test and post-test. In the case of occupational advancement data the discrepancy was largest for technical institute students enrolled in business administration and electrical technology.

The results for total populations in both schools are reported in Table 142.

Total Population: Within the community college, the proportions indicating specific considerations would not matter in a possible occupational advance were consistently lower on the post-test, indicating decreased commitment to occupational advancement for a number of students. The difference in proportions ranged from 24.6 to 1.3.

TABLE 142. Percentages Indicating Items "Wouldn't Matter" In a Possible Occupational Advance On Pre-Test and Post-Test by Institution

Considerations	<u>Community College</u>		<u>Technical Institute</u>	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Endanger your health	4.	2.7	2.4	.6
Leave your family for some time	17.6	9.3	10.2	15.7
Move around the country a lot	32.4	29.3	33.7	31.3
Leave your community	54.1	46.7	52.4	57.8
Leave your friends	23.0	20.0	32.5	22.9
Give up leisure time	41.9	17.3	37.3	22.9
Keep quiet about political views	40.5	34.7	34.9	33.7
Keep quiet about religious views	41.9	26.7	31.3	31.3
Learn a new routine	81.1	62.7	81.3	78.3
Work harder than you are	67.6	45.3	68.7	64.5
Take on more responsibility	62.2	49.3	66.9	57.0
Total number of cases	74	75	166	166

The largest proportional difference was from 41.9 percent on the pre-test indicating giving up leisure wouldn't matter, to 17.3 giving this response on the post-test. The second largest difference occurred for the "work harder than you are" category, in the pre-test 67.6 percent responded "wouldn't matter" whereas 45.3 percent did so on the post-test.

Within the technical institute, a lower proportion responded "wouldn't matter" on the post-test to eight of the eleven considerations than had so responded on the pre-test. In areas of family, community, religious views, proportions increased or remained the same. Differences in proportions ranged from 14.4 to 1.2. Proportional variations between pre-test and post-test for community college respondents were larger than were those for technical institute respondents, on an item for item comparison.

In sum, the data indicated that with several exceptions for technical institute students, commitment to occupational advancement was characteristic of lower proportions of respondents in both schools near the completion of the occupational program. It should be noted that whereas community college freshmen respondents in slightly larger proportions more frequently indicated commitment to occupational advancement, results on the post-test show a reversal. The proportions of technical institute students responding "wouldn't matter" exceeded that of community college students on eight of the eleven items. Differences of proportions ranged from 19.2 to 1.0.

TABLE 143. Percentage of Business Administration Students Indicating Item "Wouldn't Matter" in Possible Occupational Advance On Pre-Test and Post-Test by Institution

Considerations	<u>Community College</u>		<u>Technical Institute</u>	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Endanger your health	8.7	4.3	4.9	
Leave your family for some time	26.1	4.3	12.2	14.7
Move around the country a lot	43.5	34.8	34.1	44.1
Leave your community	56.5	43.5	46.3	61.8
Leave your friends	17.4	26.1	26.8	17.6
Give up leisure time	39.1	8.7	39.0	17.6
Keep quiet about political views	30.4	17.4	29.3	26.5
Keep quiet about religious views	43.5	13.0	31.7	32.4
Learn a new routine	69.6	43.5	82.9	70.6
Work harder than you are	60.9	26.1	58.5	70.6
Take on more responsibility	47.8	39.1	61.0	64.7
Total number of cases	23	23	41	34

Specific Curricula: Business Administration. Among business administration students in the community college, proportions indicating high commitment to occupational advancement decreased from the pre-test to the post-test in ten of the eleven areas. The one area excepted was that of leaving friends, where proportions increased from 17.4 percent in the pre-test to 26.1 percent in the post-test indicating "wouldn't matter". Differences in proportions ranged from 34.8 to 4.4.

With technical institute students, proportions with high commitment to occupational advancement increased for six of the eleven categories between pre-test and post-test. On the post-test, lower proportions indicated that endangering health, leaving friends, giving up leisure, keeping quiet about political views and learning a new routine wouldn't matter. Differences in proportions were generally lower than were differences for community college students and ranged between 21.4 and .7 percent.

A comparison of post-test results for business administration students in the two schools, showed that proportions with high commitment to occupational advancement in the technical institute exceeded proportions in the community college with similar commitment, for nine of the eleven items. With differences ranging from 27.1 to 4.3 percent.

TABLE 144. Percentage of Electrical Technology Students Indicating Item 'Wouldn't Matter' in Occupational Advance on Pre-Test and Post-Test by Institution

Considerations	<u>Community College</u>		<u>Technical Institute</u>	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Endanger your health				2.9
Leave your family for some time	22.2	22.2	7.7	
Move around the country a lot	33.3	33.3	26.9	38.2
Leave your community	66.7	55.6	50.0	55.9
Leave your friends	22.2	11.1	23.1	29.4
Give up leisure time	44.4		23.1	26.5
Keep quiet about political views	44.4	44.4	19.2	41.2
Keep quiet about religious views	55.6	55.6	20.8	38.2
Learn a new routine	88.9	66.7	61.5	79.4
Work harder than you are	55.6	55.6	61.5	58.8
Take on more responsibility	66.7	44.4	57.7	58.8
Total number of cases	9	9	26	34

Electrical Technology: The proportions of electrical technology students within the community college committed to occupational advancement remained the same for six of the eleven items and decreased for the remaining five. Differences in proportions from pre-test to post-test ranged from 44.4 to 11.1 percent. The largest decrease occurred for the item of giving up leisure time.

For technical institute students in this curriculum, the proportions increased for ten of the eleven items. The proportions decreased from 61.5 percent to 58.8 percent on the item "work harder than you are". Increases in proportions ranged from 22 percent to 1.1 percent.

Comparing students from both schools, on the post-test, proportions of electrical technology students in the technical institute exceeded the proportions from the community college for eight of the eleven areas. Differences in proportions ranged from 18 percent to .3 percent. In sum, generally larger proportions of community college students expressed high commitment to occupational advancement on the pre-test than technical institute students. The direction was reversed on the post-test with the proportions, so committed, in the technical institute exceeding the proportions in the community college.

Nursing: Comparison of pre-test and post-test results for community college nurse students showed a decrease in proportions committed to occupational advancement for nine of the eleven items. Differences in proportions ranged from 26.5 percent to .2 percent. The single

TABLE 145. Percentage of Nurse Students Indicating Item "Wouldn't Matter" in Occupational Advance on Pre-Test and Post-Test By Institution

Considerations	<u>Community</u>	<u>College</u>	<u>Technical</u>	<u>Institute</u>
	Pre-Test	Post-Test	Pre-Test	Post-Test
Endanger your health	4.0	3.8	3.6	
Leave your family for some time	8.0	3.8	10.8	22.2
Move around the country a lot	32.0	26.9	35.7	25.9
Leave your community	48.0	50.0	57.1	48.1
Leave your friends	32.0	26.9	42.9	25.9
Give up leisure time	44.0	30.8	46.4	14.8
Keep quiet about political views	32.0	34.6	42.9	22.2
Keep quiet about religious views	36.0	26.9	25.0	25.9
Learn a new routine	88.0	80.8	92.9	77.8
Work harder than you are	88.0	61.5	78.6	66.7
Take on more responsibility	80.0	65.4	67.9	30.8
Total number of cases	25	26	28	27

largest decrease was the item "work harder than you are" from 88 percent on the pre-test to 61.5 percent on the post-test.

A similar comparison for the technical institute nurse students showed decreases in proportions committed to occupational advancement for nine of the eleven areas also. Differences ranged from 37.1 to .9 percent. The single largest decrease was for the item "take on more responsibility" and second largest was "giving up leisure time".

A comparison of post-test results for both schools, showed proportions of community college nurse students exceeding proportions in the technical institute for nine of the eleven items. Differences in proportions ranged from 34.6 to 1 percent. Only in the areas of "leave your family for some time" and "work harder than you are" did proportions of technical institute students exceed those in the community college. These departures from the pattern seem understandable in view of the fact that larger proportions of nurse students in the community college were married and had children than those in the technical institute.

Secretarial Science: Comparison of pre-test and post-test scores for secretarial science students in the community college, showed decreases in proportions committed to occupational advancement in eight of the eleven

TABLE 146. Percentage of Secretarial Science Students Indicating Item "Wouldn't Matter" in Occupational Advance on Pre-Test And Post-Test by Institution

Considerations	Community College		Technical Institute	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Endanger your health			1.4	
Leave your family for some time	17.6	17.6	9.9	11.3
Move around the country a lot	17.6	23.5	35.2	23.9
Leave your community	52.9	41.2	54.9	60.6
Leave your friends	17.6	5.9	35.2	21.1
Give up leisure time	41.2	17.6	38.0	26.8
Keep quiet about political views	64.7	52.9	40.8	38.0
Keep quiet about religious views	41.2	29.4	33.8	29.6
Learn a new routine	82.4	58.8	83.1	81.7
Work harder than you are	52.9	41.2	73.2	63.4
Take on more responsibility	52.9	41.2	73.2	62.0
Total number of cases	17	17	71	71

areas, remained constant in two areas and increased in one. Decreases ranged from 23.6 to 11.7 percent; the increase was 5.9 percent in the area of "move around the country a lot". "Giving up leisure time" and "learning a new routine" were the areas of greatest decrease.

Results of a similar comparison for secretarial science students in the technical institute showed decreases in proportions from pre-test to post-test in nine of the eleven areas. In the two areas of "leave your family for some time" and "leave your community" proportions increased from the pre-test to post-test. Decreases ranged from 14.1 to 1.4 percent. Increases were 5.7 and 1.4 percent. The single largest decrease occurred for the item "leave your friends".

Comparing results of post-tests for each school, proportions of technical institute secretarial science students exceeded those in the community college in eight of the eleven areas, were less in two areas and the same in one. Differences in proportions ranged from 22.9 to .2 percent, with the largest proportional differences occurring for "learning a new routine", "work harder than you are", and "take on more responsibility". Thus, proportional variations in the pre-test, showing higher proportions of technical institute students to be committed to advancement, were maintained and somewhat increased on post-test results.

In conclusion, for the selected pre-test - post-test population, with the exception of the nurse students, proportions of technical institute students indicating high commitment to occupational advancement generally exceeded the proportions of community college students so committed. The pattern was less pronounced for students in the electrical technology curriculum. The areas of health, family, friends, and leisure tended most consistently to appear as strongly competitive with occupational advancement as a value.

Risk-Taking Propensity

Advancement within an occupation is usually associated with increased responsibility and decision-making. Williams (1960) in a study of risk-taking propensities found that as the level of job increased, i.e., from a personal perspective, occupational advancement, risk-taking scores tended to increase also. Whether persons who advance tend generally to be risk-takers or whether as persons advance the propensity to take risks increases remains a question. However, Williams stated the conceptual framework for developing the scale in these words:

"... a person's orientation toward taking risks has been and will be referred to in terms of his propensity to take risks. The concept of propensity implies a potential inclination for or attraction to certain activities and goals. Propensity refers to an underlying and pervasive frame of reference.... seen as a fixed and rather permanent orientation... assumed... (to be) a major facet of the individual's personality..." (Williams, 1960).

Within the context of this exploratory study, risk-taking propensity as a variable was included and constitutes an extension of measuring commitment to occupational advancement. Where the Reissman scale measures commitment in relation to potentially competitive values, the risk-taking propensity scale focuses on the preferences for job situations which require risk--and in the broader perspective characterize advancement or higher level jobs.

The question to be answered then, "Do students in the two institutions and in the four curricula differ significantly on this variable?" The scale consists of eight items with forced choice between two possible responses. One of the two responses expresses a propensity for taking risks; the second expresses seeking security. (See Appendix).

The scale was developed using Guttman scaling procedures and met generally accepted scaling standards, with a reproducibility coefficient for two independent samples of 100 studied by Williams of .89 and .91. The risk-taking propensity scale is scored by giving 1 point for each risk-taking alternative selected. The total score is a summation of each point, with the highest score possible, 8, and the lowest 0.

Risk-taking propensity data were analyzed in terms of mean scores and the proportions selecting the risk-taking alternative for specific items. Comparisons were between freshmen in the two schools, curricula in each school; curricula between schools, freshmen and fourth term students, drop-outs and those having continued; pre-test and post-test comparisons for those students providing data in 1967 and 1969.

Freshmen

The results of mean analysis for freshmen is reported in Table 141. As evident, mean scores for each curriculum and within both schools varied within .5 of a point from the theoretical mean of 4, with a range from 4.24 to 3.51. Thus in no case did the difference in means exceed .73.

Comparing mean scores by curricula within the community college, students of business administration and electrical technology had mean scores only slightly higher than nurse students and less than 1 point higher than secretarial science students. Within the technical institute nurse students had the highest mean of 4.15, business

TABLE 147. Mean Risk-Taking Scores of Freshmen by Curriculum and Institution

Curriculum	N	<u>Community College</u>		<u>Technical Institute</u>		
		\bar{X}	SD	N	\bar{X}	SD
Business Administration	127	4.00	1.58	165	4.13	1.62
Electrical Technology	41	4.24	1.66	104	3.94	1.65
Nursing	42	3.95	1.99	55	4.15	1.69
Secretarial Science	85	3.51	1.52	153	3.65	1.63
Total Sample Responding	295	3.88	1.65	477	3.94	1.65

administration ranked second with 4.13, then electrical technology with 3.94 and secretarial science at 3.65.

Differences in means between the same curriculum in each of the two schools ranged from .20 to .13. Differences in means between curricula within the community college ranged from .05 to .73; within the technical institute from .02 to .5.

Students in the secretarial science programs consistently had the lowest mean scores with the greatest differences from mean scores of those in other curricula, ranging from .73 to .44 in the community college to .5 to .29 in the technical institute.

Mean scores for all freshmen at the community college was 3.88, and for those at the technical institute 3.94. On the basis of the .06 difference between means no significant differences existed between the two student populations. Responses to specific items are reported in Table 148, for community college students.

The two items for which the largest proportions in each curricula selected the risk-taking alternative were "make many decisions" and "constant change". The two items having the second largest proportions selecting risk-taking alternatives were "be a great success or a failure" and "own direction".

Approximately 40 to 50 percent of all curricula selected risk-taking alternative to final authority on job, and between 38 and 31 percent chose similarly on the item relative to having general rather than specific direction. Proportions choosing an "exciting but short

TABLE 148. Percent of Community College Freshmen Selecting Risk Taking Alternative of Item by Curriculum

Risk-Taking Propensity Item	Business Administration N= 131	Electrical Technology 43	Nursing 42	Secretarial Science 88
Own Direction	56.9	62.8	54.8	44.3
Many Decisions	80.9	79.1	78.6	64.8
General Direction	36.2	32.6	31.0	38.6
Pressed to Limits of Ability	14.6	16.3	11.9	11.4
Am Final Authority	48.5	39.5	50.0	40.9
Success or failure	53.8	67.4	64.3	46.6
Constant Change	72.3	72.1	81.0	69.3
Exciting Job	27.1	35.7	23.8	22.7

term job over a less exciting job of longer duration dropped to the 20's, with the exception of electrical technology students which was 35.7 percent. Slightly over 15 percent or less preferred to be pressed to the limits of their ability.

Of the variations occurring among curricula the most pronounced and consistent was that the lowest proportion selecting risk-taking alternatives for six of the eight items was from secretarial science. Nurse students had the second lowest proportions for five of the eight items. Proportional differences were often slight however for students of business administration and electrical technology. Table 149 presents the results for the technical institute.

For technical institute respondents, although variations did occur in percentages, the rank order of items in terms of the proportions selecting the risk-taking alternatives were much the same as for those at the community college.

Proportions in order of size from greatest to lowest were for items indicating: 1) many decisions, 2) constant change, 3) own direction, 4) a success or failure, 5) final authority, 6) general directions, 7) exciting job, and 8) pressed to the limits of ability. The positions of items 3 and 4 are reversals from the positions with community college students. An examination of proportions in relation to curricula did not disclose any pronounced patterns.

A comparison of curricula between institutions found that students of business administration, electrical technology, and secretarial science at the technical

TABLE 149. Percent of Technical Institute Freshmen Selecting Risk Taking Alternative of Item by Curriculum

Risk-Taking Propensity Item	Business Administration N= 168	Electrical Technology 106	Nursing 56	Secretarial Science 157
Own Direction	60.1	61.3	60.7	47.1
Many Decisions	81.0	79.2	83.9	57.3
General Direction	38.7	33.0	30.4	42.0
Pressed to limits of ability	14.9	28.3	23.2	12.7
Am Final Authority	54.8	40.6	48.2	52.9
Success or Failure	61.3	49.1	44.6	40.8
Constant Change	67.9	74.5	89.3	73.2
Exciting Job	26.8	21.2	26.8	29.7

institute had larger proportions selecting the risk-taking alternative for six of the eight scale items than did students of the same curricula in the community college. Nurse students at the technical institute had larger proportions selecting the risk-taking alternatives on five of the eight items than did nurse students in the community college.

Freshmen Compared to Fourth Term Students

Mean risk-taking scores for fourth term students, 1969 were computed and compared with freshmen of 1967.

Table 150 reports the results for the community college.

Differences of means between freshmen and fourth term students at the community college responding was at .13 negligible. When examined in terms of different curricula, the range of variation did not exceed .79. Whereas fourth term students in business administration and nursing had slightly higher means than freshmen, students in electrical technology and secretarial science had lower means.

Table 151 reports the results for the technical institute. Differences of means for freshmen and fourth term students was .31. In relation to different curricula, the largest difference between means was .99. Mean risk-taking scores for fourth term technical institute students in business administration and electrical technology were higher than for freshmen in the same curricula, with the larger difference of .64 occurring for the electrical technology curriculum.

TABLE 150. Mean Risk-Taking Scores of Freshmen and Fourth Term Students in Community College by Curriculum

Curriculum	Freshmen			Fourth Term Students		
	N	\bar{X}	SD	N	\bar{X}	SD
Business Administration	127	4.00	1.58	14	4.22	1.48
Electrical Technology	41	4.24	1.66	8	3.50	1.78
Nursing	42	3.95	1.99	32	4.03	1.58
Secretarial Science	85	3.51	1.52	14	3.43	1.60
Total	295	3.88	1.65	68	4.01	1.04

TABLE 151. Mean Risk-Taking Scores of Freshmen and Fourth Term Students in Technical Institute by Curriculum

Curriculum	Freshmen			Fourth Term Students		
	N	\bar{X}	SD	N	\bar{X}	SD
Business Administration	165	4.13	1.62	45	4.47	2.08
Electrical Technology	104	3.94	1.65	35	4.63	1.46
Nursing	55	4.15	1.69	27	3.85	1.66
Secretarial Science	153	3.65	1.63	73	3.64	1.86
Total	477	3.94	1.65	180	3.63	1.30

Mean scores of fourth term students in nursing and secretarial science were lower than for freshmen, with differences of .30 and .01 respectively. The fact that the larger proportion of fourth term students were in these two curricula is reflected in the mean score for the total.

A comparison of fourth term students in the two schools found that mean scores for technical institute students in each curriculum slightly exceeded the scores of community college students in the same curriculum, except for nurse students.

Due to the limited number of fourth term students responding in several curricula at the community college, responses from business administration and electrical technology students were combined, as were those from nurse and secretarial science students. Since Williams had found some relationships existing between sex and risk-taking propensities, the decision was to combine curricula where the students were predominately of the same sex.

Table 152 presents the comparison for the community college respondents.

Comparing the students of business administration and electrical technology with freshmen, larger proportions indicated preferences for deciding their own direction, being the final authority, taking an exciting, though perhaps short term job, and being pressed to the limits of their abilities. Lower proportions than freshmen expressed preferences for making many decisions, having general directions, having a job where they can be a great success or complete failure and experiencing constant change.

TABLE 152. Percent of Community College Freshmen and Fourth Term Students Selecting Risk Taking Alternative of Item by Combined Curriculum

Risk-Taking Propensity Item	Curricula				
	N=	Business Administration & Electrical Technology		Nursing & Secretarial Science	
		Freshmen	Fourth Term	Freshmen	Fourth Term
	174	22	130	46	
Own Direction	58.0	63.6	47.7	39.1	
Many Decisions	80.5	59.1	69.2	82.6	
General Directions	35.1	31.8	36.2	32.6	
Pressed to Limits of Ability	14.9	22.7	11.5	23.8	
Am Final Authority	45.9	63.6	43.8	56.5	
Success of Failure	56.9	50.0	52.3	54.3	
Constant Change	71.8	63.6	73.1	84.8	
Exciting Job	28.7	45.5	23.1	34.8	

A comparison of nurse and secretarial science students found that larger proportions of fourth term students preferred making many decisions, being the final authority, experiencing constant change, opportunity to be a success or failure, and exciting job, and being pressed to limits of ability than did freshmen in the same curriculum. Lower proportions, however, preferred deciding their own directions.

Table 153 presents comparable data for the technical institute.

TABLE 153. Percent of Technical Institute Freshmen and Fourth Term Students Selecting Risk Taking Alternative of Item by Combined Curriculum

Risk Taking Propensity Item	Curricula				
	N=	Business Administration & Electrical Technology		Nursing & Secretarial Science	
		Freshmen	Fourth Term	Freshmen	Fourth Term
	274	80	213	101	
Own Direction	60.6	65.0	50.7	43.6	
Many Decisions	80.3	82.5	64.3	64.4	
General Directions	36.5	60.0	39.0	37.6	
Pressed to Limits of Ability	20.1	31.2	20.2	12.9	
Am Final Authority	49.3	56.3	51.6	51.5	
Success or Failure	56.6	56.3	41.8	40.6	
Constant Change	70.4	83.7	77.5	80.2	
Exciting Job	24.5	37.0	28.6	44.6	

Comparing fourth term business administration and electrical technology students at the technical institute with freshmen, it was found that larger proportions preferred the risk-taking alternative on seven of the eight items that had freshmen. The one exception was the item for opportunity of great success or complete failure, where proportions varied only .3 and favored freshmen.

Comparing fourth term students in these two curricula with fourth term students in comparable curriculum in the community college, proportions of technical institute students selecting risk-taking alternatives exceeded that of the community college for six of the eight items, with the highest difference being 28 percent and the lowest 1.4.

A comparison of technical institute fourth term nurse and secretarial science students with freshmen found lower proportions preferring risk-taking alternatives on five of the eight items. Higher proportions of fourth term students than freshmen preferred constant change and an exciting job.

Comparing fourth term students in these combined curricula between institutions, higher proportions of community college students selected risk-taking alternatives on five of the eight items. Differences between proportions ranged from 17.2 to 4.5. Larger proportions of technical institute students preferred deciding own direction, taking general directions, and an exciting job.

Freshmen: Drop-Outs and Still-Enrolled

Freshmen responses to risk-taking propensity items were categorized on the basis of whether the student dropped out of the curriculum or had continued in the curriculum and was still enrolled during the fourth term.

Table 154 presents the results for community college respondents.

Differences in proportions between drop-outs and those still enrolled ranged from 10 percent to 1-1/2 percent. On five of the eight items the proportions of students still enrolled choosing the risk-taking alternative exceeded the proportion of drop-outs.

Table 155 presents the results for technical institute drop-outs and those still enrolled.

Differences in proportions ranged from 5.1 to .1 between the two categories. Proportions of drop-outs choosing the risk-taking alternative were larger than for

TABLE 154. Percent of Community College Freshmen Selecting Risk-Taking Alternative of Item by Dropping Out and Still Enrolled in Curricula During Fourth Term

Risk Taking Propensity Item	N=	Dropped Out	Still Enrolled
		140	160
Own Direction		51.4	56.3
Many Decisions		80.7	71.4
General direction		41.4	31.3
Pressed to limits of ability		12.9	14.4
Am final authority		42.9	48.1
Success or failure		57.9	53.1
Constant change		71.4	73.8
Exciting Job		24.5	28.9

TABLE 155. Percent of Technical Institute Freshmen Selecting Risk-Taking Alternative of Item by Dropping Out and Still Enrolled in Curricula During Fourth Term

Risk Taking Propensity Item	N=	Dropped Out	Still Enrolled
		323	162
Own Direction		57.3	53.7
Many decisions		74.9	69.8
General direction		37.2	38.9
Pressed to limits of ability		18.9	16.7
Am final authority		50.8	50.0
Success or failure		50.2	50.0
Constant change		73.4	73.5
Exciting job		25.5	27.5

those still enrolled on 5 of the eight items. Drop-outs did not appear to differ significantly in risk-taking propensity from freshmen who continued to the fourth term.

Pre-Test and Post-Test

Risk-taking data were analyzed for freshmen who had in their fourth term, 18 months later, provided data for the study. The pre-test and post-test results were for groups composed in large part of the same respondents. Where some data were not complete on either the pre-test or post-test for a specific respondent, the number in each category differs. Thus two community college respondents

did not complete the risk-taking scale as freshmen but did as fourth term students. The processing was such, that limited resources precluded removing cases which had incomplete data on some variables.

Table 156 presents the results of this analysis.

TABLE 156. Percent Selecting Risk-Taking Alternative of Item on Pre-Test and Post-Test by Institution

Risk-Taking Propensity Item	N=	Community College		Technical Institute	
		Pre-Test	Post-Test	Pre-Test	Post-Test
	73		75	166	160
Own Direction		55.4	34.7	46.4	49.4
Many decisions		67.6	52.0	65.7	66.9
General direction		29.7	24.0	39.2	42.2
Pressed to limits of ability		10.8	18.7	17.5	18.7
Am final authority		48.6	37.3	47.6	49.4
Success of failure		50.0	34.7	48.2	44.0
Constant change		70.3	50.7	73.5	75.3
Exciting job		28.8	25.3	25.2	38.6

Differences in proportions selecting risk-taking alternatives on the pre-test as compared to the post-test ranged from 20.7 to 3.5 percent for community college respondents, and from 13.4 to 1.2 percent for technical institute respondents. For community college respondents, differences in proportions for 7 of the 8 items were in the direction of higher proportions selecting risk-taking alternatives on the pre-test than on the post-test, thus indicating a decrease in risk-taking propensity. The direction was reversed for technical institute students where differences in proportions tended to be smaller, but were in the direction of higher proportions selecting risk-taking alternatives on the post-test than on the pre-test. There was only one departure from this, which was for item six. Risk-taking propensities for technical institute students appeared to have increased slightly.

Comparing post-test results from respondents in the two schools, of those in the technical institute, consistently, for 7 of the 8 items, higher proportions selected risk-taking alternatives than did community college respondents.

A comparison of pre-test and post-test results by curriculum indicated that the direction of change is not uniform for each curriculum in each institution.

Tables 157 and 158 present results for each institution by curriculum. Table 159 summarizes the direction of change, disregarding the extent, by curriculum and institution.

As can be noted, for various curricula in the community college, the trend for decreasing proportions selecting the risk-taking alternative on the post-test was more pronounced for business administration (one increase, and one no change, to six decreases), secretarial science, (two, no changes and six decreases) and nursing (two increases, six decreases). Students of electrical technology differed, in that for three items, there were no changes; for three items, there were increases; and for two items only were there decreases in proportions.

Relative to students of each curricula in the technical institute, the trend for proportions to increase from pre-test to post-test was most pronounced in business administration (decreased on one item; increased on seven), electrical technology (decreased on two items, and increased on six), and secretarial science (decreased on three items and increased on five). For nurse students the direction of change was counter to that in other curricula, with decreases in proportions for six of the eight items, and increases for the remaining two.

In conclusion, students in both schools and in all curricula had mean scores within .5 of a point either above or below the theoretical mean of 4.

On the basis of mean risk-taking propensity scores, freshmen entering the community college did not differ significantly from those entering the technical institute. Comparisons between freshmen mean scores and mean scores of fourth term students approximately 18 months later, indicated only slight variations in means. From an item analysis of proportional variations between freshmen dropping out and freshmen continuing, it was concluded that these two groups did not differ significantly on the variable of risk-taking.

Results of analysis of pre-test and post-test data on an item by item basis, indicated a decrease in risk-taking propensity among community college respondents on 7 of the 8 items; and slight increases on 7 of the 8 items for technical institute students. Analysis of direction of change by curriculum and institution showed that the direction of change for students of electrical technology in the community college was counter to the direction for other curricula. In the technical institute the direction of change for nurse students was counter to that of the other three curricula.

TABLE 157. Percentage of Community College Students Selecting Risk-Taking Alternative on Pre-Test (1967) and Post-Test (1969) by Curriculum

Risk Taking Item	N =	Business Administration		Electrical Technology		Nursing		Secretarial Science	
		Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test
		23	23	9	9	25	26	17	17
1. Own direction		56.5	34.8	55.6	55.6	52.0	30.8	58.8	29.4
2. Many decisions		56.5	39.1	66.7	33.3	80.0	61.5	64.7	64.7
3. General direction		30.4	31.7	22.2	22.2	32.	38.5	29.4	5.9
4. Pressed to limits of ability		8.7	8.7	11.1	22.2	12.0	34.6	11.8	5.9
5. Am final authority		56.5	34.8	22.2	44.4	56.0	42.3	41.2	29.4
6. Success or failure		56.5	30.4	33.3	22.2	64.0	50.0	29.4	23.5
7. Constant change		73.9	26.1	44.4	66.7	84.0	69.2	58.8	47.1
8. Exciting job		22.7	26.1	44.4	44.4	32.0	19.2	23.5	23.5

TABLE 158. Percentage of Technical Institute Students Selecting Risk-Taking Alternative on Pre-Test (1967) and Post-Test (1969) by Curriculum

Risk Taking Item	Business Administration		Electrical Technology		Nursing		Secretarial Science	
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test
	N = 41	34	26	34	28	27	71	71
1. Own direction	48.8	64.7	42.3	52.9	57.1	29.6	42.3	47.9
2. Many decisions	75.6	76.5	69.2	79.4	82.1	74.1	52.1	53.5
3. General direction	43.9	47.1	30.8	58.8	32.1	33.3	42.3	35.2
4. Pressed to limits of ability	14.6	23.5	30.8	32.4	28.6	11.1	9.9	12.7
5. Am final authority	43.9	58.8	42.3	44.1	50.0	48.1	50.7	47.9
6. Success or failure	56.1	52.9	50.0	47.1	39.3	33.3	46.5	42.3
7. Constant change	65.9	70.6	76.9	85.3	92.9	81.5	69.0	70.4
8. Exciting job	26.8	32.4	4.2	35.3	25.0	44.4	31.4	40.8

TABLE 159. Summary of Direction of Differences in Percentages Selecting Risk-Taking Alternatives on the Pre-Test (1967) as Compared to Post-Test (1969) by Curriculum and Institution

Risk Taking Item	Business Administration		Electrical Technology		Nursing		Secretarial Science	
	CC	TI	CC	TI	CC	TI	CC	TI
Own direction	-	+	-	+	-	-	-	+
Many decisions	-	+	-	+	-	-	0	+
General direction	-	+	0	+	+	+	-	-
Pressed to limits of abilities	0	+	+	-	+	-	-	+
Am final authority	-	+	+	+	-	-	-	-
Success or failure	-	-	-	-	-	-	-	-
Constant change	-	+	+	+	-	-	-	+
Exciting job	+	+	0	+	-	+	0	+
Number of cases	23	34	9	34	27	26	17	71

Summary

Present-Future Orientations

Over sixty percent of freshmen in both the community college and technical institute reported planning for a 3 to 5 year period. Approximately 13-14 percent reported no plans or plans for a period of a few months.

Categorized as drop-outs or continuing into the fourth term, over 80 percent of both categories in both schools reported plans for a 1 to 5 year period. Slightly larger proportions of drop-outs reported "no plans" than did those who continued.

Over half of freshmen in both schools referred to occupational goals in plans. Approximately 25 percent referred to further education. Variations between the schools were slight.

With reference to specific curricula, business administration freshmen in both schools had between 15 and 24 percent reporting "no plans". Nurse and secretarial science students had less than 10 percent in both schools reporting "no plans".

In all curricula except electrical technology in both schools, occupational plans were reported by a majority. Over 1/3 of nurse and electrical technology students

referred to further education, as did over 1/4 of the business administration students and slightly over 10 percent of the secretarial science students. Differences between schools were slight.

With reference to content of plans, proportional variations for drop-outs and freshmen continuing in the community college were less than 5 percentage points; for the technical institute differences ranged from 7 to 15 points with lower proportions of drop-outs reporting occupational plans and higher proportions reporting educational plans than freshmen continuing.

Expectations, Preferences and Chances

When asked what they expected to be doing five years from now and what they would like to be doing five years from now, two categories accounted for over sixty percent of the responses. These were: job consistent with curriculum and job advancement through more education. Between 15 and 20 percent indicated job different from curriculum. Between 10 and 15 percent indicated marriage plus job and between 3 and 25 percent, marriage only. Variations between the two schools were relatively slight.

Shifts did occur between freshmen and fourth term students. Proportions both expecting and preferring a job consistent with curriculum increased for community college students. Proportions in this category in the technical institute decreased, in all likelihood from the larger number of women fourth term students who expected and preferred marriage only or in combination with a job.

The proportions of fourth term students expecting and preferring job advancement through more education decreased to slightly over 1/4 of respondents in both schools.

Freshmen who dropped out of curricula generally did not differ significantly from those freshmen who continued. Two of the larger proportional variations found were that of drop-outs from the community college, about 35 percent expected a job consistent with curriculum but only 23 percent preferred such a job. For those still enrolled, proportional difference between expected and preferred was only 3 percent. Of drop-outs from the technical institute about 29 percent expected job advancement through more education; whereas 37 percent preferred it. This exceeded by 10 percent the proportion of those still enrolled giving this response.

When asked about perceived chances of attaining the expectations and preferences, the large majority rated

chances as excellent or good. Larger proportions were more optimistic about attaining expectations than preferences. Fourth term students tended generally to be more optimistic than they were as freshmen.

Freshmen who subsequently dropped out were not found to be less optimistic than those who continued.

Valuing Occupational Advancement

When asked to indicate which of eleven items representing competing values would impede change which would lead to occupational advancement, responses indicated that endangering health, separation from family, leaving friends and as fourth term students, giving up leisure were competitive for close to 80 percent of respondents.

Although differences were small, they were consistently in the direction of community college students as entering freshmen and as fourth term students placing somewhat greater value on occupational advancement than students in the technical institute. This generalization did not hold for technology students.

Findings were suggestive that freshmen who left curricula at the community college had larger proportions committed to occupational advancement than did those who continued. This was not found for the technical institute.

Responses of students who had provided the same data in 1967 and as fourth term students in 1969 were analyzed as pre-test and post-test results to identify whether changes had occurred in the 18 month interval. It was found that with several exceptions for technical institute students, lower proportions of respondents in both schools were committed to occupational advancement. Further, that whereas freshmen in the community college in slightly larger proportions indicated commitment to occupational advancement, results on the post-test found that the proportions of technical institute students exceeded those of community college students on eight of eleven items.

The areas of health, family, friends and use of leisure tended most consistently to appear as strongly competitive with occupational advancement.

Risk-Taking Propensities

Mean risk-taking scores of community colleges and technical institute students did not differ significantly. Slight variations did occur between curricula with the one consistency that secretarial science students had the lowest mean scores. Freshmen who dropped out did not differ significantly from freshmen who continued.

A comparison of pre-test-post-test responses for a smaller population found that whereas proportions of community college students selecting risk-taking alternatives decreased for 7 of 8 items on the post-test, the direction was reversed for technical institute students. Although proportional variations were small, higher proportions selected risk-taking alternatives on the post-test than on the pre-test. Variations did occur between curricula, with electrical technology students in the community college going counter to the trend for the total population; and nurse students in the technical institute going counter to the trend for the total population.

In conclusion, it should be noted that for the smaller population for whom pre-test and post-test data were available, there was consistency in findings for the direction of fourth term technical institute students showing larger proportions committed to occupational advancement and the direction of slightly increased proportions selecting risk-taking alternatives than did proportions of community college students.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

Methodologically

From a methodological standpoint the measures of environmental press and personality need factors were applicable and did record variations in press and in student populations in the same occupational curricula in two year institutions.

Substantively

Freshmen entering the community college and technical institute had much the same demographic characteristics. Freshmen who subsequently dropped out of occupational curricula did not differ significantly in demographic characteristics from those who continued.

The majority of freshmen had parents and friends who approved of their choice of school. This was true for freshmen who subsequently left the programs as well as for those who continued.

Scholastic aptitude was not significantly related to leaving occupational programs. Men tended to drop out more frequently than women at both schools but significantly so for the technical institute.

The community college had greater "holding power" than the technical institute as evidenced in the twenty percent difference in rate of drop-outs from occupational programs.

Freshmen entering the community college and technical institute share a similar conception of college press which in turn coincides rather closely with that described by Stern (1970) as the freshmen myth held by students entering four year institutions.

Student personality need profiles for community college and technical institute freshmen were more alike than were they like profiles of students in three types of liberal arts colleges. Profiles of freshmen more closely resembled those of students in three types of undergraduate technical programs (Stern, 1970). Pronounced variations

from those of undergraduates of technical programs did occur, however, in the areas of dependency needs and emotional expression.

Environmental press did differ in these two institutions with the community college being more supportive of intellectual pursuits and of treating students as adults. The extent to which this difference is a partial explanation for the lower drop-out rate from programs in the community college when compared with the technical institute requires more study. The plausibility of such a link is supported by the factors on which the two institutions differed when considered in relation to the disproportionate number of men leaving the technical institute.

Results did not clearly indicate that the community college or technical institute was effective for specific types of students and far less so for other types. Variations in intellectual interests and motivation did indicate that freshmen who left the community college had mean scores closer to those who continued at the technical institute, whereas technical institute drop-outs had mean scores more closely resembling those who continued at the community college.

The results of this study help to specify the relationships between environmental press of colleges as a stimulus to attracting the types of students generally compatible with press. Pace (1964) noted that across the country at large one finds a selective sorting based on mutual attraction and choice. He continued that in the majority of cases however it is probably fair to say that students and colleges come together because of proximity and acceptable cost. In this study proximity and cost were only slightly variant and relative to the individual student's residence. The program objectives were the same. In this case many students in effect had a choice between two colleges where environmental press was reported as different in the dimension of intellectual climate and similar in the non-intellectual dimension. Yet on the basis of personality need profiles of freshmen, selective sorting in terms of attraction to one over the other did not occur on the basis of greater or lesser compatibility. The extent of difference in press as well as the fact that the difference was in the intellectual climate may be the explanation. Thus the question, what magnitude of differences must exist as a prerequisite for selective sorting to occur to attract students to a more compatible environment?

Variations did occur among students in the different curricula, supporting the thesis that persons attracted to particular occupations, and intermediately to particular

educational programs, do differ somewhat in theoretical, aesthetic, economic, political and social values. These relationships tend to transcend institutions.

Vocational values related to commitment to occupational advancement and types of job situations related to advancement do seem to change during the educational experience. The results relative to the direction of change and variations between institutions was contradictory in that the direction varied with the populations compared.

In conclusion, the increasing precision possible in measuring the educational environment, the attributes of incoming students and graduates of occupational programs increases the degree of reasonable accountability to which educators will be held. Such accountability should reinforce the need for critical review of educational objectives with serious consideration to objectives for general education as well as occupational education. The role of environmental press in relation to student attributes must be considered as instrumental to achieving these objectives. Such action is feasible for individual institutions. To further understanding of differences in community colleges and technical institutes efforts could be directed to answering the following questions:

- 1) Are the findings of this study indicative of differences which exist between a representative sample of community colleges and a representative sample of technical institutes?
- 2) Are the changes in vocational values and the direction of changes suggested by results of this study supported or confirmed by more intensive systematic study? What relationships exist between changes in vocational values and variations in environmental press?

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APPENDIX

Does your mother work outside the home? Yes _____; No _____ (If yes)

Part-time _____; Full-time _____

What is her job? _____

Please be specific: (Example: secretary, cook in small restaurant, waitress, teacher)

How long does it take you to go from your residence to:

Farmingdale _____; Suffolk _____

Do you have friends attending or who graduated from this school?

Yes _____ No _____

Relationship (Example: Brother, sister, cousin) _____

Write the NUMBER of the highest level of education achieved in the blank BESIDE THE PERSON indicated, if they

- | | |
|-----------------------------------|--|
| _____ Father | 1. Completed elementary school |
| | 2. Attended but did not graduate high school |
| _____ Mother | 3. High school graduate |
| | 4. Post high school vocational training |
| _____ (1) Brother | 5. Attended but did not graduate technical institute |
| | 6. Graduate technical institute program |
| _____ (2) | 7. Attended but did not graduate from a Junior College |
| | 8. Graduated from a Junior College |
| _____ (3) | 9. Attended 4 year college |
| | 10. Four year college graduate |
| _____ (1) Sister | 11. Post graduate education |
| | |
| _____ (2) | |
| | |
| _____ (3) | |
| | |
| _____ If Married, Husband or Wife | |

Do you have plans for the future? Yes _____; No _____

If yes, briefly tell what these are.

If you have plans for the future, do you hope these will be achieved in:

_____ one month or less _____ 1-2 years _____ 5 or more years
_____ six months _____ 3-4 years

How did your father feel about your attending this school?

- strongly approved
- approved
- neither approved nor disapproved
- disapproved
- strongly disapproved

How did your mother feel about your attending this school?

- strongly approved
- approved
- neither approved nor disapproved
- disapproved
- strongly disapproved

How did close friends and associates view your attending this school?

- almost all thought it a wise decision
- the majority thought it a wise decision
- some thought it a wise decision
- very few thought it a wise decision

If married:

How did your wife or husband feel about your attending this school?

- strongly approved
- approved
- neither approved nor disapproved
- disapproved
- strongly disapproved

GO ON TO PART II

PART II

"Suppose you were offered an opportunity to make a substantial advance in a job or occupation. Place a check opposite each item in the following list to show how important it would be in stopping you from making that advance."

	Would stop me	Might stop me from making change	Would be a serious consideration but wouldn't stop me	Wouldn't matter at all
Endanger your health				
Leave your family for some time				
Move around the country a lot				
Leave your community				
Leave your friends				
Give up leisure time				
Keep quiet about religious views				
Keep quiet about political views				
Learn a new routine				
Work harder than you are now				
Take on more responsibility				

Looking at your present situation, what do you expect to be doing five years from now?

What are your chances of reaching this goal?

_____ excellent _____ fair _____ very poor
 _____ good _____ poor

What would you like to be doing five years from now?

What are your chances of reaching this goal?

_____ excellent _____ fair _____ very poor
 _____ good _____ poor

PART III

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view, you may find yourself agreeing strongly with some of the statements; disagreeing just as strongly with others; and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1 I agree a little	-1 I disagree a little
+2 I agree on the whole	-2 I disagree on the whole
+3 I agree very much	-3 I disagree very much

- _____ The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- _____ Even though freedom of speech for all groups is a worthwhile goal it is unfortunately necessary to restrict the freedom of certain political groups.
- _____ The United States and Russia have just about nothing in common.
- _____ It is only natural that a person would have a much better acquaintance with ideas he believes in than ideas he opposes.
- _____ Man on his own is a helpless and miserable creature.

- _____ There is so much to be done and so little time to do it in.
- _____ Once I get wound up in a heated discussion, I just can't stop.
- _____ It is better to be a dead hero than to be a live coward.
- _____ The main thing in life is for a person to want to do something important.
- _____ A man who does not believe in some great cause has not really lived.

- _____ Fundamentally, the world we live in is a pretty lonesome place.
- _____ In a discussion, I often find it necessary to repeat myself several times to make sure I am being understood.
- _____ If given a chance, I would do something of great benefit to the world.
- _____ Most people just don't give a "damn" for others.
- _____ It is only natural for a person to be rather fearful of the future.

- _____ I'd like it if I could find someone who would tell me how to solve my personal problems.
- _____ While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven or Shakespeare.
- _____ In times like these, a person must be pretty selfish if he considers primarily his own happiness.
- _____ In the long run, the best way to live is to pick friends and associates whose tastes and beliefs are the same as ones own.
- _____ To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1 I agree a little	-1 I disagree a little
+2 I agree on the whole	-2 I disagree on the whole
+3 I agree very much	-3 I disagree very much

- _____ In the history of mankind there have probably been just a handful of really great thinkers.
- _____ There are two kinds of people in this world, those who are for the truth and those who are against the truth.
- _____ The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
- _____ Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
- _____ A person who thinks primarily of his own happiness is beneath contempt.
- _____ There are a number of people I have come to hate because of the things they stand for.
- _____ When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
- _____ My blood boils whenever a person stubbornly refuses to admit he is wrong.
- _____ A group which tolerates too much differences of opinion among its own members cannot exist for long.
- _____ It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- _____ In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- _____ Of all the different philosophies which exist in this world there is probably only one which is correct.
- _____ The present is all too often full of unhappiness. It is only the future that counts.
- _____ It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- _____ A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.
- _____ If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all".
- _____ Most people just don't know what's good for them.
- _____ In this complicated world of ours the only way we can know what is going on is to rely on leaders or experts who can be trusted.
- _____ Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.
- _____ In times like these it is often necessary to be more on guard against ideas put out by people or groups in ones own camp than by those in the opposing camp.

JOB PREFERENCE INVENTORY

All of us have different requirements for the job that we would find most attractive. The following are a number of alternatives that you might be faced with in considering job opportunities. Please check one alternative in each of the following pairs.

*

*

*

The kind of job that I would most prefer would be:

1. Check one:

- (1) A job where I am almost always on my own
- (2) A job where there is nearly always someone available to help me on problems that I don't know how to handle

2. Check one:

- (1) A job where I have to make many decisions by myself
- (2) A job where I have to make few decisions by myself

3. Check one:

- (1) A job where my instructions are quite detailed and specific
- (2) A job where my instructions are very general

4. Check one:

- (1) A job where I am almost always certain of my ability to perform well
- (2) A job where I am usually pressed to the limit of my abilities

5. Check one:

- (1) A job where I am the final authority on my work
- (2) A job where there is nearly always a person or a procedure that will catch my mistakes

6. Check one:

- (1) A job where I could be either highly successful or a complete failure
- (2) A job where I could never be too successful but neither could I be a complete failure

7. Check one:

- (1) A job that is changing very little
- (2) A job that is constantly changing

8. Check one:

- (1) An exciting job but one which might be done away with in a short time
- (2) A less exciting job but one which would undoubtedly exist in the Company for a long time