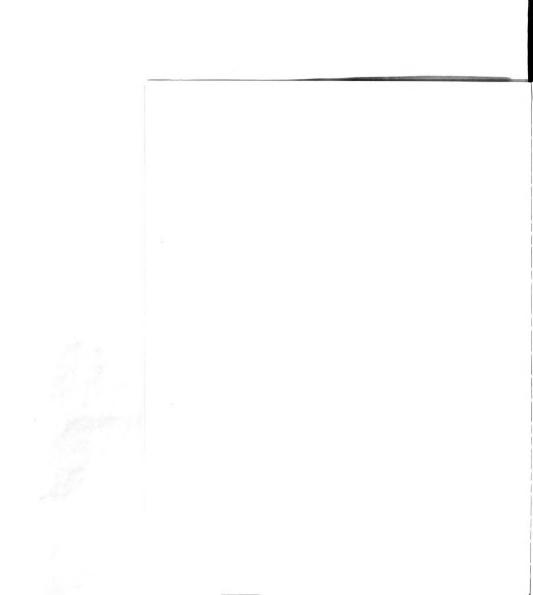
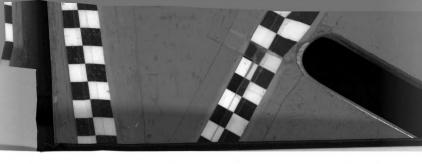


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ABSTRACT

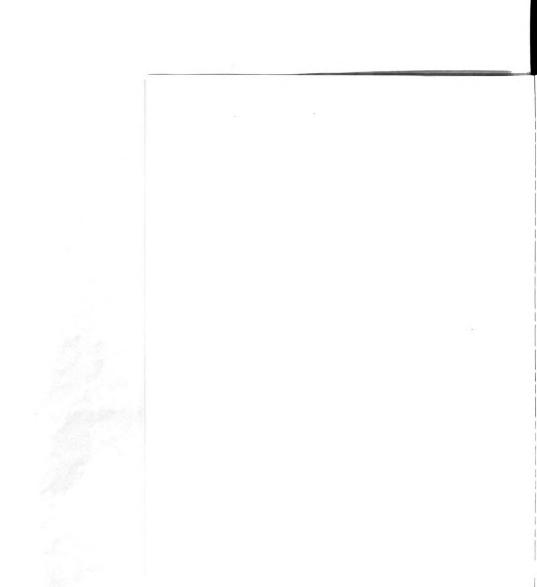
A COMPARISON OF FRESHMEN COMMUTER STUDENTS WITH RESIDENT STUDENTS ON SELECTED CHARACTERISTICS, EXPERIENCES. AND CHANGES

by James Robert Appleton

It was the purpose of this study to contribute to a

Statement of the Problem

more complete understanding of the freshmen commuter students at a large, primarily residential university and to determine if any differences existed between the commuters and those students living in residence on the campus. More specifically, the attempt was made: (1) to determine in what ways commuter students were similar and/or dissimilar to freshmen resident students at the time of college entrance, (2) to determine how selected first year college experiences of commuter students compared with the experiences of first year resident students at the same institution, and (3) to determine how commuter students compared with resident students with regard to academic achievement and to the nature and direction of change in critical thinking ability, in attitudes of stereotypy, and in value orientation during the first year.





James Robert Appleton

Procedures

The sample was selected from 2,746 first term freshmen at Michigan State University who had not attended another university or college, were not foreign students at the time of admission to the university, were enrolled for at least 12 credits during the fall term, and who had complete and usable test and biographical data. From this working population were selected 311 commuters and 296 resident students. Fiftyeight of the 311 commuters were designated as local commuters by virtue of their living with parents in the community immediately adjacent to the campus. The other 253 were designated as non-local commuters. Where applicable, these two groups of commuters were treated separately in the comparison with the resident group. Those students from the initial sample who were still enrolled at the end of the first year and for whom usable post-test data were available were included in the end-of-year portion of the study.

During the Freshman Orientation Week, the following instruments were administered to the students: The Test of Critical Thinking, Form G; The Inventory of Beliefs, Form I; the Differential Value Inventory; the College Qualification Test; and a Biographical Data Sheet. The initial comparisons were developed from an analysis of this data and from information received from various university agencies. At the end of the freshman year, retest information was received by use



James Robert Appleton

of the following instruments: The Test of Critical Thinking,
Form G; The Inventory of Beliefs, Form I; and the Differential
Values Inventory. An Experience Inventory was also administered and personnel records were searched for gradepoint averages and indications of withdrawal or retention.
Chi-square simple analysis of variance, "t" tests, and
analysis of covariance techniques were used in the analysis
of the data.

Major Findings of the Study

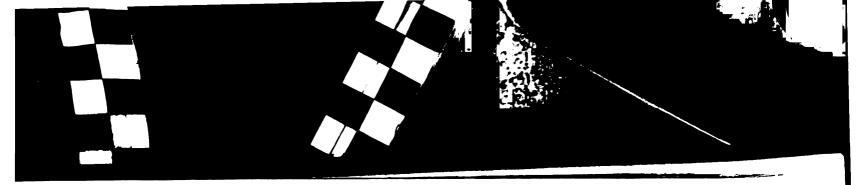
- Significant differences were found among the resident students, local commuters, and non-local commuters in terms of selected initial characteristics and academic aptitude.
- 2. No differences were found among the three groups in terms of faculty contact, attitude toward class experiences and courses, study practices, educational intentions, and personal interaction with peers during their first year.
- 3. Significant differences were found among the three groups in the amount of immersion in campus life during the first year and in their attitude toward the institution.
- 4. No difference was found among the three groups in academic achievement during the first year, although a significant difference was found among the three groups in percentage of withdrawal.

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5. No differences were found among the three groups with regard to the nature and direction of change during the first year in critical thinking ability, attitudes of stereotypy, and value orientation during the first year.

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A COMPARISON OF FRESHMEN COMMUTER STUDENTS WITH
RESIDENT STUDENTS ON SELECTED CHARACTERISTICS,
EXPERIENCES, AND CHANGES

Ву

James Robert Appleton

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1965



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ACKNOWLEDGMENTS

The writer wishes to express his sincere appreciation to Dr. Walter F. Johnson, Chairman of the Guidance Committee, for his assistance in the preparation of this thesis and for his helpful guidance throughout the doctoral program. Appreciation is also extended to Drs. Edward B. Blackman, Norman Kagan, and Bill L. Kell for encouragement and advice.

The writer is indebted to Dr. Irvin J. Lehman, who made available a portion of the data from which this study was derived and who very graciously was available for consultation.

For his wife, Carol, the writer reserves a special expression of love and appreciation for the encouragement, patience, and support through the years of the doctoral program.

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CHAPTER I

THE PROBLEM

Introduction

In recent years research efforts in higher education have been directed increasingly to the study of college students and their educational environment. A clear understanding of the characteristics and needs of the students and an awareness of the college environment and climate in which the students participate has been determined to be an important requisite in the development of curricular and co-curricular programs. Several reasons may be advanced to account for this research emphasis and soaring college enrollments, tight budgets, and growing concerns for excellence in undergraduate programs have certainly added impetus to such inquiries.

One segment of the student population which seems, however, to have been neglected in this research analysis has been the student who resides outside of the campus community, lives with parents, and travels to the college or university for the educational experiences. Although small by percentages, this segment is not a transitory one and burgeoning urban population centers and new community colleges

has been made to determine if such students constitute a specific group which has unique opportunities, peculiar problems of adjustment to the educational community, or needs that are not held in common with other segments of the student population. By action, most colleges and universities seem to support the assumption that the commuters are not unique. Conclusions are made either tacitly or overtly that the students are not peculiar as commuters. In some cases they are completely ignored.

Although research findings will be discussed further in Chapter II, it is important to note that only a handful of studies are available which give any attention to the differences or similarities between the residential and commuter students. Carefully planned and executed research is almost totally lacking. In 1954, Hardee found only Hand's, Campus Activities, when searching for reference to the college commuter and she found no listings in the Educational Index for the ten years preceding. A thorough search by Stark in 1963 brought to light only one study which dealt with the differences and similarities between commuter and residential students on non-academic variables. Fritz

Melvene Draheim Hardee, Counseling and Guidance in General Education (New York: World Book Company, 1955), p. 266.

Matthew Stark, "A Comparison of Expressed Personal Problems, Study Habits, and Reading Skills of College Freshman Commuter and Residence Hall Students," (unpublished Ph.D. dissertation, Western Reserve University, 1963), p. 4.

discovered that very little has been done in relating changes and differences in the attitudes of students to their place of residence in college. Furthermore, he found no studies which focused primarily upon these relationships. 1

Several questions go unanswered. Do the commuter students vary from the rest of the student population at the time of college entrance? Are unique problems and needs realized? Does living at home seem to have some effect on the educational experience, on the immersion in the campus environment, or on student achievement? If differences exist, what are institutions planning for the commuters?

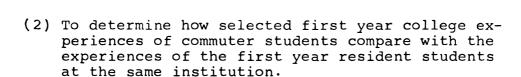
It is upon these initial characteristics, first year experiences, achievements, and changes of the commuter that the attention of this study will be focused.

Statement of the Problem

It is the purpose of this investigation to contribute to a more complete understanding of the freshmen commuter students at a large, primarily residential university and to determine if any differences exist between the commuters and those students living in residence on the campus. More specifically, the attempt is made:

(1) To determine in what ways commuter students are similar and/or dissimilar to the freshmen resident students at the time of college entrance.

Roger Jay Fritz, "A Comparison of Attitude Differences and Changes of College Freshmen Men Living in Various Types of Housing," (unpublished Ph.D. dissertation, The University of Wisconsin, 1956), p. 17.



(3) To determine how commuter students compare with the resident students with regard to academic achievement and to the nature and direction of changes in critical thinking ability, in attitudes of stereotypy, and in value orientation during the first year.

Hypotheses

As the review presented in the next chapter demonstrates, much of the existing research bearing relevance to this investigation is not conclusive. As a result, the hypotheses lack the framework of a stable theory. As an exploratory study, however, it was deemed appropriate that the following hypotheses be developed to be used as guidelines in defining more clearly the direction of this investigation.

The following broad research hypotheses are developed:

Part One

(1) It is possible to differentiate at the time of enrollment between the commuter students and the resident students with regard to the following characteristics: (A) age; (B) nativity of parents; (C) father's education; (D) mother's education; (E) father's occupation; (F) mother's occupation; (G) rank in high school graduating class; (H) religious preference; (I) major; (J) amount of education desired; (K) source of financial support; and (L) aptitude for college work.

Part Two

(2) It is possible to differentiate between the commuter students and the resident students in terms of the following first year experiences: (A) faculty contact; (B) class experiences and courses; (C) study practices; (D) educational intentions; (E) attitude toward the attending institution; (F) immersion in campus life; and, (G) personal interaction.

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- (3) It is possible to differentiate between the commuter students and the resident students in terms of academic achievement at the end of the freshman year, first year withdrawal rates, and the level of education reached after five years.
- (4) It is possible to differentiate between the commuter students and the resident students in terms of the nature and direction of changes in attitudes of stereotypy, value orientation, and critical thinking ability.

These hypotheses are restated in testable form in Chapter III.

Definition of Terms

A few of the key terms are defined so as to avoid any confusion and add to the clarity of this presentation.

Resident Student

The term resident student, as used in this study, refers to those students who lived in university residence halls during their entire first year. Since Michigan State University has a first year residency requirement, all freshmen students except those who live with relatives, are married, or are 21 or over will be in residence.

Commuter Student

For purposes of this study, the commuter designation was limited to those students who were actually living with parents. Those students were excluded who may have been

living with other relatives or in rooming houses within commuting distances.

Local Commuter

The term local commuter refers to the students who were living at home with parents in the community immediately adjacent to the campus. These students were isolated from the rest of the commuters for portions of the analysis.

Non-Local Commuter

Those students residing at home with parents in communities beyond the 0-1 mile radius previously mentioned were defined as non-local commuters.

Immersion in Campus Life

The degree of immersion in the campus life was intended as a measure of involvement in the campus community, activities, and events.

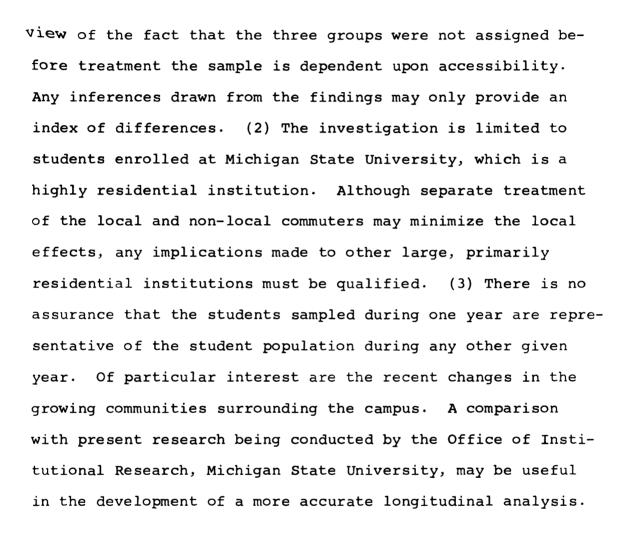
Withdrawal

If sometime during the freshman year a student withdrew from the university for any reason, he was classified as a withdrawal student.

Limitations of the Study

Some limitations may be imposed upon the implications which are developed from the results of this study. (1) In





Overview of the Thesis

Thus far, the problem has been stated in broad research terms and some clarification of the need for the study has been indicated. In the following chapter a review of the literature relevant to the topic will be reported and summarized.

In Chapter Three, an account of the design is presented which includes a description of the population, the

sample, the instruments, the specific hypotheses, and the methods utilized in analysis.

In the fourth chapter, an analysis of the results is reported. A summary of the purposes, procedures, the findings, and the conclusions of the study is presented in the fifth and final chapter.





CHAPTER II

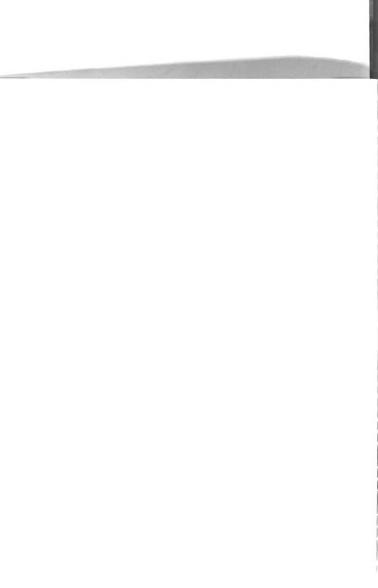
REVIEW OF LITERATURE

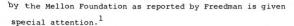
The literature which has some bearing on the thesis is reviewed in this chapter. In order to put the research problem into perspective, the relevant material on college students and their environment is reviewed. The studies and reports which give particular attention to the commuter students are then critically and comprehensively considered. A discussion is added to indicate the value of this research to the present study.

Published Summaries of Research on College Students and Campus Cultures

A number of summaries have been developed which draw together some of the important research conducted on the college students and campus cultures. Many of these summaries are published proceedings from professional conferences devoted to this topic.

An entire issue of <u>The Journal of Social Issues</u>, 1956, considers the contributions made by Freedman, Webster, Brown, and Sanford to the knowledge of personality development during the college years. The Vassar study supported





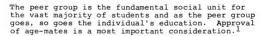
Bushnell provides an excellent summary of a few important studies concerned with the changing characteristics of the undergraduate and the effect of the educational programs. 2 He compared and contrasted the works of Jacob, Eddy, the Hazen Foundation report by Smith, and the Vassar study. Emphasis is given to Jacob's profile of the self-confident, self-satisfied, conformity minded student who was not primarily concerned with world issues but aspired to enjoy the material goods of life. The wealth of data from the Vassar studies supported the general trends of Jacob's analysis but Smith indicated that Jacob's profile would be modified if the religious, moral, and personal values more directly associated with the inner life of the individual were not underplayed or ignored while goals or ends were accentuated. 3 The research reviewed by Bushnell would suggest a campus culture exists and that this campus culture is more the outgrowth of student peer group influence than of faculty influences.

levitt Sanford (issue editor), The Journal of Social Issues, Vol. 12 (April, 1956).

²John Bushnell, "What Are the Changing Characteristics of the Undergraduate and What Do These Changes Mean for Programs of General Education," <u>Current Issues in Higher Education</u>, Association for Higher Education (1959).

³Ibid., p. 139.





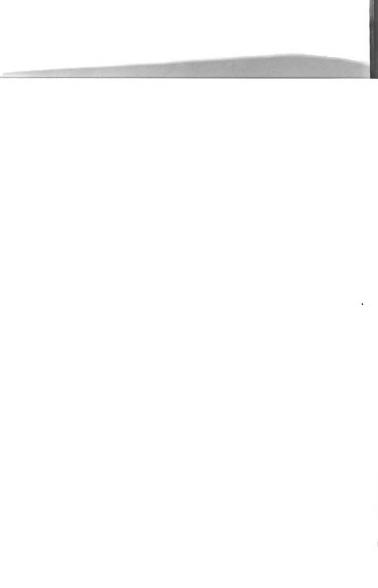
In the process of stressing those places where the researchers have found common footing, Bushnell seemed to avoid some of the areas of disagreement. Jacob clearly states that students actually become more homogeneous and less individualistic during college, whereas substantial changes and increased heterogeneity was noted in the Vassar Students. Such differences between studies were not clarified.

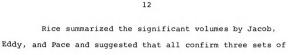
After a 1960 review of the literature on the outcomes of college, Bloom and Webster concluded that although some modification of personality traits and individual characteristics was noted during the college years, there was no clear evidence that the college environment and the college curriculum make an impact on values and personality. On the other hand, it is generally agreed that higher education increases the individual's fund of information and the quality of his intellectual abilities and skills.³

l<u>Ibid</u>., p. 140.

²Harold Webster, "Changes in Attitudes During College," <u>The Journal of Educational Psychology</u>, Vol. 49 (June, 1955), p. 109.

³Benjamin Bloom and Harold Webster, "The Outcomes of College," <u>Review of Educational Research</u>, Vol. 30 (October, 1960), pp. 323.





important generalizations.

(1) An educational institution does have a distinctive climate or atmosphere.

(2) Peer group interaction and faculty-student interaction outside the classroom--important elements in the campus climate--have a stronger and more significant impact on student attitudes and values than do the things which go on in the classroom.

(3) Many of the activities which go on outside the classroom--advising programs, the extra-class program, counseling services, a dormitory system and residence program, and a campus program of cultural events--enhance the motivation to learn and increase the perceived relevance of learning. They not only encourage but facilitate the mastery of specific subject matter knowledge. Even narrowly defined, academic achievement is affected by the environment of the campus.

The 1962 proceedings of the Southern College Personnel Association Convention and of the College Administrative Teams Institute, 3 portions of The American College, 4 and The Study of Campus Cultures⁵ provide additional summaries.

lyames Rice, "The Climate of an Institution,"

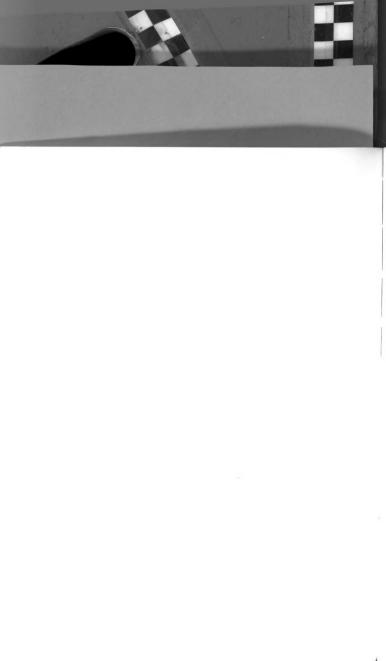
<u>Creating the College Climate</u> (Proceedings of the Second Junior College Administrative Teams Institute, Florida State University, 1963), p. 2.

²Kenneth M. Wilson (ed.), <u>Institutional Research on</u>
College Students (Southern College Personnel Association, March, 1962).

³Creating the <u>College Climate</u>, <u>op. cit</u>.

⁴Nevitt Sanford (ed.), <u>The American College</u> (New York: John Wiley and Sons, Inc., 1962).

⁵Terry F. Lunsford (ed.), <u>The Study of Campus</u> Cultures (Berkeley: Center for the Study of Higher Education, 1963).





Student Characteristics

Investigation of the predominant characteristics among entering students becomes increasingly essential. The contributions of Jacob, Smith, and the Vassar study have already been cited. Several institutions have developed profiles on their particular student population which only have local significance. Heist reviews some of the pertinent data on the extent and type of differences among college students. He notes the important diversity in academic ability within and among institutions as well as the variations in certain non-intellective characteristics. Webster, Trow, and McConnel describe some important characteristics of freshmen students and give attention to an analysis of some of the influences which have contributed to this diversity. They consider the diversity to be educationally significant. 2

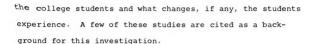
The College Environment and Student Changes

 ${\bf A}$ variety of studies are available which attempt to determine whether the college community has any effect upon

¹Paul Heist, "Diversity in College Student Characteristics," <u>The Journal of Educational Sociology</u>, Vol. 33 (February, 1960), p. 279.

²Harold Webster, Martin A. Trow, and T. R. McConnel, "Individual Differences among College Freshmen," <u>The Sixty-first Yearbook of the National Society for the Study of Education</u>, Part I (1962), p. 145.





Some Attempts at Definition

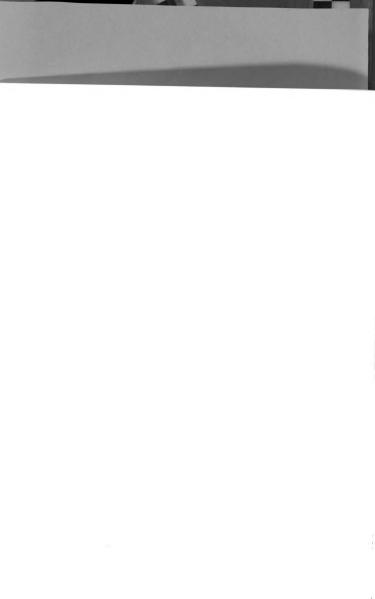
The total body of behavior and communicative acts within the system which affect the experience of individuals and shape the perceptions, images, and values by which those individuals orient their participation in the system. $^{\rm L}$

Ralph Tyler suggests that sutdents develop certain perspectives of their problems and of their unique situation as students which become defined as cultural standards and expectations. Mueller pictures the campus population as an artificial and temporary subgroup in our society with features which differentiate it sharply from any other community with a similar size. Its distinguishing features include differences in age, physical energy, socio-economic status, homogeneity in interests and living routines, and the concentration of immature personalities.

¹Bart Carter Pate, "College as Environmental Systems: Toward the Codification of Social Theory," (unpublished Ph.D. dissertation, Boston University, 1964).

²Terry F. Lunsford (ed.), <u>op. cit</u>., p. 15.

³Kate H. Mueller, Student Personnel Work in Higher Education (Boston: Houghton Mifflin Company, 1961), p. 97.



Importance of the Total Environment

Eddy developed an exploratory study in selected colleges and universities. He was concerned with the relationships between intellectual training and character influence. He notes especially the important effects of the total environment, the importance of student participation, and particularly the profound effect of students on fellow students. The overall climate of the institution is affected not only by the level of expectancy, the teaching, and the curriculum, but also by such things as student life and living accommodations. 1

Newcomb provides a valuable addition to the analysis of the effects of the college experience. He studied the influence of the academic climate and particularly of the faculty influence upon student attitudes. He concluded that socialization does occur and that this change appears to be a function not of any one factor but of several factors in the academic environment. He is most prolific in his description of the peer group formation and influence. He suggests that the average differences between freshmen and

ledward D. Eddy, Jr., The College Influence on Student Character (Washington, D. C.: The American Council on Education, 1959), p. 152.

Theodore M. Newcomb, <u>Personality and Social Change</u> (New York: The Dryden Press, 1943).

Theodore M. Newcomb, <u>Social Psychology</u> (New York: Holt, Rinehart, and Winston, 1960), p. 205.



Seniors are usually rather slight. He stresses the effects of group memberships upon individual students.

These contributions of Newcomb are complemented by Siegel who gives attention to the effect which membership and reference groups have on the attitudes of individual students. The Cornell Values Study also reinforces this concept. What students learn in college is determined in large measure by their fellow students with whom they associate through activities and group membership.

Thistlethwaite limits his investigation to a group of exceptional students, National Merit participants, and develops evidence to show that the environment is an important determinant of the students' motivation to seek advanced intellectual training. Student cultures and faculty influences tend to affect student achievement and behavior outside the classroom. ³

Measurement of the Environment

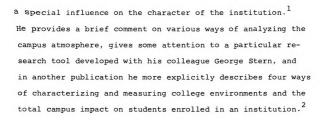
Pace admits that the pervading atmosphere is difficult to explain. He stresses that the people themselves have

lalberta E. Siegel and Sidney Siegel, "Reference Groups, Membership Groups, and Attitude Change," The Journal of Abnormal and Social Psychology, Vol. 55 (1957), p. 360.

² Rose K. Goldsen, What College Students Think (Princeton: Van Nostrand Company, 1960).

³Donald L. Thistlethwaite, "College Press and Student Achievement," <u>The Journal of Educational Psychology</u>, Vol. 50 (October, 1959), p. 183.





Effect on Interests, Critical Thinking, Values, and Beliefs

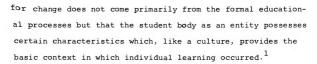
A few studies are available which limit their investigation to changes in interests, critical thinking, values, or beliefs. The exploratory study by Jacob already mentioned was actually undertaken to discover what happens to the values held by American college students as a result of the general education they secure in social science. In addition to the profile developed of student values which stresses the tendency toward homogeneity, he found little evidence that courses, curriculums, teaching methods, or faculty had much influence on changing student values. He supported Freedman's earlier conclusions that the impetus

¹Robert C. Pace, "Evaluating the Total Climate or Profile of a Campus," <u>Current Issues in Education</u> (1961), p. 171.

²Robert C. Pace, "What Kind of a College Environment Are Students Entering?" <u>The Association of College Admissions Counselors Journal</u>, Vol. 16 (Winter, 1956), p. 6.

³Philip E. Jacob, <u>Changing Values in College: An Exploratory Study of the Impact of College Teaching</u> (New York: Harper and Brothers, 1957), p. xi.



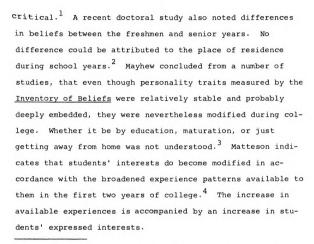


Howard and Warrington administered the Inventory of Beliefs to 1,942 freshmen students entering Michigan State University in 1951. A random sample was retested during the Spring of 1952 and at the end of their senior year. As measured by the <u>Inventory of Beliefs</u>, beliefs and attitudes change significantly in male and female students both during their freshman year and between their freshman and senior years. Lehmann has contributed a longitudinal study from which part of the data for this study are drawn which has shown some relationship between certain biographical characteristics and critical thinking ability, attitudes of stereotypy, and value orientation. With some exception, he has indicated an improvement in critical thinking ability, a lessening of stereotypic beliefs, and a movement away from the traditional value orientation during each of the four years of college life. The first year changes were most

¹Nevitt Sanford (issue editor), <u>The Journal of Social</u> <u>Issues</u>, Vol. 12 (April, 1956), p. 56.

²Victor Howard and Willard Warrington, "The Inventory of Beliefs: Changes in Beliefs and Attitudes and Academic Success Predictions," <u>The Personnel and Guidance Journal</u>, Vol. 37 (December, 1958), p. 300.





lrvin J. Lehmann and Paul L. Dressel, <u>Critical</u>
Thinking, <u>Attitudes</u>, and <u>Values in Higher Education</u>. Final
Report (Michigan State University, 1962). Note also the
preliminary report by Lehmann and dissertations by Bradley,
Cummins, Foster, Hartnett, Hodgkins, and Ikenberry developed
from this research.

²Roger Jay Fritz, "A Comparison of Attitude Differences and Changes of College Freshmen Men Living in Various Types of Housing," (unpublished Ph.D. dissertation, the University of Wisconsin, 1956).

 $^{^{3}}$ Paul L. Dressel (ed.), <u>Evaluation in the Basic College at MSU</u> (New York: Harper and Brothers, 1959), p. 230.

⁴Ross W. Matteson, "Experience-Interest Changes in Students," <u>The Journal of Counseling Psychology</u>, Vol. 2 (February, 1955), p. 119-



The Commuter Students

After this general introduction to the important considerations of college student characteristics and the effect of the campus community, the stage is set for a more detailed and comprehensive review of the worthwhile studies of the commuter students.

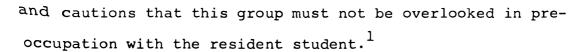
General References

such an investigation with the writers in the college personnel field, yet Mueller's recent volume makes only one brief reference to the commuter. She indicates that the students living with parents are isolated from each other and are normally not available for student activities. She concludes, only from opinion, that it is especially important that commuters be provided with lounges—snack bars, study rooms, and a centrally located space. Special organizations should be promoted for their social and recreational development. Williamson, the author of the other currently popular college personnel volume, makes no reference to the commuter whatsoever. An earlier volume by Lloyd-Jones and Smith gives brief attention to this segment of the student body

¹Kate H. Mueller, op. cit., p. 200.

²E. G. Williamson, <u>Student Personnel Services in Colleges and Universities</u> (New York: McGraw-Hill Book Company, 1961).





The American College includes several brief references to commuter students but cites no completed research. The provincial atmosphere which pervades the commuter colleges and their lack of impact on students is noted. The lack of personal friendships, the lack of social support in achieving independence of parents, and the lack of informal interaction with fellow students is stressed. It is stated that,

generally speaking, leaving home to go to college is in some ways highly favorable to the development of personality. The student is almost bound to encounter and take seriously values and roles that are different from some that he has taken for granted; he is thus forced to make conscious choices and to take the first steps toward building a value system of his own . . Proximity to the campus is essential to intellectual discourse . . . The opportunities to establish any firm identity as a college student is offered by residence.²

These opinions, however, show little reference to research and relate primarily to commuter institutions.

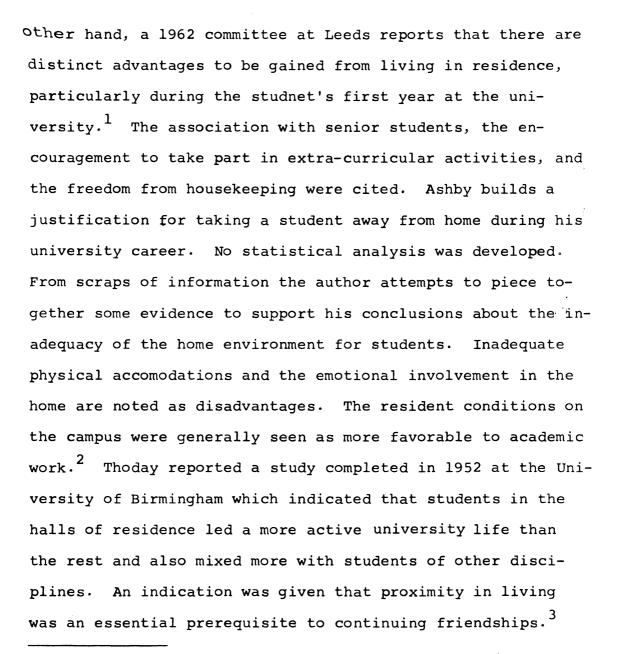
From England has filtered various opinions about commuter and residence situations. One author is of the opinion that the educative mission of a university, which is not confined to purely academic work, cannot ultimately be achieved if all students are solely in halls of residence. On the

¹Esther Lloyd-Jones and Margaret Ruth Smith, Student Personnel Work as Deeper Teaching (New York: Harper and Brothers, 1954), p. 196.

Nevitt Sanford (ed.), The American College (New York: John Wiley and Sons, Inc., 1962), p. 267.

Times Educational Supplement, Vol. 2439 (February 16, 1962), p. 304.





¹ Times Educational Supplement, Vol. 2478 (November 16, 1962), p. 644.

²Eric Ashby, "A Note on an Alternative to Halls of Residence," <u>Universities Quarterly</u>, Vol. 5 (February, 1951), p. 150.

Doris Thoday, "University Expansion and Student Life," <u>Universities Quarterly</u>, Vol. 14 (June, 1960), p. 273.

Commuters and Academic Success

An increasing amount of attention has been given to the academic success of the college students, but only one early study treats the commuter as a distinctly separate group. Walker included 1,910 men and 1,435 women living in various housing accomodations while enrolled at the University of Chicago in his study to determine the relation between academic success to various types of college housing. Comparisons were made between the students living in rooming houses, fraternity houses, at home, and in the University's residence halls on such variables as the number of quarters at the University of Chicago, grade-point average, numbers dismissed for poor work, numbers who withdrew from college because of their being on probation as a result of poor grades, students who graduated, and the number enrolled for graduate work. Walker was careful to compare the actual grades earned by the students in the various housing groups with the grades predicted by regression equation. High School grades, college aptitude test scores, and a high school personality rating provided the basis for the development of the regression equation. He concluded that different types of college housing were associated with different degrees of academic success. He suggested that students of

¹ Ernest Timothy Walker, "The Relation of the Housing of Students to Success in a University," (unpublished Ph.D. dissertation, the University of Chicago, 1934), p. 37.

both sexes who lived in residence halls made grades above those predicted for them, the students who live at home made grades similar to those predicted for them, and the fraternity students and the rooming house students made grades below those predicted for them. Residence hall students were first and the commuters second in all of the stated variables. Walker felt that the relationship between the type of housing and success in college was "great enough to make student housing compare in importance with other problems of student life."

Commuters and Withdrawal

Bemis reviewed the records of 1,208 within-term undergraduate withdrawals at the University of Washington.³ Of special interest is the conclusion that a majority of the students who decided to sever academic relations within terms either lived at home with their parents or resided with their spouses while enrolled. Some value is certainly lost because adequate control was not imposed upon measures of initial aptitude or past performances.

¹ Ibid., p. 62.

²Ibid., p. 75.

³James Fleming Bemis, "A Study of Undergraduate Students Who Voluntarily Withdrew from the University of Washington During the 1959-60 Academic Year," (unpublished Ed.D. dissertation, The University of Washington, 1962).



Commuters and Non-Academic Characteristics and Student Activities

The search for research efforts given to the investigation of non-academic characteristics and activities of commuter students has been somewhat more rewarding than even Hardee and Stark have previously indicated might be the case. Even so, only eight studies are noted which include the commuter student as a part of the research population. Three of these are surveys of various proportions, two are studies which give particular attention to attitude differences and changes, two are Ph.D. dissertations which investigate the differences between commuter and resident students on a number of variables, and one gives particular attention to the commuter at an urban institution.

The urban study, completed at Wayne State University, analyzed the factors influencing local students to seek housing in the dormitory rather than at home. A question-naire was distributed to 336 dormitory residents; 253 were completed. It was found that the dormitory students represented a cross-section of the total university student body. Approximately three quarters indicated that the dormitory experience had been a distinct value in their educational program. They cited the elimination of commuter travel time, better study conditions, independence from family and family tension, nearness to campus jobs, the exposure to other students, and the opportunity to use campus facilities and

participate in student activities. 1 It is suspected that other urban institutions have given some attention to the study of resident housing and their commuter population but no additional published material has been uncovered.

Whitmore and Hand conducted a review of campus leadership, social life, living accomodations, and activities of college students at seventy-five American campuses from every section of the United States. 2 Its early date and the attention given to institutions other than the large, residential college may limit the applicability to the present investigation but it does serve as an excellent illustration of an early work. Summarizations of opinion questionnaires submitted by deans and university officials were reported but no statistical design was represented. The summaries revealed that about a quarter of the students were living at home but that "only three per cent live at home and like it." 3 It was reported that the students who live at home and commute to college are isolated from college life and lose many of the advantages that residence in a college group can give.

Ranking over any other factor in college living is the twenty-four-hour-a-day influence of the student

¹H. C. VandenBosch, "Factors Influencing Local Students to Seek Dormitory Housing at an Urban University," School and Society, Vol. 81 (April 2, 1955), p. 104.

Harold C. Hand (ed.), <u>Campus Activities</u> (New York: McGraw-Hill Book Company, Inc., 1938), p. 148.

³<u>Ibid.</u>, p. 147.



living group. A student's adjustment to society, his scholarship, his attitudes, and his mental and physical health are as a whole largely determined by where and how he lives. 1

The authors would have us believe that from social, moral, mental, and physical viewpoints, shared living accomodations on the campus are preferred to living at home. Students in rooming houses are reported to suffer most on all counts, with living at home not a large margin better.²

Another survey was conducted in 1954 by Hardee. A questionnaire was sent to administrators, counselors, faculty, and students to determine the problems and possibilities of the commuter students. Random replies and opinions are reported, certain advantages and disadvantages of commuting are listed, and recommendations offered. Included in the list of advantages was the opportunity the commuter could exercise to retain his identity in his own group and to live in his permanent culture rather than being transplanted for four years. The benefit of family counsel and better study conditions were also noted. The large majority of the respondents felt that the commuter was disadvantaged in at least the following ways:

(1) The commuter misses the on-campus and dormitory life which constitute valuable adjuncts to

l<u>Ibid</u>., p. 148.

²<u>Ibid</u>., p. 151.

Melvene Draheim Hardee (ed.), <u>Counseling and</u>
<u>Guidance in General Education</u> (New York: World Book Company, 1955).

- general education. The commuter is liable to obtain only a one-dimensional education as he is not as exposed to new people, new ideas, and more responsibility for his own actions and ideas.
- (2) New cultural influences may not reach the commuter so readily.
- (3) There is danger in his education being spread thin, since he is usually pressed for time.
- (4) Despite possible advantages, it seems the home with its many distractions is not so conducive for effective study.
- (5) The commuter is often harassed by financial worries, which he tries to conquer, in part, by commuting. 1

Hardee does not refer to any conclusions developed specifically from research to support the opinions of the faculty and university staff personnel. She also assumes that the commuter group is academically representative of the college population and that they have the same hopes, aspirations, aims, interests, and emotions as resident students. This survey suggested to the author that nonparticipation in campus activities might be as related to personality differences, interests, and part-time work load as to commuting.

A survey was developed by Williamson in 1954 at the University of Minnesota using a questionnaire distributed to a 10 per cent stratified, random sample of 4,629 students at the University. A total of 3,808 students eventually participated. It was hypothesized that participation, in both amount and type, was significantly related to such factors

l<u>Ibid</u>., p. 271.

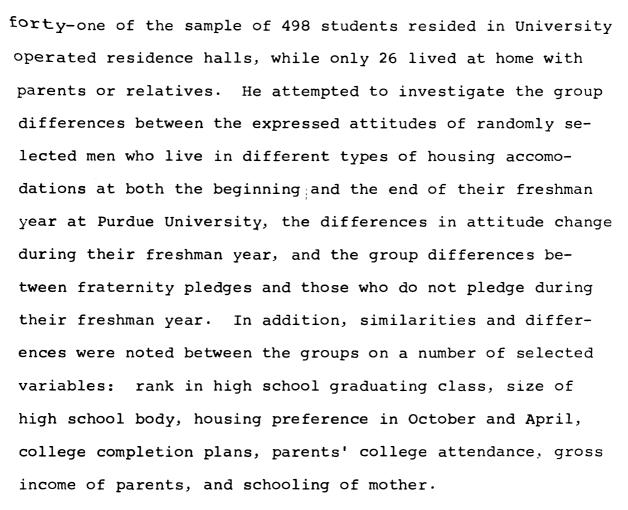
²E. G. Williamson, Wilbur L. Layton, and Martin L. Snoke, <u>A Study of Participation in College Activities</u> (Minneapolis: University of Minnesota Press, 1954).

as education of parents, size of home community, degree of self support, and living accomodations. Forty per cent of the men and 50 per cent of the women lived in the homes of their parents, 11 per cent of the men and 23 per cent of the women lived in university residences, and the remainder in rooming houses, fraternities or sororities. Several student characteristics were related to participation in organized campus activities. Younger students, students who were employed less, and students whose parental income and educational level was higher tended to participate more. The career choice of male students was related to participation in organized campus activities. Religion, race, marital status of parents, occupation of father, size of home community, and recreation patterns of the home did not affect participation. Of particular interest is the report that men and women who lived in fraternities and sororities were by far the most active of all students while students who lived at home participated least in college activities. Distance from campus also significantly affected participation. 1

A 1956 dissertation by Fritz compared attitude differences and changes of college men living in various types of housing at Purdue University. 2 Two hundred and

¹<u>Ibid</u>., p. 67.

Roger Jay Fritz, "A Comparison of Attitude Differences and Changes of College Freshmen Men Living in Various Types of Housing," (unpublished Ph.D. dissertation, The University of Wisconsin, 1956).



A summary of the first questionnaire administered during the fourth week of the first semester revealed the following results. Those students living at home with their parents had a significantly lower mean score than the fraternity and residence hall groups when measuring social relations and activities. This seemed to indicate that students who live at home participate in fewer extra-curricular activities and are either less interested in participating or feel they have less time to devote to them than do those in the other groups. When comparing residential students and those living at home, no difference was noted in

(1) relationships with the opposite sex, (2) money and finances, (3) personal and interpersonal relations, (4) study problems and general college life, (5) vocations and the future, and (6) religion and philosophy. A definite difference existed between the residence hall and home groups on attitude toward home and family, with the residence hall group indicating a distinctly more favorable attitude. Retention of home ties negatively influenced the commuter students' adjustment to the university environment during their first month following enrollment. When summarizing the results of the second questionnaire administered five weeks before the end of the freshman year, Fritz indicated that the group living at home with parents continued to have lower mean scores indicating less favorable attitudes than the residential group. It was suggested that emphasis placed upon the importance of extracurricular participation and greater opportunity to join in social activities on the campus promulgates more favorable attitudes among students in university residence than among those living at home. 2

Gruen also gave particular attention to attitude change and change in self-concept among liberal arts college students. 3 No measurable movement on either the self-concept

¹<u>Ibid</u>., p. 41.

²<u>Ibid</u>., p. 66.

Richard Edward Gruen, "A Study of Attitude Change and Change in Self-Concept Among Liberal Arts College Students," (unpublished Ph.D. dissertation, New York University, 1963).

dimension or in attitudes was noted. Quite apart from the research conclusions, the implication was made that the college students living at home in the community where they obtain their undergraduate education appear to maintain strong ties with the primary social groups and that the community, family, and environmental influences and pressures are probably greater on these students.

Drasgow developed a local study to measure differences between two matched groups of commuter and dormitory students on 26 variables. 1 At the outset the groups were matched on the basis of sex, marital status, college in the university in which enrolled, and year in college. Only 13 of the 26 variables were reported. The two groups were found to be different on five variables: father's education, socio-economic level, ACE Psychological Examination scores, Cooperative English scores, and "worries" as measured by an instrument devised by the author. The dormitory group received higher mean scores on father's education, socioeconomic level, and "worries" and lower scores on the ability measures. It was also found that the dormitory students tended to stay in college longer. No differences were reported in high school averages, rank in high school graduating class, college average, age, size of family, sibling placement, number of clubs and activities, or offices held.

lames Drasgow, "Differences Between College Students," The Journal of Higher Education, Vol. 29 (April, 1958), p. 216.

Cation and socio-economic level indicated that dormitory students may have been subject to more family pressure to go to college and this may function as a motivational force on them. Drasgow theorized that the higher score on the variable "worries" recorded by the residence students might indicate increases in anxiety and pressures from being away from home. Many of the author's conclusions were speculations and were not necessarily direct implications from the research findings. This study in its published form did not have adequate descriptions of the experimental design and these shortcomings limit direct comparisons.

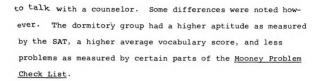
muter and resident students in reading skills, study habits, and expressed personal needs and problems. The Mooney

Problem Check List, the Brown-Holtzman Survey of Study Habits

and Attitudes, the Cooperative English Test, and the

Scholastic Aptitude Test were administered. He concluded that the commuter students seemed to be basically similar to the residence hall students with regard to reading skills, study skills, expressed personal problems, the number of students who worked for pay or who participated in extracurricular activities, and the number of students who desired

lmatthew Stark, "A Comparison of Expressed Personal Problems, Study Habits, and Reading Skills of College Freshman Commuter and Residence Hall Students," (unpublished Ph.D. dissertation, Western Reserve University, 1963).



Discussion

As may be noted from the representative studies and opinions cited, many investigations have been conducted which concern themselves with student characteristics, attitudes, beliefs, ability, and change. Specific attention has also been drawn to the influence of the campus community upon these students.

The entering students, though somewhat more capable of academic work, both within and between institutions, provide much of the same diversity as is found in society at large.

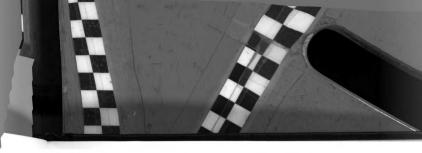
It appears from the previous review that intellectual skills and ability are improved by the educational experience. Certain changes are also noted in personality traits and basic values and beliefs. These changes, however, which are more obvious in the first and second years, are often seen as modifications of existing patterns. Most studies dealing with attitudes and value changes have tended to deal with a particular type of college or university. Also, most studies dealing with such changes have been carried out either on a

emphasize those aspects of findings which refer only to a small segment of a total study body. Another weakness might be the failure to develop an adequate theoretical framework within which the diversity can be handled. A conclusive point of view is not yet available.

There is very little evidence that any one factor from the multitude of college experiences explains changes in students. Of great interest to the college personnel administrator has been the claim that it is not always the formal academic pursuits which affect the character and personality development but the sum total of the students' immersion in the campus environment. There does seem to be support for the notion that the academic program is affected by the campus environment. More and more the thesis seems to be accepted that the modification that does occur in college students is affected by the interaction of persons and things in an environment which provides a sense of community. The campus life, communal work and play, seem to be educationally valuable. Eddy has noted that it is the total campus experience which seems to have some impact on student characteristics. Jacob, Freedman, Newcomb, and others give

Benjamin Joseph Hodgkins, "Student Subcultures--An Analysis of Their Origins and Affects on Student Attitude and Value Change in Higher Education," (unpublished Ph.D. dissertation, Michigan State University, 1964), p. 3.

Melvene Draheim Hardee, op. cit., p. 267.



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importance to the student subculture and peer group influences. Lehmann has indicated that the informal 'bullsessions' might be as important as the classroom and that the campus milieu may be more important than the faculty in affecting changes in values and beliefs during the first two years.

If curriculum and extra-curriculum combine to create ways of life which not only instruct but influence the personality development and socialization of the individual, it becomes increasingly clear why a study of the commuter student is important. If, as suspected, the commuter does not participate in the campus environment, the educational opportunities are in fact varied. Maybe the commuters are unwittingly placed into the background of the educational offerings.

The documented information about the similarities or differences in needs, problems, interests, changes and campus immersion between the commuter students and the rest of the campus population is also not conclusive. A number of studies cite differences in terms of immersion in campus life. Most often, however, the amount or kind of involvement in campus life is not determined to be a cause for any specific resulting educational advantage.

CHAPTER III

THE DESIGN

This chapter consists of a definition of the population and sample, a description of the instrumentation, the method of data collection, the statistical hypotheses and a review of the procedures and techniques utilized during analysis.

Definition of the Population

The freshmen students who entered Michigan State
University in the fall of 1958 comprised the original population from which the sample was selected. In order to achieve the objectives of this study, however, it was necessary to exclude from the original population the following types of students: (1) those who had transferred to
Michigan State University after having attended another college or university; (2) those who were classified as foreign students at the time of admission to the university; (3) those who were not enrolled for at least 12 credits fall

Permission has been given for use of a portion of the data originally compiled for the larger study conducted by Dr. Irvin J. Lehmann and Dr. Paul L. Dressel entitled, Critical Thinking, Attitudes, and Values in Higher Education, sponsored by the Office of Education, United States Department of Health, Education, and Welfare, and Michigan State University.

term, and, (4) those who had incomplete or unusable initial test and/or biographical data. After the above deletions were made, the actual working population of the study consisted of 2,746 first-term freshmen; 1,436 were males and 1,310 were females.

Selection and Classification of the Sample

From these 2,746 students was selected the entire group of 311 students listed as "living at home with parents." It was determined that 58 of the 311 resided in the local community (approximately 0-1 mile) and 253 of the 311 were non-local commuters (more than 1 mile). When it became evident that there were differences in the local and non-local commuters, the two groups were treated separately in the analysis.

For purposes of comparison, a control sample of 300 was selected from the 2,256 students who indicated that they were living in a campus residence hall during the first term at the university. After stratifying by sex, the sample was randomly selected. The sex stratification was deemed necessary in view of the weighting of males both in the commuter sample and in the original entering student population in 1958. Four student records were subsequently judged not complete so that a control sample of 296 was finally available for initial comparisons with the 311 commuters.

Eighty of the total 607 withdrew during the year, 1 was not enrolled for at least 12 credits for the entire year, and 5 either moved from the residence hall or from home during the year. Four hundred and twenty one students were available for end-of-year achievement comparisons, 477 of these completed the experience inventories, and 463 completed the post-test battery.

Description of the Instruments

In order to achieve the purposes of this study, it was necessary to identify certain selected initial characteristics and to obtain measures of academic aptitude, first year experiences, attitudes, value orientation, and critical thinking ability. The following instruments were selected from the original study to measure the named variables:

- I. Initial Characteristics and Ability.
 - A. <u>Biographical Data Sheet</u>, (Michigan State University).
 - B. <u>The College Qualification Test</u>, (The Psychological Corporation).
- II. First Year Experiences.
 - A. Experience Inventory I, (Michigan State University).
- III. End-of-year Changes.
 - A. The Inventory of Beliefs, Form I, (The American Council on Education).
 - B. <u>The Differential Values Inventory</u>, (Richard Prince, The University of Chicago).
 - C. The Test of Critical Thinking, (The American Council on Education).

Each of the instruments will be discussed briefly.

The Biographical Data Sheet

This instrument consists of 25 questions designed to provide biographical information which would be difficult to obtain through existing university records. Responses to eleven of the twenty-five questions were considered important in satisfying the purposes of this study.

The College Qualification Test

The <u>College Qualification Test</u> consists of three ability tests which may be combined into a comprehensive total score.

The total score seems to have greater general predictive power and is used in preference to the three separate subtests which, when used independently, measure verbal ability, skill in handling numerical concepts, and general information.

2

The manual reports a reliability coefficient to approach or exceed .90. Lehmann and Dressel report a reliability coefficient of .93 using the data collected from the original working population of this study. The validity of

George Bennett, Marjorie G. Bennett, Winburn L. Wallace, and Alexander G. Wesman, College Qualification Tests, Manual (New York: The Psychological Corporation, 1957).

²<u>Ibid</u>., p. 50.

³<u>Ibid</u>., p. 28.

⁴Irvin J. Lehmann and Paul L. Dressel, <u>Critical</u>
<u>Thinking</u>, <u>Attitudes</u>, <u>and Values in Higher Education</u>, Final report of Cooperative Research Project (East Lansing: Michigan State University, 1959), p. 21.

the <u>College Qualification Test</u> has been examined frequently. Lehmann and Ikenberry report validity coefficients ranging from .34 to .66 when using grades in required courses as the criterion. Hartnett provides further evidence of the predictive quality of the test. Correlations from .50 to .70 seem to be the usual findings when relating the <u>College</u> <u>Qualification Test</u> total score to early college performance.

Experience Inventory I

The Experience Inventory I is a 50 item scale developed by the original research staff to give an indication of the nature and extent to which students are involved or immersed in the campus environment. 3,4 The results of thirty-three questions are reported in this study in view of their direct bearing upon the comparisons involving the commuter students.

lrvin J. Lehmann and Stanley O. Ikenberry, <u>Critical Thinking</u>, <u>Attitudes</u>, and <u>Values in Higher Education</u>: <u>A Preliminary Report</u> (East Lansing: Office of Evaluation Services, Michigan State University, 1959).

Rodney T. Hartnett, "An Analysis of Factors Associated with Changes in Scholastic Performance Patterns," (unpublished Ph.D. dissertation, Michigan State University, 1963).

³ Irvin J. Lehmann and Stanley O. Ikenberry, op. cit.,
p. 11.

⁴Irvin J. Lehmann and Paul L. Dressel, <u>op. cit.</u>, p. 282.



The Inventory of Beliefs

The <u>Inventory of Beliefs</u> was developed as part of the Cooperative Study of Evaluation in General Education, under the sponsorship of the American Council on Education, Committee on Measurement and Evaluation. Students were asked to respond to 120 statements by means of a four-element scale: strongly agree, agree, disagree, strongly disagree.

The <u>Inventory of Beliefs</u> identifies students who tend to accept stereotypes and who are dependent and rigid in attitudes and values from those who are more mature in their viewpoints and who tend to be more adaptable in their beliefs and attitudes.²

The manual reports that the reliability coefficient of the <u>Inventory of Beliefs</u> ranges from .69 to .95 with a median of .86. Ikenberry applied the Kudar-Richardson Formula 20 to the test score data of the working population of this study and obtained a reliability coefficient of .84. The test-retest reliability as measured by Lehmann and Ikenberry is .71. The validity for measures of attitudes and values is more difficult to provide. The manual reports

Paul L. Dressel and Lewis B. Mayhew, <u>General Education</u>: <u>Explorations In Evaluation</u> (Washington, D. C.: The American Council on Education, 1954).

²Irvin J. Lehmann and Paul L. Dressel, <u>op. cit</u>, p. 21.

³Stanley O. Ikenberry, "A Multivariate Analysis of the Relationship of Academic Aptitude, Social Background, Attitudes, and Values of Collegiate Persistence," (unpublished Ph.D. dissertation, Michigan State University, 1960), p. 56.

⁴Irvin J. Lehmann and Stanley O. Ikenberry, op. cit., p. 48.

evidence of face validity and construct validity. Indications of concurrent validity are presented by Ikenberry. While the <u>Inventory of Beliefs</u> seems to be related to some extent to cognitive measures it seems to be related more closely to the measurement of attitude or personality traits similar to that of stereotypy. ²

The Differential Values Inventory

The <u>Differential Values Inventory</u> was developed by Price³ to measure the "traditional" and "emergent" value categories outlined by Spindler.⁴ The scale of 64 forced-choice items was intended to contrast the person who places considerable emphasis on respectability, self-denial, hard work as a determinant of success, egocentricity, and disregard for the past and present in favor of the future, with the person oriented toward an emergent value system characterized by getting along with people, group-determined morality standards, consideration of the group and their feelings, and an emphasis on the present.⁵

¹Stanley O. Ikenberry, op. cit., p. 55.

² Rodney T. Hartnett, op. cit., p. 64.

Richard Price, "A Study of the Relationship Between Individual Values and Administrative Effectiveness in the School Situation," (unpublished Ph.D. dissertation, The University of Chicago, 1957).

⁴George Spindler, "Education in a Transforming American Culture," <u>Harvard Educational Review</u>, Vol. 25 (Summer, 1953), p. 156.

⁵Richard Prince, <u>op. cit</u>., p. 42.

An estimate of reliability by Ikenberry resulted in a Coefficient of .75. Test-retest procedures have yielded stability coefficients of .61 for males and .60 for females over the period of one year. Although the evidence of reliability and validity for the <u>Differential Values Inventory</u> is not extensive, it appears to have more supportive evidence than do most value instruments.

The Test of Critical Thinking

The <u>Test of Critical Thinking</u>, like the <u>Inventory of Beliefs</u>, was developed as part of the Cooperative Study of Evaluation in General Education. Emphasis was placed on problem solving ability. Questions were designed to measure the ability to recognize the existence of a problem, to define the problem, to select information pertinent to its solution, to recognize assumptions, to make hypotheses, to draw conclusions, to judge the validity of the conclusions, and to evaluate the conclusions in life situations. Adequate indications of reliability and validity are provided

¹Stanley O. Ikenberry, op. cit., p. 60.

²Irvin J. Lehmann and Stanley O. Ikenberry, <u>op. cit.</u>, p. 74.

³Paul L. Dressel and Lewis B. Mayhew, op. cit.

in the manual and by Lehmann and Ikenberry. Lehmann and Dressel report a reliability coefficient of .79 using this population.

Collection of the Data

During the Freshman Orientation Week, September, 1958, the following instruments were administered to the students: Test of Critical Thinking, Form G; The Inventory of Beliefs, Form I; the Differential Values Inventory; the College Qualification Test; and the Biographical Data Sheet. The initial comparisons were developed from an analysis of this data and from information received from various university agencies.

At the end of the freshman year, retest data was obtained by use of the following instruments: Test of Critical Thinking, Form G; The Inventory of Beliefs, Form I; and the Differential Values Inventory. The Experience Inventory I was also administered and personnel records were searched for grade-point averages and indications of withdrawal or retention.

Paul L. Dressel, <u>Instructor's Manual for the Test of Critical Thinking</u>, Form G, The American Council on Education, Committee on Measurement and Evaluation, 1953.

²Irvin J. Lehmann and Stanley O. Ikenberry, op. cit.

³Irvin J. Lehmann and Paul L. Dressel, op. cit.

Statistical Hypotheses

Following directly from the previously stated purposes and research hypotheses, the subsequent null hypotheses were formulated. The three groups referred to in the hypotheses are:

Group One: The control sample of resident students.

Group Two: The local commuters.

Group Three: The non-local commuters.

Part One, Initial Characteristics

Null Hypothesis I. No differences exist at the time of enrollment among the three groups with regard to the following characteristics: (A) age;

- (B) nativity of parents;(C) father's education;(D) mother's education;(E) father's occupation;
- (F) mother's occupation; (G) rank in high school graduating class; (H) religious preference; (I) major;
- (J) amount of education desired; and, (K) source of financial support. 1,2

Null Hypothesis II. No differences exist among the three groups in terms of aptitude for college work as measured by the College Qualification Test.

Part Two, First Year Experiences

Null Hypothesis III. No differences exist among the three groups in terms of the following first year experiences: (A) faculty contact; (B) class experiences and courses; (C) study practices; (D) educational intentions; (E) attitude toward the

Where applicable, separate comparisons were made between the local commuters with the resident control and between the non-local commuters with the residential control. Some interest will be noted in isolating the results of the local commuter from the rest of the commuter group.

²Even though many characteristics and experience categories are included in these hypotheses, they were treated separately in the analysis of the data.

institution; (F) immersion in campus life; and, (G) personal interaction with peers. 1

Part Three, End-of-year Analysis

<u>Null Hypothesis IV</u>. No difference exists among the three groups in terms of academic achievement as measured by the grade-point averages for the freshman year.

 $\underline{\text{Null Hypothesis V}}$. No difference exists among the three groups in terms of withdrawal rates during the first year or the level of education reached after five years.

Null Hypothesis VI. No differences exist among the three groups with regard to the nature and direction of changes during the first year in attitudes of stereotypy as measured by The Inventory of Beliefs, Form I; value orientation as measured by the Differential Values Inventory; and critical thinking ability as measured by the Test of Critical thinking.²

Methods of Analysis

Chi-square, simple analysis of variance, "t" tests, and analysis of covariance were the statistical techniques used in this study.

Chi-square (x^2) was used to test the null hypotheses that no differences existed between the groups in initial characteristics, the first year experiences, the withdrawal rates and the level of education reached after five years. The distributions were analyzed to determine how closely the observed number of responses in a given category approximated

Refer to footnotes 1 and 2 on previous page.

Even though the several instruments are included in this hypothesis, they were treated separately in the analysis of the data.



an expected theoretical distribution. The .05 level of significance was used for all tests as the criterion to reject the null hypotheses.

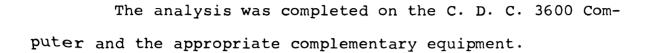
Simple analysis of variance was used to test the null hypothesis that no differences existed among the three groups in initial aptitude. The significance level used for the analysis of variance was the .05 level. The "t" test was applied to test for the specific location of the differences and, according to Edward's suggestion, the significance level was set at .01.

The analysis of covariance was used for analysis of the end-of-year data. Certain controls were therefore imposed to minimize initial differences in the three groups. To test the null hypothesis that no differences exist among the three groups in academic achievement, the initial College Qualification Test scores were used as covariants. To test the null hypothesis that no differences exist among the three groups in the nature and direction of change in attitudes of stereotypy, value orientation, and critical thinking ability, the initial scores on the respective instruments were used as covariants. The .05 level of significance was used as the criterion to reject the null hypotheses.

Allen L. Edwards, Statistical Methods for the Behavioral Sciences (New York: Holt, Rinehard, and Winston, 1961), p. 328.

²<u>Ibid</u>., p. 329.

James E. Wert, <u>Statistical Methods in Educational</u> and <u>Psychological Research</u> (New York: Appleton-Century-Crofts, Inc., 1954).



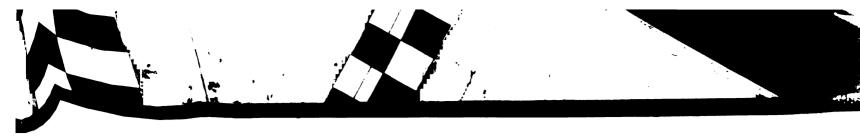
Summary

The population of the present study consisted of the Fall, 1958, entering freshman class of Michigan State University with the exclusion of transfer students, foreign students, part-time students, and students who had incomplete test records. The sample was selected so as to include three groups: local commuters, non-local commuters, and a residential control. Where applicable the local commuters and non-local commuters are treated separately.

The several instruments used in this study are described in this chapter. Additional information concerning grade-point averages and retention records has been gathered from personnel records. The data were collected during the Orientation Week of the fall term and again during the spring of the year so that comparisons could be developed among the three groups on initial characteristics and abilities, first year experiences, and selected achievement and change variables.

Attention may now be directed to the analysis of the data reported in the next chapter.





CHAPTER IV

ANALYSIS OF THE DATA

The analysis of the data is presented in three parts corresponding to the sequence of the hypotheses presented on page 46. A summary of the most important findings is developed, but the opportunity to interpret the results in terms of the general purposes of the study will be delayed until the next chapter. Tables are included which summarize the statistical information.

Part One. Initial Characteristics and Ability

Hypotheses I and II were concerned with the differences in terms of selected initial characteristics and ability among the three groups.

Hypothesis I

Null Hypothesis I. No differences exist at the time of enrollment among the three groups with regard to the following characteristics: (A) age; (B) nativity of parents; (C) father's education; (D) mother's education; (E) father's occupation; (F) mother's occupation; (G) rank in high school graduating class; (H) religious preference; (I) curricular major; (J) amount of education desired; and, (K) source of financial support.

existed among the three groups in nativity of parents, religious preference, or in the amount of education desired.

Approximately 90 per cent of the parents in each group were both native born, over 70 per cent in each group were Protestant, and an overwhelming number in each group desired to complete at least the four year college experience. It is evident, however, that the null hypothesis which states that no differences exist among the three groups at the time of enrollment is rejected. Differences were noted in age, education of father and mother, occupation of father, rank in high school graduating class, curricular major, and source of financial support.

Table 1. Comparison of selected initial characteristics among resident students, local commuters, and non-local commuters.a

| Variable | df | x ² | P |
|--------------------------------------|----|----------------|-----|
| Age | 4 | 16.574 | *b |
| Nativity of Parents | 2 | 1.529 | NSC |
| Father's Education | 4 | 39.712 | * |
| Mother's Education | 4 | 45.310 | * |
| Father's Occupation | 12 | 88.918 | * |
| Mother's Occupation | | not compute | d |
| Rank in High School Graduating Class | 4 | 25.406 | * |
| Religious Preference | 4 | 7.574 | NS |
| Curricular Major | 4 | 16.381 | * |
| Amount of Education Desired | 2 | .877 | NS |
| Source of Financial Support | 4 | 48.287 | * |

^aSee Appendix A for more extensive analysis of this data.

bSignificant at or beyond the .05 level of confidence.

C Not significant.

Subsequently both the local commuters and the non-local commuters were compared separately with the resident students on those items where a significant difference was revealed among the three groups.

Age. While over half of all the students in each group were 18 years of age, it is evident from observing Table 2 that the non-local commuters tended to be older than the resident students. Only 4.39 per cent of the residents were 19 or over, whereas, 14.23 per cent of the non-local commuters were in this age group. No differences were noted between the local commuters and the resident students.

Father's Education. As is noted in Table 3, slightly more than half of the fathers of the resident students had some formal training beyond high school. Over 70 per cent of the fathers of local commuters, but only 32 per cent of the fathers of the non-local commuters had some education beyond high school.

When compared with the residential students the local commuters had fathers with a significantly higher level of formal education and the non-local commuters tended to have fathers with a lower level of education.

Mother's Education. Similarily, the local commuters tended to have mothers with a higher level of formal education and the non-local commuters tended to have mothers

Comparison of age between the resident students and each of the commuter groups. Table 2.

| | Resi | Resident Students | Lo | Local Commuters | Non- Comm | Non-Local Commuters | ð.f. | x ² | Δ |
|------|------|----------------------|----------|--------------------|--------------|------------------------|------|----------------|-----|
| z | | % | z | % | z | % | ; | | · |
| (| | (((| , | | | | | | |
| 3 85 | | 28.72 | 14 20 | 24.14 65 53 | | | | | |
| 170 | | 60.00 | 0 ' | 20.00 | | | (| • | ת |
| T3 | | 4.39 | ٥ | 10.34 | | | 7 | 3.89 | NSN |
| | | | | | | | | | |
| 85 | | 28.72 | | | 99 | 26.09 | | | |
| 198 | | 68.99 | | | 151 | 59.68 | | | 2, |
| 13 | | 4.39 | | | 36 | 14.23 | 7 | 16.455 | * |
| | | | | | | | | | |

aNot significant.

 $^{^{\}mathbf{b}}$ Significant at or beyond the .05 level of confidence.

Comparison of father's education between the resident students and each of the commuter groups. Table 3.

| д | ™ | * |
|-------------------------------|---|---|
| x ₂ | 9.10 | 21.680 |
| đf | 2 | 7 |
| Non-Local Commuters N % | | 34.20 34.78 32.02 |
| Non- Comm N | | 84 88 81 |
| Local Commuters N % | 10.35 17.24 72.41 | |
| COM | 6 10 42 | |
| Resident Students N % | 24.33 24.66 51.01 | 24.33 24.66 51.01 |
| Resj Stud N | 72 73 151 | 72 73 151 |
| Variable | Father's Education Less than High School High School Completed More than High School | Father's Education Less than High School High School Completed More than High School |

^aSignificant at or beyond the .05 level of confidence.

Comparison of mother's education between the resident students and each of the commuter groups. Table 4.

| Δ. | · | | r | ∀ | | | | * |
|------------------------|---|---|-----------------------|-----------------------|--------------------|-----------------------|-----------------------|-----------------------|
| × | : | | | 14.84 | | | | 18.690 |
| đ£ | ; | | | 7 | | | | 7 |
| Non-Local Commuters | % | | | | | 29.25 | 45.06 | 25.69 |
| Non- Comm | z | | | | | 74 | 114 | 65 |
| Local Commuters | % | 06.90 | 22.41 | 70.69 | | | | |
| Com | z | 4 | 13 | 41 | | | | |
| Resident Students | % | 20.95 | 35.81 | 43.24 | | 20.95 | 35.81 | 43.24 |
| Resi | z | 62 | 106 | 128 | | 62 | 106 | 128 |
| Variable | | Mother's Education Less than High School | High School Completed | More than High School | Mother's Education | Less than High School | High School Completed | More than High School |

^aSignificant at or beyond the .05 level of confidence.

with a lower level of formal education than did the resident students.

Father's Occupation. It is evident from observing Table 5 that the fathers of the non-local commuters were engaged in occupations which placed their families at lower socio-economic levels than the families of the resident group. As an illustration, over 63 per cent of the fathers of the residents were classified in the occupational groups of executive/managerial, business, professional, and white collar, while slightly over 25 per cent were laborers or farmers. Less than 40 per cent of the fathers of the non-local commuters were classified in the five occupational groups listed above while over 47 per cent were laborers or farmers.

It is important to note that a difference also existed between the father's occupation of the local commuters and the resident students. Less than 50 per cent of the fathers of the local commuters were classified in executive/managerial, business, professional, or white collar categories. Fewer were farmers or laborers and more were retired. The key difference, however, was that while only 3.04 per cent of the fathers of resident students were teachers or in public service occupations, over 27 per cent of the fathers of the local commuters were placed in this category.

Comparison of father's occupation between the resident students and each of the commuter groups. Table 5.

| ſ | 4 | | | | | | | ſ | Ծ * | | | | | | | | * |
|------------------------|-----|---------------------|----------------------|----------|--------------|--------------|----------------------|--------------|------------------|---------------------|----------------------|----------|--------------|--------------|----------------------|--------------|------------------|
| 2, | × | | | | | | | | 59.473 | | | | | | | | 50.012 |
| ų | QI. | | | | | | | | 9 | | | | | | | | 9 |
| Non-Local Commuters | % | | | | | | | | | | 60.6 | 6.32 | 7.51 | 13.83 | 6.72 | 47.04 | 9.49 |
| Non- | Z | | | | | | | | | | 23 | 16 | 19 | 35 | 17 | 119 | 24 |
| Local Commuters | % | | 10.34 | 8.62 | 8.62 | 18.97 | 27.58 | 8.62 | | | | | | | | | |
| Lo | Z | | 9 | വ | Ŋ | 11 | 16 | Ŋ | 10 | | | | | | | | |
| Resident Students | % | | | | 14.53 | | | 25.34 | 7.43 | | 15.54 | 16.55 | 14.53 | 17.57 | 3.04 | 25.34 | 7.43 |
| Res | Z | | 46 | 49 | 43 | 52 | σ | 75 | | | | | 43 | 52 | 6 | | 22 |
| Variable | | Father's Occupation | Executive/Managerial | Business | Professional | White Collar | Teacher/Pub. Service | Labor/Farmer | Deceased/Retired | Father's Occupation | Executive/Managerial | Business | Professional | White Collar | Teacher/Pub. Service | Labor/Farmer | Deceased/Retired |

^aSignificant at or beyond the .05 level of confidence.



Mother's Occupation. The major occupation of 60 to 70 per cent of the mothers in all three groups was that of housewife. A number were also engaged in white collar professions and in teaching and public service positions. The number of mothers in other occupational categories was either small or non-existent so statistical analysis was not feasible.

Table 6. Comparison of mother's occupation between the resident students and each of the commuter groups.

| Variable Mother's Occupation | | ident dents | | ocal muters | | -Local |
|---------------------------------|-----|----------------|----|----------------|-----|--------|
| - | N | . % | N | % | N | % |
| Executive/Managerial | 4 | 1.35 | 0 | _ | 6 | 2.37 |
| Business | 3 | 1.02 | 1 | 1.73 | 1 | 0,40 |
| Professional | 3 | 1.02 | 2 | 3.45 | 5 | 1.98 |
| White Collar | 22 | 7.43 | 9 | 15.52 | 43 | 17.00 |
| Laborer | 17 | 5.74 | 2 | 3.45 | 14 | 5.53 |
| Teacher/Pub. Service | 40 | 13.51 | 8 | 13.79 | 20 | 7.90 |
| Housewife | 207 | 69.93 | 36 | 62.07 | 164 | 64.82 |
| | | | | | | |

Rank in High School Graduating Class. After isolating the influence of the local commuters from the analysis of the commuting population, no difference was noted between the non-local commuters and the residents with regard to rank in high school graduating class. Over 60 per cent of both groups ranked in the upper third and less than 5 per cent in the lower third of their graduating class. There were differences, however, between the rank of the local commuters and the resident students. Whereas 67.23 per cent of the



Comparison of rank in high school graduating class between the resident students and each of the commuter groups. Table 7.

| Variable | Res Stu N | Resident Students N % | Lo Comm N | Local Commuters N % | Non- Comm | Non-Local Commuters N % | đ£ | x ₂ | Д |
|---|-----------------|-----------------------------|-----------------|---------------------------|-----------------|-------------------------------|----|----------------|-----|
| Rank in High School Graduating Class Lower Third Middle Third Upper Third | 5 92 199 | 1.69 31.08 67.23 | 21 28 28 | 15.52 36.21 48.27 | | | 7 | 26.565 | * |
| Rank in High School Graduating Class Lower Third Middle Third Upper Third | 5 92 199 | 1.69 31.08 67.23 | | | 12 86 155 | 4.74 33.99 61.27 | 2 | 5.218 | qSN |

^aSignificant at or beyond the .05 level of confidence.

Eч

b_{Not} significant



resident students came from the upper third of their graduating class, only 48.47 per cent of the local commuters ranked in this category. 1.69 per cent of the resident students and 15.52 per cent of the local commuters ranked in the lower third.

Curricular Major. Both the non-local and local commuters differed from the resident students in curricular choice. A higher percentage of the commuter students than the resident students had not chosen a major at the time they initially enrolled at Michigan State, a higher percentage were in liberal or general education programs, and fewer were in vocational or professionally oriented curricular areas.

Source of Financial Support. No difference in source of financial support was noted between the residents and the local commuters. However, as is evident from Table 9, a much larger percentage of the resident group than the non-local commuters received parental assistance. Many more of the non-local commuters supported a large portion of their educational costs by working, loans, or scholarships.

Hypothesis II

Results of the analysis of variance for <u>The College</u>
Qualification <u>Test</u>, Table 10, revealed that there was a

Comparison of curricular areas between the resident students and each of the commuter groups. Table 8.

| 2 | ж М | | | | 10.810 *a | | | | 9.223 * |
|------------------------|--------|-------|---------------|--------------------------------|--------------|----------|---------------|-----------------|-----------------------------|
| ; | d t | | | | 2 1 | | | | 2 |
| Non-Local Commuters | % | | | | | 0 | 18.00 | 37.15 | 44.27 |
| Non- | N | | | | | 7 | 4 0 | 94 | 122 |
| Local Commuters | % | | 20.69 | 44.83 | 34.48 | | | | |
| Coll | z | | 12 | 97 | 20 | | | | |
| Resident Students | % | | 15.54 | 27.03 | 57.43 | ti ti | 10.04 | 27.03 | 57.43 |
| Res | z | : | 46 | 080 | 170 | , | 40 | 80 | 170 |
| Variable | | Major | No Preference | Liberal/General Vocational/ | Professional | Major | No Freierence | Liberal/General | vocational/ Professional |

^aSignificant at or beyond the .05 level of confidence.

Comparison of source of financial support between the resident students and each of the commuter groups. Table 9.

| Variable | Resi | Resident Students | COM | Local Commuters | Non- Comm | Non-Local Commuters | , | 7 | , |
|---------------------|------|----------------------|-----|--------------------|--------------|------------------------|----|--------|----|
| | Z | % | z | % | z | % | ar | * | ٦, |
| Source of Financial | | | | | | | | | |
| Support Parents | 240 | 81.08 | 44 | 75.86 | | | | | |
| Job | 32 | 10.81 | 7 | 12.07 | | | | | |
| Scholarship/Loan/ | | | | | | | | | rd |
| Other | 24 | 8.11 | 7 | 7 12.07 | | | 7 | 1.380 | NS |
| Source of Financial | | | | | | | | | |
| Support | | | | | | | | | |
| Parents | 240 | 81.08 | | | 138 | 54.54 | | | |
| Job | 32 | 10.81 | | | 74 | 74 29.25 | | | |
| Scholarship/Loan/ | | | | | | | | | .4 |
| Other | 24 | 8.11 | | | 41 | 41 16.21 | 7 | 45.009 | * |

a Not significant.

 $^{\mathrm{b}}\mathrm{Significant}$ at or beyond the .05 level of confidence.

significant difference among the three groups in terms of academic aptitude. Thus the null hypothesis that no difference existed among the three groups is rejected. Results of the "t" tests indicate that no difference existed between the local commuters and the residence students but that the non-local commuters had a significantly lower mean score than the resident students.

Table 10. Analysis of variance of mean differences for the three groups on College Qualification Test scores.

| | ·co | LLEGE QUALIE | FICATION TEST | TATOTAL |
|--------------------------------------|-----|--------------------|----------------|----------------|
| Group | N | Mean | F ^a | t ^b |
| Resident | 296 | 125.132 | E 212 | 7 |
| Local Commuter Non-Local Commuter | | 127.741 118.692 | 5.313 | .7 2.911 |

 $^{^{}a}F_{.05} = 3.86$

$$^{b}t_{.01} = 2.576$$

Summary of Part One

The null hypotheses I and II that no differences existed among the three groups with regard to initial characteristics or academic ability are rejected and the research hypotheses are accepted. More important, however, is the analysis of the individual characteristics of the three groups.

The local commuters when compared with the resident students came from families with a higher educational-socio-economic level. More fathers were teachers, more of the students ranked lower in their high school graduating class, and they were more likely to have "no preference" as to major field of study at fall registration or be enrolled in liberal or general educational programs. No differences were noted between the local commuters and the resident students in age, source of financial support, or academic ability.

The non-local commuters, on the other hand, were older than the resident students, were more likely to come from families with a lower educational-socio-economic level, and they received less financial support from home. The non-local commuters were also more likely to be "no preference" or enrolled in liberal or general education programs than were the residents. They had less aptitude for college work as measured by the <u>College Qualification Test</u> than the residents but they did not differ from the resident students with regard to rank in high school graduating class.

No differences existed among the three groups with regard to nativity of parents, religious preference, or amount of education desired.

Part Two. First Year Experiences

Hypothesis III was concerned with the differences in terms of first year experiences among the three groups.

Hypothesis III

Null Hypothesis III. No differences exist among the three groups in terms of the following first year experiences: (A) faculty contact; (B) class experiences and courses; (C) study practices; (D) educational intentions; (E) attitude toward the institution; (F) immersion in campus life; and, (G) personal interaction with peers.

Although many categories were included in this one general hypothesis, each individual item was treated separately in the analysis. It will not be possible to accept or reject the null hypothesis in its entirety.

Faculty Contact. As is evident from Table 11, the students in all three groups experienced very little exposure to the faculty. Furthermore, no differences existed among the three groups on five of the six items which were intended to measure faculty contact. Separate analysis of this one item, Table 12, revealed that the local commuters spent more time with faculty members with whom they were not enrolled for classes. No difference was evident between the nonlocal commuters and the resident students on this particular item.



Comparison of selected first year experiences among the three groups.a Table 11.

| Item | đ£ | x ² | д |
|--|----|----------------|--------|
| ctIn-Class had the same instructor twice this year. | 7 | 1.602 | qSN |
| MOSE (MOTE Chain hall) Of My instructors this term do not know me by name. | 7 | 3.683 | NS |
| personal, non-acade | 7 | .506 | NS |
| ien I go to see an instructor outside of class i something dealing with an assignment. | 7 | 2.176 | NS |
| nave never gone to see any one instructor more than once of class. | 7 | .812 | NS |
| I have gone to see an instructor, although I was not at the time taking a course from him. | 7 | 5.227 | * |
| Class Experiences and Courses | | | |
| Only one or two students in any given class this term have ever been in the same section of a course with me before. | 2 | 2.311 | NS |
| | 7 | 39.911 | * |
| I have not found any of my courses to be extremely interesting this year. | 7 | 2.562 | NS |
| I have "cut" most of my classes at least two or three times. | 7 | 12.751 | * |
| Study Practices | | | |
| I study during most of my out-of-class time. | 7 | .662 | NS. |
| I spend more than two hours a week in the library. Almost all of my time in the library is spent reading the various | 7 | 20.928 | k |
| class assignments. | 7 | .746 | NS |
| i usuaily accembr to complete my course work reading belote doing any non-course reading. | 7 | 3.247 | N S |

Table 11. Continued

| Item | df | 7× | Ъ |
|--|----|---------|----|
| Educational Intentions I intend to receive my degree from M.S.U. | 2 | .131 | NS |
| Attitude Toward the Institution Duting this year, I have had some rather serious doubts as to whether Michigan State is actually the best school for me. | 7 | 7.277 | * |
| Immersion in Campus Life | | | |
| During this year I was an officer or held a position of leadership in an extracurricular club activity committee at | C | 33.484 | * |
| | 10 | 33.153 | * |
| I attended all the home football games this year. | 10 | 18.223 | * |
| | | | |
| committees. | 7 | 28.449 | * |
| I saw less than four home basketball games this year. | 7 | 2.043 | NS |
| During this year, I went to hear a visiting speaker or lecturer | | | |
| sponsored by a department on campus, the Honors College, or the | | | |
| Lecture-Concert series. | 7 | 20.797 | * |
| I attended no concerts sponsored by the university. | 7 | 24.971 | * |
| I would say that I have attended most of the really big social | | | |
| events on campus this year. | 7 | 14.790 | * |
| About the only time I spend on campus is for my classes. | 7 | 133.381 | * |
| I did not pledge a fraternity or sorority. | 7 | 40.679 | * |
| I usually spend more than 15 or 20 minutes a day in a student | | | |
| gathering place. | 7 | 39.634 | * |
| I do not regularly date the same person at M.S.U. | 7 | 7.498 | * |

Table 11. Continued

| Item | d£ | x ² | ъ |
|--|----|----------------|----|
| Personal Interaction I date less than twice a week. | 2 | .446 | NS |
| I have a (boy or girl) friend in my home town whom I date. | 7 | 3.279 | NS |
| Most of the "bull-sessions" or discussions in which I participate discuss academic questions. | 7 | 1.461 | NS |
| I spend less than an hour a day in "bull-sessions" with my friends. | 7 | 12.853 | * |
| | | | |

^aSee Appendix B for more detailed analysis of the data.

 $^{
m b}$ Not significant.

^cSignificant at or beyond the .05 level of confidence.

Table 12. Separate comparison between the resident students and each of the commuter groups in terms of faculty contact.^a

| Item _ | | dent ents No | Loc Commu Yes | | Non-L Commu Yes | | x ² | P |
|--|---------|--------------------|---------------------|----|-----------------------|-----|----------------|-----------------|
| Faculty Contact I have gone to see an instructor, al- | | 182 | 18 | 30 | | | 4.982 | * b |
| though I was not at the time taking a course from him. | 9 52 | 182 | | | 49 | 130 | 1.457 | ns ^c |

aDifferent total N's in this and succeeding tables in Part Two indicate some "no response" items.

Class Expeiences and Courses. Table 11 reveals that the three groups differed on two of the four questions. Both the local and non-local commuters indicated they placed more importance than did the resident students on class and course experiences as the main vehicle for learning. Likewise, both commuter groups missed fewer classes than did the resident students.

Study Practices. No differences were revealed among the three groups in terms of three of the four items which were intended to measure study practices. Table 14 indicates that the non-local commuters spent more time in the library than the resident students. No difference was noted

bSignificant at or beyond the .05 level of confidence.
CNot significant.

in the library time of the local commuters and the resident students.

Table 13. Separate comparison between the resident students and each of the commuter groups in terms of items intended to measure the class experiences and courses.

| | | | | | | 2 | P |
|-----|------------|--|--|--|--|---|---|
| Yes | No | Yes | No | Yes | No | ^ | Р |
| | | | | | | | |
| 107 | 134 | 32 | 17 | | | 7.132 | ** |
| 107 | 134 | | | 139 | 48 | 38.601 | * |
| | 171 | 5 | 43 | | | 6.114 | * |
| 64 | 171 | | | 27 | 153 | 8.911 | * |
| | 107 107 | <u>Students</u> Yes No 107 134 107 134 | Students Communication Yes No Yes 107 134 32 107 134 32 64 171 5 | Students Commuters Yes No Yes No 107 134 32 17 107 134 64 171 5 43 | Students Commuters Commuters Commuters Yes No Yes No Yes 107 134 32 17 139 107 134 139 139 139 | Students Commuters Commuters Yes No Yes No 107 134 32 17 107 134 139 48 64 171 5 43 | Students Commuters Commuters Commuters X² Yes No Yes No Yes No X² 107 134 32 17 7.132 7.132 107 134 139 48 38.601 64 171 5 43 6.114 |

 $^{^{\}mathrm{a}}$ Significant at or beyond the .05 level of confidence.

Table 14. Separate comparison between the resident students and each of the commuter groups in terms of study practices.

| Item | | dent ents | Loc | | Non-L Commu | | _v ² | P |
|-----------------------------------|-----|--------------|-----|----|----------------|----|---------------------------|-----|
| | Yes | No | Yes | No | Yes | No | х | Р |
| Study Practices I spend more than | 80 | 155 | 17 | 31 | | | .033 | nsa |
| two hours a week in the library. | 80 | 155 | | | 100 | 79 | 19.691 | *p |

a Not significant.

bSignificant at or beyond the .05 level of confidence.

Educational Intentions. It is evident from Table 11 that no difference existed among the three groups with regard to educational intentions. Over 75 per cent of the students in all three groups indicated a desire to complete their undergraduate work at Michigan State University. It is important to note that this indication at the end of the first year is consistent with the reaction of the students in all three groups during the initial phase of this study.

Attitude Toward the Institution. As is evident from Table 11, a difference was noted in terms of the attitude of the three groups toward Michigan State University. Further analysis revealed that this difference rested more specifically in the difference between the non-local commuters and the resident students. The non-local commuters expressed more doubts as to whether Michigan State was actually the best school for them. No difference was noted in terms of the attitudes of the local commuters and the resident students.

<u>Immersion in Campus Life</u>. Differences among the three groups with regard to immersion in campus life were indicated in all but one of the twelve items.

Separate analysis as reported in Table 16 revealed that the non-local commuters responded differently than the resident students on all eleven items. The non-local commuters when compared with the resident students held fewer



positions of leadership, read the State News less, belonged to fewer organizations, tended not to pledge a sorority or a fraternity, were less likely to date the same person at MSU, spent more time in the campus grills and student gathering places, and attended fewer home football games, lectures, concerts, and big social events. A definite difference also was noted in the amount of time spent on campus. The non-local commuters indicated that about the only time they spent on campus was for classes.

Table 15. Separate comparison between the resident students and each of the commuter groups on attitude toward the institution.

| Item | Resident Students | | Loc Commu | | Non-I | Local | . x ² | Б |
|--|----------------------|-----|--------------|----|-------|-------|------------------|-----------------|
| _ | Yes | No | Yes | No | Yes | No | X | P |
| Attitude Toward | | | | | | | | |
| the Institution During this year, | 121 | 120 | 24 | 25 | | | .025 | ns ^a |
| I had some rather serious doubts as | | | | | = 0 | | 6 050 | *p |
| to whether MSU is actually the best school for me. | 121 | 120 | | | 70 | 117 | 6.953 | * |

a Not significant.

On the other hand, the local commuters were quite like the resident students. No differences were noted in their immersion in campus life except that the local commuters

bSignificant at or beyond the .05 level of confidence.

Separate comparison between the resident students and each of the commuter groups on immersion in campus life. Table 16.

| groups on immersion in campus life | | | | | | | | |
|--|--------------------------------|--------------------|------------------------------|----------------|----------------------------------|------------|-----------------|-----------------|
| Item | Resident Students Yes No | dent ents No | Local Commuters Yes No | 1 ers No | Non-Local Commuters Yes No | cers No | ×2 | Сt |
| Immersion in Campus Life During this year I was an officer or held a position of leadership. | 93 | 148 148 | 14 | 35 | 25 | 162 | 1.755 33.540 | NS ^a |
| I read the State News each day. | 208 208 | 33 33 | 39 | 10 | 117 | 70 | 1.454 35.475 | NS * |
| I attended all the home football games. | 130 | 111 | 15 | 34 | 29 | 120 | 8.865 | * * |
| I am a member of at least two clubs, activities, or committees. | 114 | 127 | 29 | 20 | 48 | 138 | 2.300 | NS * |
| I went to hear a visiting speaker or lecturer. | 118 118 | 123 123 | 22 | 27 | 51 | 135 | .269 | NS * |
| I attended no concerts sponsored by the university. | 95 95 | 140 140 | 20 | 28 | 116 | 64 | .025 | NS * |
| I would say that I have attended most of the really big social events on campus this year. | 84 | 151 | 10 | 38 | 35 | 145 | 3.995 | * * |
| | | | | | | | | |



| - | |
|-----------|--|
| | |
| Continued | |
| Table 16. | |
| | |

| Item | Resident Students | Resident Students | Local Commuters | ers | Non-Local Commuters | rs No | x ₂ | Ъ |
|--|----------------------|----------------------|-----------------|-----|------------------------|----------|----------------------|------|
| About the only time I spend on campus is for my classes. | 19 19 | 216 216 | 23 | 25 | 108 | 70 1 | 50.036 70 131.540 | * * |
| I did not pledge a fraternity or a sorority. | 149 | 85 | 35 | 13 | 162 | 16 | 1.500 | NS * |
| H | 45 | 186 | 13 | 34 | | | 1.582 | NS |
| minutes a day in a student gatnering place. | 45 | 186 | | | 98 | 91 | 38.949 | * |
| I do not regularly date the same person at MSU. | 186 186 | 49 | 36 | 12 | 119 | 58 | .406 | NS * |

a Not significant.

 $^{
m b}$ Significant at or beyond the .05 level of confidence.

attended fewer home football games and fewer big social events on campus. They tended to be on campus only for scheduled opportunities and classes.

Personal Interaction. This category was intended to indicate something about peer interaction which might not necessarily be related to student interaction on the campus. No differences were noted on three of the four items. Further analysis revealed that both commuter groups spent less time in "bull-sessions" or discussions with friends than did the resident students.

Table 17. Separate comparison between the resident students and each of the commuter groups on one item intended to measure personal interaction.

| Item | | dent | Loc | | Non-L Commu | | x ² | |
|---|-----|------|-----|----|----------------|----|----------------|-----|
| | Yes | No | Yes | No | Yes | No | X | P |
| Personal | | | | | | | | |
| Interaction I spend less than an hour a day in "bull- | 100 | 140 | 28 | 21 | | | 3.950 | * a |
| sessions" or discussions with my friends. | 100 | 140 | | | 108 | 77 | 11.676 | * |

^aSignificant at or beyond the .05 level of confidence.

Summary of Part Two

The first year experiences of the local commuters tended to be very similar to the experiences of the resident

ences were noted in faculty contact, study practices, educational intentions, or attitudes toward Michigan State University. The local commuters did take more advantage of the opportunity to see faculty members with whom they were not enrolled at the time. The local commuters were also quite like the resident students in the amount of immersion in the activities and the structured life on the campus. They spent less time in discussions with friends and except for structured activities they tended to come on campus only for class-related activities. They were different than the resident students in that they saw class as the most important vehicle for learning. They missed very few classes.

The non-local commuters also tended to be very much like the resident students in the amount of faculty contact, study practices, and educational intentions. At this point, however, the dissimilarities became quite pronounced. The commuters had more doubts about Michigan State as the educational institution best suited for their needs. They tended to look at the classroom experiences as the most important vehicle for learning, missed fewer classes, and were more likely to study in the library. A difference was noted on 11 of the 12 items which attempted to determine the students' immersion in campus life. The non-local commuters did not participate heavily in any phase of campus life. They did not participate in discussions with friends as often

as the resident students and they did not regularly date the same person at MSU.

Part Three. End-of-Year Analysis

Hypotheses IV, V, and VI were concerned with the differences among the three groups in terms of academic achievement during the first year, withdrawal and retention, and the nature and direction of change during the first year in attitudes of stereotypy, value orientation, and critical thinking ability. It was suspected that differences in experiences might affect the educational progress of the commuters as measured by these variables.

Hypothesis IV

<u>Null Hypothesis IV</u>. No difference exists among the three groups in terms of academic achievement as measured by the grade-point averages for the freshman year.

To the degree that aptitude for college work was controlled by <u>The College Qualification Test scores</u>, and to the degree that all other pertinent factors related to achievement did not introduce a bias in the study, the analysis of the data revealed that living at home did not seem to make a difference in the academic achievement as measured by the grade-point average of those students who remained in school for the entire year.

It is evident from the data that the null hypothesis that no difference exists among the three groups in terms

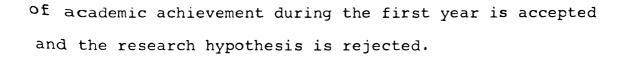


Table 18. Comparison of achievement during the first year among the three groups.

| | | Residuals | | |
|---------------------------------|-----------------------|-------------------|----------------|----------------|
| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Square | F ^a |
| | Achievement (GPA) | | | |
| Total | 519 | 136.831 | | |
| Between Groups Within Groups | 2 517 | 1.026 135.805 | .513 .262 | 1.958 |

 $^{^{}a}$ F_{.05} = 3.02

Hypothesis V.

<u>Null Hypothesis V</u>. No difference exists among the three groups in terms of withdrawal rates during the first year or in the academic completion record after five years.

The data in Table 19 reveals a difference in terms of the withdrawal percentages among the three groups by the end of the first year. Further analysis of the separate commuter groups revealed that a greater percentage of the non-local commuters than residents withdrew by the end of the first year. No difference existed between the local commuters and the resident students. It is important to note that controls for such variables as initial ability and

 ${\tt SOCiO-economic}$ level were not imposed in this portion of the study and therefore the results are not conclusive. 1

Table 19. Comparison of percentage of withdrawal among the three groups at the end of the first year.

| Variable | Resident Students | | Local Commuters | | Non-Local Commuters | | df | x ² | P |
|-----------|----------------------|-------|--------------------|-------|------------------------|----|----|----------------|----|
| | N | % | N | % | N | % | ar | X | P |
| Still in | | | | | | | | | |
| School | 268 | 90.54 | 54 | 93.10 | 205 | 81 | | | |
| Withdrawn | 28 | 9.46 | 4 | 6.90 | 48 | 19 | 2 | 13.734 | *a |

aSignificant at or beyond the .05 level of confidence.

Table 20. Separate comparison of withdrawal between the resident students and each of the commuter groups.

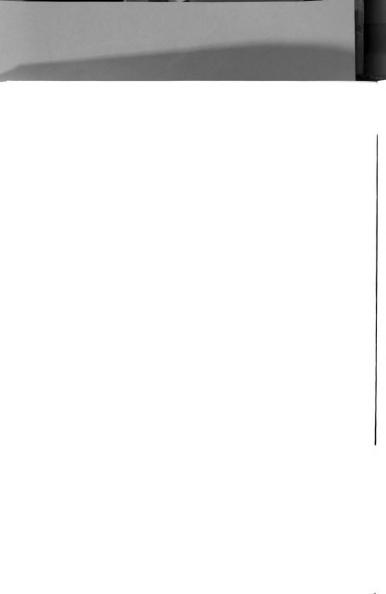
| Groups | đf | x ² | P |
|--|----|----------------|-----------------|
| Comparison Between Residents and | 1 | .270 | NS ^a |
| Local Commuters Comparison Between Residents and | 1 | .270 | No |
| Non-Local Commuters | 1 | 8.820 | *p |

a Not significant.

As a corollary to the above analysis, the data in Tables 21 and 22 reveals similar results when comparing the

bSignificant at or beyond the .05 level of confidence.

¹ Irwin J. Lehmann and Stanley O. Ikenberry, <u>Critical Thinking</u>, <u>Attitudes</u>, <u>and Values in Higher Education</u>: <u>A Preliminary Report</u> (East Lansing: Office of Evaluation Services, Michigan State University, 1959), pp. 51 and 56.



academic record of the three groups after five years from time of enrollment. A higher proportion of the non-local commuters than the resident students were permanent dropouts with no transfer indicated. No difference was noted between the local commuters and the resident students. As in the analysis of withdrawals after the first year, controls for initial ability and socio-economic level were not imposed.

Table 21. Comparison of academic completion record among the three groups at the end of five years from time of entrance.

| Variable | | ident dents % | I Com N | ocal muters % | Non- Com N | -Local muters % | -df | x ² | P |
|---------------------------------------|-----|---------------------|---------------|---------------------|------------------|-----------------------|-----|----------------|----|
| Graduated or Active Dropout, transfer | 177 | 59.80 | 36 | 62.07 | 136 | 53.75 | | | |
| possible | 69 | 23.31 | 14 | 24.14 | 43 | 17.00 | | | |
| Dropout, permanent | 50 | 16.89 | 8 | 13.79 | 74 | 29.25 | 4 | 14.061 | ⋆a |

a Significant at or beyond the .05 level of confidence.

Table 22. Separate comparison of academic completion record after five years from time of enrollment between the resident students and each of the commuter groups.

| Groups | đf | x ² | P |
|--|----|----------------|-----------------|
| Comparison Between Residents and Local Commuters | 2 | .166 | ns ^a |
| Comparison Between Residents and Non-Local Commuters | 2 | 13.114 | å |

a_{Not} Significant

b Significant at or beyond the .05 level of confidence.



Hypothesis VI

Null Hypothesis VI. No differences exist among the three groups with regard to the nature and direction of changes during the first year in attitudes of stereotypy as measured by The Inventory of Beliefs, Form I; value orientation as measured by The Differential Values Inventory; and critical thinking ability as measured by the Test of Critical Thinking.

To the degree that initial differences were controlled by the pre-test scores, results of the Analysis of Covariance, Table 23, reveals no differences among the three groups in terms of the nature and direction of change in attitudes of stereotypy, value orientation, or critical thinking ability. It is evident that the null hypothesis that no differences existed among the three groups is accepted and the research hypothesis is rejected.

Summary of Part Three

No differences were revealed among the three groups at the end of the first year in terms of academic achievement or in the nature and direction of changes in attitudes of stereotypy, value orientation, or critical thinking ability. Differences were revealed among the three groups in terms of withdrawal rates during the first year and the level of education reached after five years. A greater proportion of the non-local commuters than the resident students withdrew sometime during the first year and more were permanent dropouts after five years from the time of enrollment. Lack of adequate controls makes it impossible, however, to determine if

these differences were due to place of residence or differences in such variables as academic ability or socio-economic level.

Table 23. Comparison of nature and direction of change in attitudes of stereotypy, value orientation, and critical thinking ability among the three groups.

| | | Residuals | | |
|---------------------------------|-----------------------|----------------------|------------------|-------|
| Source of Variation | Degrees of Freedom | Sums of Squares | Mean Square | Fa |
| | INVENTORY C | F BELIEFS | | |
| Total | 461 | 43269.139 | | |
| Between Groups Within Groups | 2 459 | 23.906 43245.233 | 11.953 94.216 | 0.127 |
| | CRITICAL THINK | ING ABILITY | | |
| Total | 461 | 8970.960 | | |
| Between Groups Within Groups | 2 459 | 13.055 8957.,905 | 6.527 19.516 | 0.334 |
| | DIFFERENTIAL VA | LUES INVENTOR | tΥ | |
| Total | 461 | 15312.247 | | |
| Between Groups Within Groups | 2 459 | 155.290 15156.957 | 77.645 33.021 | 2.351 |

 $a_{F_{.05}} = 3.02$



CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, AND IMPLICATIONS FOR FURTHER RESEARCH

Summary

It was the purpose of this study to contribute to a more complete understanding of the freshmen commuter students at a large, primarily residential university and to determine if any differences existed between the commuters and those students living in residence on the campus. More specifically, the attempt was made:

- To determine in what ways commuter students were similar and/or dissimilar to freshmen resident students at the time of college entrance.
- (2) To determine how selected first year college experiences of commuter students compared with the experiences of first year resident students at the same institution.
- (3) To determine how commuter students compared with resident students with regard to academic achievement and to the nature and direction of change in critical thinking ability, in attitudes of stereotypy, and in value orientation during the first year.

A review of the published literature revealed some support for the notion that a campus climate exists and that the nature of this campus climate or environment is determined not only by the faculty and the formal academic pursuits but also by the student body, their associations, and their

activities. It was purported that curriculum and extracurriculum combine to create ways of life which not only instruct but influence the personality development and socialization of the individual students. It was the opinion of several writers that campus life, communal work and play, is educationally valuable. There is substantial data to show that the commuters, those living at home, do not participate as freely as the residential students in this campus environment. The commuters tended to participate in the curricular offerings but did not become as involved in the interaction of persons in a campus environment. This difference between commuters and resident students in involvement in campus life, however, was not determined by research analysis as a cause for any specific resulting educational advantage.

The sample for the study was selected from 2,746 first term freshmen at Michigan State University who had not attended another university or college, were not foreign students at the time of admission to the university, were enrolled for at least 12 credits during the fall term, and who had complete and usable test and biographical data. From this working population were selected 311 commuters and 296 resident students. Fifty-eight of the 311 commuters were designated as local commuters and the other 253 were designated as non-local commuters. Where applicable, the two groups of commuters were treated separately in the analysis. Those students from the initial sample who were still enrolled at



the end of the first year and for whom usable post-test data was available were included in the end-of-year portion of the study.

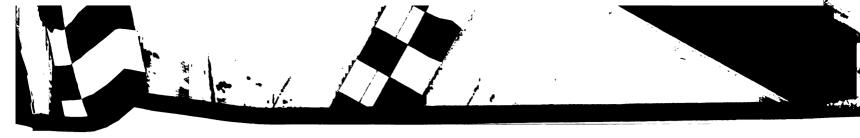
During the Freshman Orientation Week, the following instruments were administered to the students: The Test of Critical Thinking, Form G; The Inventory of Beliefs, Form I; the Differential Values Inventory; the College Qualification Test; and a Biographical Data Sheet. The initial comparisons were developed from an analysis of this data and from information received from various university agencies. At the end of the freshman year, retest information was obtained by use of the following instruments: Test of Critical Thinking, Form G; The Inventory of Beliefs, Form I; and the Differential Values Inventory.

An Experience Inventory was also administered and personnel records were searched for grade-point averages and indications of withdrawal or retention. Chi-square, simple analysis of variance, "t" tests, and analysis of convariance techniques were used in the analysis of the data.

Findings and Conclusions

The more significant findings are presented in three parts corresponding to the sequence of the analysis in the previous chapter.





<u>Part One. Initial</u> <u>Characteristics</u>

1. The null hypothesis that no differences existed at the time of enrollment among the three groups with regard to age, nativity of parents, father's education, mother's education, father's occupation, mother's occupation, rank in high school graduating class, religious preference, curricular major, amount of education desired, and source of financial support was rejected and the research hypothesis was accepted.

Few but important differences were noted between the local commuters and the resident students. The local commuters when compared with the resident group represented families with a higher educational-socio-economic level and more fathers were associated with education as a profession. More of the local commuters ranked lower in their high school graduating class and they were more likely to have "no preference" as a major field of study at fall registration or be enrolled in liberal or general educational programs. No differences were noted in terms of age, source of financial support, academic ability, nativity of parents, religious preference, or amount of education desired.

The non-local commuters, on the other hand, were older than the resident students, were more likely to come from families with a lower educational-socio-economic level, and they received less financial support from home. The non-local commuters were also more likely to be "no preference"



or enrolled in liberal or general education programs than were the residents. No differences existed with regard to rank in high school graduating class, nativity of parents, religious preference, or amount of education desired.

2. The null hypothesis that no difference existed among the three groups in terms of aptitude for college work as measured by the <u>College Qualification Test</u> was rejected and the research hypothesis was accepted. Separate analysis revealed that the non-local commuters when compared with the resident students had a lower mean score on academic aptitude. No difference was noted between the local commuters and the resident students.

Part Two. First Year Experiences

3. The null hypothesis stated:

No differences exist amont the three groups in terms of the following first year experiences: (A) faculty contact; (B) class experiences and courses; (C) study practices; (D) educational intentions; (E) attitude toward the institution; (F) immersion in campus life; and, (G) personal interaction with peers.

It was not possible to accept or reject this hypothesis in its entirety but the results generally supported the conclusion that there were no differences among the three groups in terms of faculty contact, class experience and courses, study practices, educational intentions, and personal interaction with peers. Significant differences were noted among the three groups in terms of attitude toward the institution and immersion in campus life. More specifically, the first

year experiences of the local commuters tended to be very similar to the experiences of the resident students. With only an exception on one item, no differences were noted with regard to faculty contact, study practices, educational intentions, or attitude toward the institution. The local commuters did take more advantage of the opportunity to see faculty members with whom they were not enrolled at the time. The local commuters were also quite like the resident students in the amount of immersion in the life on campus except that they spent less time in discussion with friends and they tended to come on campus only for structured activities. They were different than the resident students in that they saw class as the most important vehicle for learning. They missed very few classes.

The non-local commuters also tended to be very much like the resident students in the amount of faculty contact, study practices, and educational intentions. The non-local commuters, however, had more doubts about Michigan State as the educational institution best suited for their needs. They tended to look at the classroom experiences as the most important vehicle for learning, missed fewer classes, and were more likely to study in the library. A difference was noted on 11 of the 12 items which attempted to determine the students' immersion in campus life. The non-local commuters did not participate heavily in any phase of campus life. They did not become involved in discussion with friends as



often as the resident students and they did not regularly date the same person at MSU.

Part Three. End-of-Year Analysis

- 4. The null hypothesis that no difference existed among the three groups in terms of academic achievement as measured by the grade-point averages for the freshman year was accepted and the research hypothesis rejected. The results of the analysis revealed that for those students who remained in school the entire year, living at home did not seem to make a difference in academic achievement as measured by the grade-point average.
- among the three groups in terms of withdrawal rates during the first year or the level of education reached after five years was rejected and the research hypothesis accepted.

 The analysis revealed that a greater percentage of the non-local commuters than the residents withdrew by the end of the first year and were permanent dropouts after five years.

 No differences were revealed between the local commuters and the resident group. As a description of the withdrawal patterns these results are important. However, lack of adequate controls prohibits one from determining if this difference is due to the place of residence or other factors such as academic ability or socio-economic status.





No differences exist among the three groups with regard to the nature and direction of change during the first year in attitudes of stereotypy as measured by The Inventory of Beliefs, Form I; value orientation as measured by The Differential Values Inventory; and critical thinking as measured by the Test of Critical Thinking.

This null hypothesis was accepted and the research hypothesis rejected. No differences were revealed among the three groups at the end of the first year with regard to the nature and direction of change in attitudes of stereotypy, value orientation, or critical thinking ability.

Discussion

The opportunity to separate the non-local commuters from the students living in the local community with their parents has been an important innovation of this study. The results of the analysis clearly supported the need for this distinction. Several differences have been noted which may, with further investigation, actually call for some redefinition of the commuter or at least demand that a distinction be made between the commuters living in communities adjacent to the campus and the commuters who travel some distance to the university. This separation is particularly illustrated in the differences revealed in immersion in the campus life and student group experiences.

Although a variety of explanations may be advanced to account for some of the various results, it seems clear



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that the local commuters reflect their close association with a community heavily populated with personnel affiliated with the university. More of their fathers were teachers and the students themselves took more initiative to spend more time out-of-class with faculty with whom they were not enrolled in class. It is suspected that the geographic limits of the local commuter might be defined in terms of the spread of the faculty families in the local communities surrounding a college or university campus.

A few of the other results from the analysis of the local commuters may reflect local conditions which are less applicable to other university situations. The families tended to be in a higher educational-socio-economic class. The fact that these local commuters ranked lower than the residents in high school graduating class despite the fact that no difference was noted in their academic aptitude may also be accounted for by the local community conditions. Almost 90 per cent of the graduates of the local high school attend college and it is a highly competitive academic environment.

Once the influence of the university on the local community has been isolated, it seems more plausable that the results of this study may have implication beyond the confines of the particular university where the study was completed to other large, residential institutions.

The commuters who are traveling some distance to the university view the class experience and their academic work

as the main source of educational advantage. This is illustrated by their response to a number of questions and by their better attendance record at classes despite the difficulty of travel when compared to the resident students. However, it is no wonder that they would respond this way since they did not participate in any other phases of campus life and were not involved in the informal discussions which are believed to be a valuable part of the students' educational program. They were more likely to know campus only through the classroom experience.

The non-local commuters spent more time in the library, which suggests the need for study areas and suggests that the resident students had alternate study areas such as the residence unit. The fact that the non-local commuters spent more time in student gathering places and local grills suggests the need for such facilities on the campus for these commuters and also suggests that the resident students use their residence unit as a meeting place with friends. The non-local commuters' lack of immersion in the campus community suggests the need for a re-evaluation of the program of co-curricular activities presently developed.

The non-local commuters did not have the financial support from home that the resident students enjoyed and they spent more time working to support their educational endeavors. This suggests that it is possible that the commuters lived at home by necessity and that they might have had less time and energy to devote to campus affairs. There

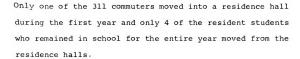


also seems to be less committment to a particular educational program or at least more unsureness about educational objectives. The difference in educational background in the family also could have affected this attitude toward the educational experience. Their living at home might very likely have contributed to the lack of a sense of identity with the institution and a lack of educational direction.

It is important to note that the differences in exposure to campus life did not prove to have any effect on achievement or on the desired changes in attitudes of stereotypy, value orientation, or critical thinking ability. The results do not substantiate the opinions of those writers considered earlier who indicate that involvement with the peer-group and participation in campus life does have a noticeable impact on student achievement and development. Such impact was not realized in terms of the specific variables measured. The campus community might still contribute qualities of "give and take" and certain advantages which are not measured by the instruments used in this study.

At the outset of this study, it was suspected that the students who lived at home might not remain at home all year but might move back and forth as appropriate during the school years. This also would make the definition of a commuter more difficult. Although this study only considered the first year experiences, this suspicion was not verified.



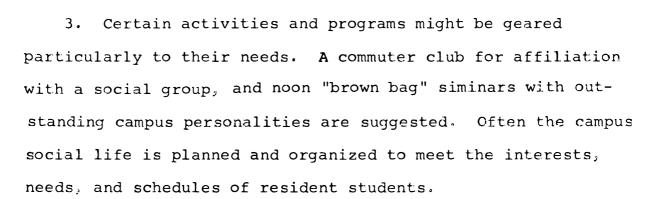


Several administrative actions may be suggested which follow directly from the results of this study. It is most important that the commuters not be overlooked in preoccupation with the resident students. This study revealed enough differences to suggest that the commuter students, especially those living beyond the limits of the local community, be treated as a distinct portion of the student body—with special needs, problems, concerns, and potential. Particular attention is given to the areas of responsibility which concern the college personnel administrator.

The possibilities are as limitless as ones imagination and the following ideas may be useful:

- This group might be singled out during orientation programs. The facilities and opportunities available to the commuter students might be reviewed, special concerns which they have might be discussed, and academic counseling and financial aid could be considered.
- Facilities might be provided which meet the needs of the commuters. Lunch rooms, study facilities, a lounge for rest, and even a separate commuter center might prove rewarding.





- 4. Emphasis might be given to communication of counseling opportunities for commuters. Certain counselors might even give special attention to the commuter, his problems, home conflicts, academic needs, and questions regarding curricular programs. Special noon groups may be established for counseling or advising purposes.
- 5. The financial aids officers might give special attention to this segment of the student body that seems to be in need of financial assistance.

Other programs will vary depending on the local conditions, size of the commuter group, and staff available. The commuter should be encouraged to participate in the total campus community and events should be planned which fit the commuters schedule. Harold Taylor in The Future of American Education expresses his educational philosophy when he states:

We must make the life of the college student an immersion in a total environment. . . . In such a community it would be natural to compose music, to write stories, to perform experiments, to discuss politics, to play games, to learn facts, to govern oneself, and



to act cooperatively in the collective government of the $\mbox{whole.}^{\mbox{\sc l}}$

If such an experience is important and if the commuters are to be provided with equal opportunities, we must give attention to them as unique members of the university community.

Implications for Further Research

This study suggests areas for additional investigation. First, it seems important for individual institutions to develop descriptive studies to determine the nature of their commuter population. Administrative action and program development must be based on an understanding of the characteristics and needs of the entire student body.

Secondly, continued emphasis should be given to the study of the college and the university as an environmental system. What are the patterns of interaction and what effect does the community actually have on the participants?

Several questions about the commuter students remain unanswered and call for extensions of this study. An analysis of what effect distance from the campus has on the commuter students would be useful. Are differences to be noted between the students who travel 50 miles from those who travel 10 miles to the campus? Closer attention to the

¹ Matthew Stark, "Residence Living and Education," The Journal of Higher Education, Vol. XXXI, No. 3 (March, 1960), p. 161.

peer-associations and home-community relations of the commuter is merited. The effect of living at home on student withdrawal could be more carefully analyzed and the importance of the student's financial condition as a determinant of commuting needs investigation. Additional comparative studies might be designed by matching groups on important variables such as the educational-socio-economic level of the family and academic aptitude.



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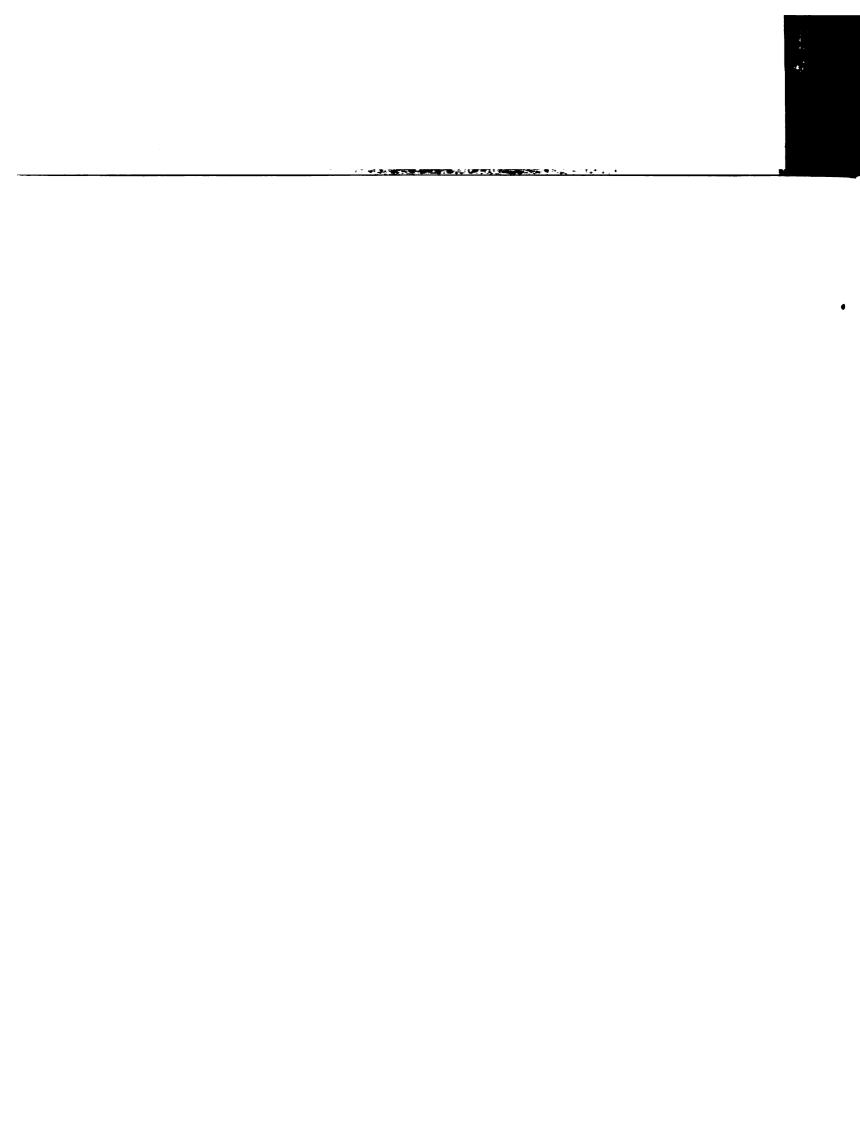
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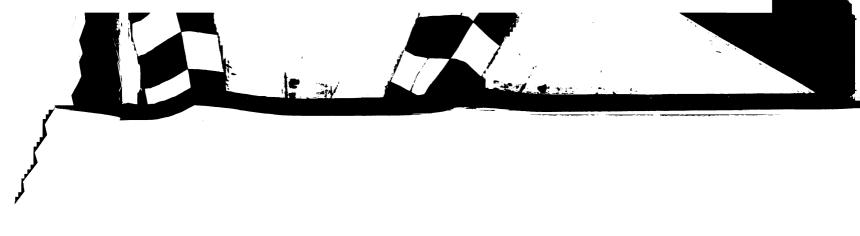
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APPENDIX A

Comparison of selected initial characteristics among the resident students, local commuters, and non-local commuters



| local com- | |
|---|---------------|
| students, | |
| resident | |
| the | |
| among | |
| ted initial characteristics among the resident students, local com- | • |
| initial | commuters |
| selected | and non-local |
| of | nd nd |
| Comparison of select | muters, an |
| | |

| Variable | Resi | Resident | Lc | Local Commuter | Non- Com | Non-Local Commuter | 4 | 7 | £ |
|---|------------------|-------------------------|---|-------------------------|-----------------|-------------------------|----|--------|--------|
| | N | % | N | % | N | % | di | < | л, |
| Age Under 18 | α | 28.72 | 14 | 24.14 | 99 | 26.09 | | | |
| 18 19 or Over | 198 13 | 66.89 4.39 | 38 | 65.52 | 151 | 59.68 14.23 | 4 | 16.574 | დ * |
| Nativity of Parents One or Both not Native Born Both Native Born | 33 263 | 11.15 | 4 4 5 | 6.90 | 23 | 9.09 | 7 | 1.529 | qsN |
| Father's Education Less than High School High School Completed More than High School | 72 73 151 | 24.33 24.66 51.01 | 6 10 42 | 10.35 17.24 72.41 | 84 88 81 | 34.20 34.78 34.02 | 4 | 39.712 | * |
| Mother's Education Less than High School High School Completed More than High School | 62 106 128 | 20.95 35.81 43.24 | 4 1 4 4 4 1 1 3 4 1 1 4 1 1 1 1 1 1 1 1 | 6.90 22.41 70.69 | 74 114 65 | 29.25 45.06 25.69 | 4 | 45.310 | * |



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| | Resi | Resident | Con | Commuter | Com | Commuter | 4 | 7 | ۵ |
|---|------|----------|-----|----------|-----|----------|----|--------|---|
| | N | % | N | % | z | % | ; | < | 4 |
| Father's Occupation | | | | | | | | | |
| Executive/Managerial | 46 | 15.54 | 9 | 10.34 | 23 | 60.6 | | | |
| Business | 49 | 16.55 | 2 | 8.62 | 16 | 6.32 | | | |
| Professional | 43 | 14.53 | 2 | 8.62 | 19 | 7.51 | | | |
| White Collar | 52 | 17.57 | 11 | 18.97 | 35 | 13.83 | | | |
| Teacher/Public Service | 6 | 3.04 | 16 | 27.58 | 17 | 6.72 | | | |
| Labor/Farmer | 75 | 25.34 | 2 | 8.62 | 119 | 47.04 | | | |
| Deceased/Retired | 22 | 7.43 | 10 | 17.24 | 24 | 9.49 | 12 | 88.918 | * |
| Mother's Occupation | | | | | | | | | |
| Professional/Business/ | | | | | | | | | |
| Executive | 32 | 10.80 | 12 | 20.69 | 55 | 21.74 | | | |
| Housewife | 207 | 69.93 | 36 | 62.06 | 164 | 64.82 | | | |
| Teacher/Public Service | 40 | 13.52 | 80 | 13.79 | 20 | 7.91 | | | |
| Labor | 17 | 5.75 | 7 | 3.45 | 14 | 5.53 | 9 | 16.544 | * |
| Rank in High School Graduating Class | | | | | | | | | |
| Lower Third | 2 | 1.69 | 6 | 15.52 | 12 | 4.74 | | | |
| Middle Third | 92 | 31.08 | 21 | 36.21 | 86 | 33.99 | | | |
| Upper Third | 199 | 67.23 | 28 | 48.27 | 155 | 61.27 | 4 | 25.406 | * |
| Religious Preference | | | | | | | | | |
| Catholic | 22 | 18.58 | 6 | 15.52 | 45 | 16.60 | | | |
| Protestant | 214 | 72.30 | 41 | 40.69 | 200 | 79.05 | | | |
| | | | | | | | | | |

Appendix A. Continued



Appendis A. Continued

| N % 9 47 18.58 3 94 37.15 8 112 44.27 2 171 67.59 8 82 32.41 6 138 54.54 7 41 16.21 | Variable | Resi | dent | Lo | Local Commuter | Non- Com | Non-Local Commuter | ų | 2, | , |
|---|--|-----------|----------------|------------|-------------------|-------------|-----------------------|----|--------|----|
| Preference 46 15.54 12 20.69 47 18.58 at ional/Professional 170 57.43 26 44.83 94 37.15 20.69 47 18.58 at ional/Professional 170 57.43 20 34.48 112 44.27 44.27 arcs or Less 208 70.27 38 65.52 171 67.59 ants 240 81.08 44 75.86 138 54.54 29.25 ants 240 81.08 44 75.86 138 54.54 29.25 ants 24 8.11 7 12.07 41 16.21 | | N | % | N | % | Z | % | αī | × | ጊ |
| sional 170 57.43 20 44.83 94 37.15 20 34.48 112 44.27 208 70.27 38 65.52 171 67.59 32.41 88 29.73 20 34.48 82 32.41 240 81.08 44 75.86 138 54.54 32 10.81 7 12.07 41 16.21 | Major No Preference | 46 | 15.54 | 12 | 20.69 | 47 | 18.58 | | | |
| 208 70.27 38 65.52 171 67.59 onal 88 29.73 20 34.48 82 32.41 240 81.08 44 75.86 138 54.54 32 10.81 7 12.07 41 16.21 | | 80 170 | 57.43 | 7 0 | 44.83 34.48 | 94 | 37.15 44.27 | 4 | 16.381 | * |
| of Financial 240 81.08 44 75.86 138 54.54 ts 32 10.81 7 12.07 74 29.25 arship/Loan/er 24 8.11 7 12.07 41 16.21 | Amount of Education Desired 4 Years or Less Graduate/Professional | 208 88 | 70.27 29.73 | 38 20 | 65.52 34.48 | 171 | 67.59 32.41 | 7 | .877 | NS |
| larship/Loan/ 24 8.11 7 12.07 41 16.21 | Source of Financial Support Parents | 240 | 81.08 | 44 | 75.86 | 138 | 54.54 | | | |
| | Scholarship/Loan/ Other | 24 24 | 8.11 | , , | 12.07 | 41 | 16.21 | 4 | 48.287 | * |

^aSignificant at or beyond the .05 level of confidence.

 $^{^{\}mathrm{b}}$ Not significant.

APPENDIX B

Comparison of selected first year experiences among the resident students, local commuters and non-local commuters

NS

2.311

7

73

113

24

25

90

151

Most of what I have learned this year in college I have obtained through class lectures and

assignments.

course with me before.

39.911

7

48

139

32 17

107 134

Comparison of selected first year experiences among the resident students, local commuters, and non-local commuters.

| | | | Local | a1 | Non- | Non-Local | | | |
|--------------------------------------|----------|--------|----------|------|------|-----------|-----|-----------|-----|
| Item | Resident | dent | Commuter | uter | Comm | Commuter | 70 | 7, | |
| | Yes | No | Yes | No | Yes | No | Th. | < | 4 |
| Faculty ContactIn-Class | | | | | | | | | |
| twice this wear. | 16 | 150 | 14 | 3.5 | Y Y | 65 122ª | c | 1.602 NSb | qsN |
| Most (more than half) of my in- | 1 | 200 | + |) | 3 | 1 | 1 | | 2 |
| structors this term do not know me | | | | | | | | | |
| by name. | 80 | 191 | 12 | 37 | 72 | 115 | 7 | 3.683 | NS |
| Faculty Contact Out-of-Class | | | | | | | | | |
| I have seen one of my instructors | | | | | | | | | |
| about a personal, non-academic | | | | | | | | | |
| problem. | 47 | 47 194 | 10 | 39 | 32 | 155 | 7 | .506 | NS |
| When I do see an instructor outside | | | | | | | | | |
| of class it is always for something | | | | | | | | | |
| dealing with an assignment. | 181 | 09 | 32 | 16 | 131 | 26 | 7 | 2.176 | NS |
| I have never gone to see any one in- | | | | | | | | | |
| structor more than once outside | | | | | | | | | |
| of class. | 108 | 133 | 24 | 25 | 91 | 92 | 7 | .812 | NS |
| I have gone to see an instructor, | | | | | | | | | |
| although I was not at the time | | | | | | | | | C |
| taking a course from him. | 25 | 52 182 | 18 | 30 | 49 | 130 | 7 | 5.227 | * |
| Class Experiences and Courses | | | | | | | | | |
| Only one or two students in any | | | | | | | | | |
| given class this term have ever | | | | | | | | | |
| been in the same section of a | į | | | | | í | c | JW LIE C | |

*

*

*

NSNS NS NS SN .746 .662 .131 2.562 7.277 20.928 3.247 12.751 ď£ 2 2 \sim 2 2 ~ ~ 2 Non-Local 69 28 117 159 153 79 23 Commuter 111 70 Yes 28 9/ 27 100 109 156 159 Commuter 44 43 16 25 11 ω 32 31 Local 24 വ 17 17 32 36 S 41 120 94 39 196 155 35 171 141 Resident 45 Yes 64 80 141 198 202 121 97 is spent reading the various class whether Michigan State is actually Almost all of my time in the library Class Experiences and Courses (Cont.) I have not found any of my courses to be extremely interesting this I have "cut" most of my classes at I spend more than two hours a week course work reading before doing I intend to receive my degree from During this year, I have had some I study during most of my out-of-I usually attempt to complete my Attitude toward the Institution rather serious doubts as to least two or three times. the best school for me. any non-course reading. Educational Intentions Item in the library. assignments. Study Practices class time. M.S.U. vear.

Continued Appendix B.

Д

Tine

Д 33.484 33.153 18.223 28.449 2.043 14.790 39.634 20.797 24.971 40.679 133.381 d£ 22 2 ~ 2 ~ ~ 2 2 N 2 Non-Local 162 120 138 135 64 145 70 16 Commuter 91 91 Yes 25 117 48 116 35 86 67 96 108 162 51 0 N Commuter 35 34 20 28 38 13 34 23 27 25 Local Yes 10 14 39 15 29 26 22 20 23 35 13 Resident Yes No 148 33 123 140 186 111 127 132 151 216 85 95 15 130 109 118 84 208 114 19 149 I would say that I have attended most an extra-curricular club, activity, About the only time I spend on campus campus, the Honors College, or the Concert Series. of the really big social events on During this year I was an officer or am a member of at least two extraattended no concerts sponsored by held a position of leadership in Ø usually spend more than 15 or 20 curricular clubs, activities, or During this year, I went to hear or a similar student I Attended all the home football did not pledge a fraternity or read the State News each day. saw less than four basketball sponsored by a department on visiting speaker or lecturer minutes a day in the Grill, Immersion in Campus Life is for my classes. Item campus this year. gathering place. games this year. games this year. the university. committee, etc. committees. sorority. Kewpee's,

Appendix B. Continued



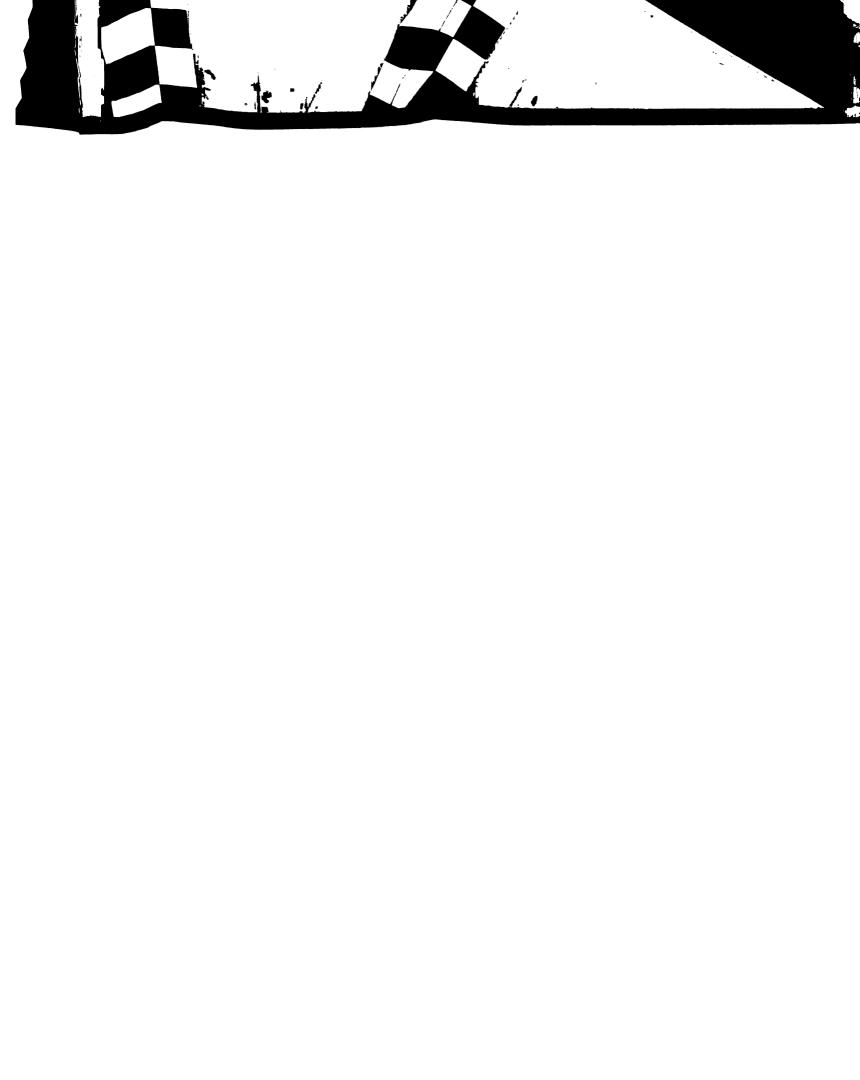
Appendix B. Continued

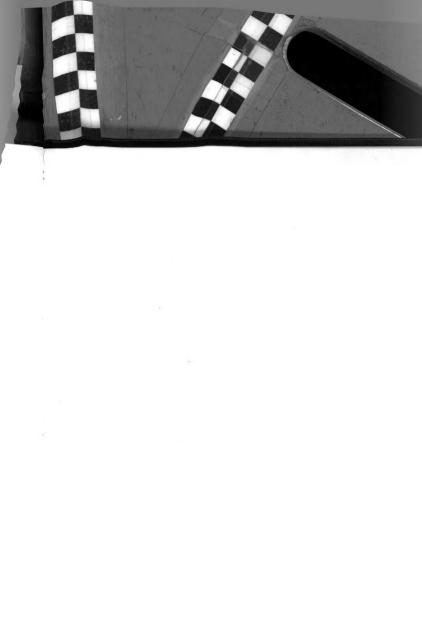
| Item | Resi | Resident | Local | al | Non- Comm | Non-Local Commuter | , | 7 | , |
|--|------|----------|-------|-------|--------------|-----------------------|-----|-----------------------|----|
| | Yes | No | Yes | οN | Yes | No | d H | × | 7. |
| Immersion in Campus Life (Cont.) I do not regularly date the same person at M.S.U. | 186 | 186 49 | 36 | 12 | 119 | 58 | 7 | 36 12 119 58 2 7.498 | * |
| Personal Interaction | | | | | | | | | |
| I date less than twice a week. | 141 | 66 | 30 | 30 19 | 105 | 81 | 7 | .446 | NS |
| I have a (boy or girl) friend in my home town whom I date | 133 | 108 | 22 | 26 | 111 | 74 | 7 | 3.279 | NS |
| Most of the "bull-sessions" or discussions in which I participate discuss academic questions such as | | | | | | | | | |
| the nature of man, world affairs, questions stimulated in courses. | | | | | | | | | |
| etc. | 74 | 74 167 | 18 | 31 | 99 | 119 | 7 | 2 1.461 | NS |
| I spend less than an hour a day in "bull-sessions" or discussions | | | | | | | | | |
| with my friends. | 100 | 100 140 | | 21 | 108 | 77 | 7 | 28 21 108 77 2 12.853 | * |

 $^{\rm a}{\rm Different}$ total N's in this table indicate some "no response" items.

bNot significant.

^CSignificant at or beyond the .05 level of confidence.







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