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AN EXPLORATION OF FACULTY ATTITUDES TOWARD ADULT STUDENTS

by

Mary Elizabeth Thompson

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education)
The University of Michigan
1974

Doctoral Committee:

Professor C. F. Lehmann, Chairman
Assistant Professor C. I. Brahce
Professor H. Y. McClusky
Professor W. J. McKeachie

ACKNOWLEDGMENTS

The writer of this thesis wishes to express her sincere thanks to the members of her committee, Dr. C. F. Lehmann, Dr. W. J. McKeachie, Dr. Howard McClusky and Dr. Carl Brahce, without whose guidance and support, this study would not have been possible.

Gratitude is especially extended to Dr. C. F. Lehmann for his guidance, cooperation and support during the entire process from the initial proposal to the completion of the manuscript. The investigator wishes to thank those faculty members who gave of their time to participate in the study.

Finally, the writer wishes to express her appreciation to her parents for their unfailing support and encouragement throughout the writer's program of graduate study.

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CHAPTER 1

INTRODUCTION

Purpose of the Study

The purpose of this study was to explore the attitudes of university faculty members toward adult students at a large research oriented university. The adult student is here defined as a person beyond the 'typical' student age of 18 to 25 years who is engaged in formalized educational activity at the university on a full-time or part-time basis. Current education literature emphasizes the need for colleges and universities to develop programs for adult students. While it is the faculty who share the responsibility with the administration for the design and implementation of new programs or for changes in old programs, there is little evidence on which to predict how faculty members feel about adult students.

The research questions asked in this study were:

1. What individual characteristics of professorial life-style, e.g., chronological age, sex, are related to a positive or negative attitude toward adult students?

2. Do professors who have more contact with adult students hold more positive attitudes than those who have little contact with adult students?

3. Does the type of contact with adult students make a difference in the attitude of faculty members?

4. Will there be a relationship between professorial attitude and the professor's area of subject matter specialization?

5. Do professors who give priority to advising and teaching roles have a more positive attitude toward adult students?

6. What implications do faculty attitudes toward adult students have for the development of programs for adult students?

The study investigated the perceptions of faculty members at the University of Michigan's Ann Arbor campus. It was anticipated that a faculty member's attitude toward adult students would be influenced by his chronological age, his subject matter specialization and the kind of contacts he had had with adult students.

Background of the Problem

Some knowledge of the socio-cultural context in which institutions of higher learning find themselves operating in the 1970's is essential to an understanding of faculty perceptions of adult students. The background relevant for this study comes from the history of the University of Michigan and its place in the American system of higher education as well as from a brief description of the changes that have taken place in the social structure of American society.

American society and its institutions of higher education have developed in close contact with each other (Williams, 1970; Handlin and Handlin, 1970; Kerr, 1971). Today's university finds itself intimately bound to the cultural revolution our society is presently experiencing. Only once before since the founding of Harvard has higher education faced such a period of great transition (Kerr, 1971:245). For most of this time, higher education existed in a climate of progress marked by confidence in its goals and a clear sense of its purpose.

From 1636 to 1820, higher education served the forces unleashed by the Renaissance and the Reformation. European culture was brought to and extended within American society. The religious doctrines of different sects were dominant in the creation of colleges and they provided the basis for most of the teaching. The culture of the Old World and the religious morality of the new were the primary themes of the academic world. There was a clear idea of the attributes of the educated man and of the curriculum that would prepare him best. This established prototype of academic life went unchallenged until the 1820's. In the fifty years that followed, the old regime remained and slowly dwindled so that by 1870 a new order prevailed in institutions of higher education.

The period from 1820-1870 was marked by turmoil in American higher education. Students protested against <u>in loco parentis</u> and the fixed curriculum. Some faculty mem-

bers had new ideas about developing a system of electives and raising intellectual standards. State colleges and universities were founded and began to replace the appeal of the colonial seminary or private colleges on the East coast.

It was the establishment of schools like the University of Michigan that was the cause of some of the turmoil in higher education at this time. Established by law in 1817, the University of Michigan was modeled not on the British universities that had influenced the seaboard colleges but on the University of France founded by Napoleon. It was not a university but a centralized system of state supported schools under the direction of a minister of public instruction (Peckham, 1967:5). At a time when the curricula of Eastern schools were heavy with ancient languages, literature, religion, philosophy, mathematics and history, the University of Michigan emphasized science and introduced economics. A second difference was that this degree-granting university was not to be an isolated tower of learning but the center of a state-wide educational system which it would supervise. A third difference was that the professors themselves were to run the university. Faculty control made the university non-sectarian and oriented toward scholarship rather than the wishes of a board of churchmen. Thus Michigan launched a radical departure that would be criticized for several decades. The last and fourth difference was that the system would be supported by taxation.

Even after the State of Michigan was admitted to the Union in 1837, the idea of education from first grade to a University degree as a continuous flow was maintained. The university would be made up of three departments: literature, science and the arts; medicine and law. Control of the university was placed in a Board of Regents.

Then, in 1849, the state constitutional convention gave the Board of Regents, "the general supervision of the university and the direction and control of all expenditures from the university funds' (Peckham, 1967:31). Several court tests took place before future state legislatures came to recognize the independence and autonomy of the Board of Regents. But given this power from the constitution and its own funds, the Board of Regents was free to develop the best university it could visualize and afford.

In 1852, Henry Philip Tappan became president of the university. Tappan's aim was to develop an institution which would cultivate the originality and genius of the talented few. To achieve this goal, Tappan advocated that a university professor should engage in research as well teaching, and that his students should participate to some degree in his research. Tappan wanted to shift the emphasis from dissemination of learning to the advancement of knowledge. His ideas were based on the German model of universities. In the 1850's and the early 1960's, Michigan became a notable battleground of the state university versus the denominational college. Henry Tappan tried to separate

the university from all sectarian influence (Brubacher and Rudy, 1968:151). Tappan's opinions carried great weight and many people were later to claim that the beginning of the American university came in Ann Arbor not Cambridge. Due to deterioration in his relationships with the Board of Regents, Tappan was removed from office. Nevertheless, his ideas were ahead of his time and they gave the university a conception of what it could be. The University has moved in that direction ever since.

Erastus Haven became president in 1863 and served for six years. Haven had no reforms to offer but he continued Tappan's policies with competence and diplomacy. The university increased its enrollment partly due to the post war bulge in 1865-66 and it became the largest university in the country, edging out Harvard. In August of 1869, the Board elected Professor Henry S. Frieze as president pro tem. Frieze held this position for two years while the Board searched for a new president. But Frieze's two years as president were marked by three important achievements - the admission of women, the inspection of high schools and the erection of an auditorium where all the students could be brought together. While the University of Michigan was established during a period of turmoil in higher education, it became a leader of reforms due to the ideas and influence of Henry Tappan.

From the end of the Civil War until the late 1960's, higher education was molded and influenced by three socio-

cultural forces (Kerr, 1971:247). These three forces were industrialization, populism and nationalism. The institutions of higher learning in America led the world in the transition from elite to mass higher education, in service to the productive forces of society and in the pursuit of scientific discoveries.

During this century, the University of Michigan had six presidents. Each of these men contributed to the development of Michigan as a university. The changes that were made were consistent with changes in American society as a whole. Throughout this period, public belief in and support of higher education was also constant. The goal of the nation and the colleges and universities was 'success' (Veysey, 1965:439). More and more people looked at college attendance as the key to a better life for their children.

James B. Angell followed Henry Frieze as president and served in the office for almost forty years. During this time, a marked shift occurred in the role to be played by the president. University growth began to force internal and external changes so that the institution Angell knew so intimately during his first twenty years as president would never again be the same. The growth of the university is attributed in part to the reputation of the faculty as good teachers with high goals. Although the faculty did research and published, they were first of all good teachers (Peckham, 1967:85). In the face of growth, the president's intimate knowledge of the abilities of his

faculty was lost. Growth required a corporate organization with a non-teaching administration of divided responsibilities. By the time Angell retired, the responsibilities of the president had so multiplied that he had to specialize just as the faculty did and his specialty was educational administration.

President Angell was almost the last of the great educators whose campus reflected the man. His successor would have to adjust to presiding over a group of enclaves governed by deans and his primary responsibility would be that they moved in harmony. In the future, the concept of the university president as universal man would be left behind just as the concept of the faculty as a community of scholars would be true only in the literal sense of place. Some of the reasons behind this change were the proliferation of knowledge, the depth of research, the increase in the number of colleges on campus, the increasing enrollments and the conflicting demands of society for specialized education.

Dean Hutchins was named as Angell's successor and he held the office through a ten year period that included World War I. One of the more significant actions taken by the university administration during this time was the establishment of the Department of Engineering Research in the College of Engineering. This department would be the forerunner of programs of government sponsored research. The department was to undertake research projects for

specific industries which would bear the costs of these experiments under contract arrangement. This provided the university with a new method of increasing its funds and one which grew to gigantic proportions.

Another avenue of increased funding was developed by Hutchins due to the strong interest he took in the Alumni. He considered them an untapped source of funds. He wanted to reclaim the Alumni by organization and to persuade them to maintain a continued interest in the university by advertising it so as to attract the best new students and by contributing financially to its development.

When Hutchins resigned in 1920, the Regents selected Marion LeRoy Burton as the next president. Burton was the president of the University of Minnesota and he had raised 10 million dollars for that institution. In the post war world, more young people wanted a college education and the Regents realized that the university was in need of more buildings, more faculty and more money in salaries.

Burton was not intimidated by great size or great growth. He was under no illusions about the significance of new buildings to the goals of an institution of higher learning. He was concerned that Michigan could meet the real tests of a university. Burton intended to raise the academic standing so that a degree from the University of Michigan would be one of increasing distinction. He felt that the university suffered from two anti-intellectual tendencies. One was the decline of the classical curriculum

and the rise of free course elections with the result that there was a lack of unity in the intellectual appeal of the university. The second tendency was movement toward excessive departmentalization. Burton felt that this tendency gave students the impression that the universe was departmentalized. Burton died in 1925 but his ideas about higher education could be a valuable reminder to the university administration of today.

Clarence Cook Little became the fourth president during this century. Little favored a select student body, character emphasis, small dormitories and a common curriculum for the first two years. He wanted to enroll all freshmen and sophomores in a separate University college. The faculty was opposed to this idea since they felt it would revive a collegiate ideal of education and for a long time they had been committed to a university ideal. This conflict caused Little to resign the presidency in January, 1929.

The Regents appointed Alexander G. Ruthven, the dean of administration, as the next president. Ruthven introduced a corporate type structure into the organization of the university. He believed that the sole business of faculties was not just to teach and investigate but to determine educational policies for their units. He also believed that the extension service was a legitimate function of the university and he encouraged its further development. Above all, Ruthven was an excellent manager.

He neither dodged nor postponed decisions. He created an administrative set-up by which he could be fed information and policies could be executed. He retired in 1951.

Harlan Hatcher became the last president of this quiet century. The university grew and diversified and enrollments steadily increased. The history of the University of Michigan repeatedly reassures the reader that the university remains committed to "teaching (always first), research and public service." (Peckham, 1967:235). Once having reassured us, the text goes on to discuss changes in administrative hierarchies and the development of research project after research project. Perhaps the answer is found in a quote from Vice-President Sawyer:

> "At every opportunity, this office has exerted influence to continue the integration of research with instruction. Our primary purpose is to pass on to new generations a cultural heritage which research is constantly expanding, testing and scrutinizing. . . No university so far as I know, has been more successful than the University of Michigan in integrating its research program with its graduate teaching and training activity. As long as this true, I cannot be concerned about the size of our research program. . ." (Peckham, 1967:244).

While research may be integrated with teaching at the graduage level, Sawyer does not mention what happens with the undergraduates.

Hatcher was succeeded by Robben Fleming, but higher education had entered a period of new turmoil. Campus disruption, abandonment of traditions, and seemingly insatiable demands for change brought tension into the academic atmosphere, exposed weaknesses in campus policies and procedures

and aroused public suspicion where there had been acceptance and approval. In discussing why the University of Michigan never exploded during the late 1960's and early 1970's, Gamson (1973) attributes it to a social structure based on both formal and informal linkages within the university community, the openness and flexibility of higher administrators and student activists and a president (Robben Fleming) who knew whether to use the formal or informal structure during a crisis. Given this situation, Gamson admits that there are still conflicts for which solutions seem dim. She summarizes the pressures as follows:

> "The student pressure for shared power in academic matters as well as on basic university policies, such as budget decisions and classified research, implies struggle between students and new groups - the faculty on the one hand, the regents on the other. The press for a more egalitarian institution - for more blacks and women throughout the ranks, for greater student involvement in curricular matters, for compensatory programs of all sorts for various groups - conflicts directly with the values of many of the faculty. Perhaps the greatest barrier to the solution of these problems is the budgetary crisis. . . .The informal networks seem to have worked best in an expanding institution, when the major groups were in minimal competition over financial resources. But the resilience of informal structure becomes sorely tested in times of scarcity, and it is not clear that there are formal structures with the legitimacy to mediate the scramble for funds." (Gamson, 1973:194-5)

For a long time, University of Michigan presidents were operating in periods of expansion. This is true no longer. Higher education has risen, declined and changed as the larger society has changed. The directions for the future are different in character from what academicians,

particularly those employed by institutions of prestige, have been accustomed to in the past.

The modern campus must learn to exist in a dependency relationship with the broad environment. A clear understanding of the dynamics of such a relationship could be a long way off. However, it is known that the shape of any system of higher education is determined by its history and by three contemporary conditions. These conditions are: consumer demand or the pressure to enroll; the placement of graduates as determined by manpower requirements and the inner logic of the system. The last condition refers to the decisions of the Board of Regents, administrators and faculty about who is admitted, what is taught, who does the teaching and what other services the university should perform.

When these conditions are examined along with recent changes in the social structure of American society, it is easily seen that the problems universities face today are more complex than they have been for a century. If institutions of higher learning will take the initiative to respond, the changes in American social structure can be used as a resource in solving their problems. One of the interesting changes that has occurred is the change in perception of the life span. Historically, the life span was chopped up into nicely compartmentalized segments labeled childhood, formal education, full-time work and the retirement. As a consequence, higher education has always focused on one age

group--those eighteen to twenty-two years of age. The campus became a type of youth ghetto.

Now people are shifting their traditional view of life. Life expectancy has increased to 71 years of age and by the year 2000, nearly thirty percent of the American population will be over fifty. Simultaneously, the work week has been reduced. Many workers are retiring early and they begin second careers. The Woman's Liberation Movement has brought more wives and mothers back to school and administrators are trying to figure out how to handle Affirmative Action programs. At the same time, many college-age youths are rejecting the endless incubation of full-time formal education for a pattern of work and study. Clearly, the rigid life cycle is breaking up, and the implications for colleges and universities and their faculties are enormous.

This discussion has shown that historically, the University of Michigan has always been a leader of reforms in higher education. The institution has built a fine reputation for quality education. The evidence for how it is responding to the present crisis is not yet in. However, the future of the institution will depend on its ability to restore a balance between research and teaching; on its ability to create options for a student body diverse in age as well as social background and on its ability to create options in the appointment of faculty members to prevent an imbalance based on chronological age.

CHAPTER II

REVIEW OF THE LITERATURE

The interpretation of the results of this study is based on research on the definition and measurement of attitudes; on attitudes toward age and aging in American society as well as information about faculty members.

Definition and Measurement of Attitudes

The basic theoretical assumptions concerning attitudes are drawn from the works of Rokeach (1969), Osgood et. al. (1957) and Doob (1947). There is disagreement in the social science literature over whether the concept of attitude should be viewed as having a number of components-cognitive, feeling and action tendency (Krech et. al. 1962) or viewed as being unidimensional (Fishbein, 1971). For the purposes of this study, an attitude can be defined as an enduring organization of beliefs around an object or a situation predisposing one to respond in a preferential manner (Rokeach, 1969).

According to Osgood et. al. (1957), most theorists are agreed that attitudes are learned and implicit. They are predispositions to respond in an evaluative sense. This idea is related to another shared view--that attitudes can be ascribed to some basic bipolar continuum with a neutral

or zero reference point, implying that they have both direction and intensity and that there is a basis for a quantitative measure of attitudes.

Attitudes can be measured on the basis of inferences drawn from the responses of the individual toward an object. One of the most widely used methods for measuring attitudes is the attitude scale which consists of a set of statements or items about which the person indicates his approval or disapproval. His pattern of responses to the items provides a way to infer something about his attitudes. More recently, two other approaches have been developed in an attempt to improve the validity of attitude measurement. These are: measurement by disguised techniques, and measurement by a semantic differential rating instrument. It is the latter that was used in this research.

Osgood, Suci and Tannenbaum (1957) developed the semantic differential rating instrument. Their research gave rise to the following hypotheses:

1. The process of description or judgment can be conceived as the allocation of a concept to an experiential continuum, definable by a pair of polar terms.

2. Many different experiential continua, or ways in which meanings vary are essentially equivalent and hence may be represented by a single dimension. The functional equivalence of many alternate continua was evident in both the studies on synesthesia and those on the changing structure of social stereotypes. It is this fact about language and thinking that makes the development of a quantitative measuring instrument feasible. If the plethora of descriptive terms we utilize were in truth unique and independent of one another, then measurement would be

impossible.

3. A limited number of such continua can be used to define a semantic space within which the meaning of any concept can be specified. This opens the possibility of measuring meaning in general objectively and specifies factor analysis as the basic methodology (Osgood, 1972:31).

Consequently, using a semantic differential, the meaning of a particular concept to a particular individual can be specified quantitatively as a particular point in the multidimensional space defined by the instrument.

Further research evidence (Osgood and Suci, 1972:55) points to the existence in meaningful judgments of three major connotative factors: evaluation, potency and activity. The evaluative factor accounts for the largest portion of the extracted variance. These three factors are taken as independent dimensions of the semantic space within which the meanings of concepts may be specified.

Of the three factors, the evaluative factor is the most conspicuous. It is this factor which corresponds to what is called the valence of the attitude. The validity of the semantic differential as an attitude test is suggested by the substantial correlations which have been found between evaluative scale ratings and scores on Thurstone and Guttman scales. The reliability of the semantic differential has been shown to be satisfactory in studies by Osgood et. al. (1957).

One of the most common criticisms of attitude scales is that they do not allow for the accurate prediction of actual behavior in real-life situations. Most proponents

of attitude measurement have agreed that attitude scores indicate only a disposition toward certain classes of behaviors and that what overt response actually occurs in a real life situation depends also upon the context provided by that situation. The attitudinal disposition itself accounts for only part of the intervening state which mediates between situations and behaviors. The meaning of the concept to an individual subject is richer by far than what is revealed by his attitude score. Within the theoretical framework underlying research on the semantic differential, attitude is only one of the dimensions of meaning and hence it provides only part of the information necessary for prediction. By combining judgments derived from scales representing other dimensions with those derived from the evaluative factor alone, additional information can be obtained and prediction improved (Osgood et. al. 1957:198-199).

Since the purpose of this study was to investigate attitudes toward students based on their chronological age and the chronological age of the subjects, a semantic differential for age developed by Rosencranz and McNevin (1969) was selected as one of the instruments to be used in the study. The scales in this instrument were derived from extensive lists compiled by subjects of all ages. These subjects were asked to list bipolar sets of adjectives desriptive of attributes or behavioral characteristics of persons of all ages. The resulting scales were administered to another group of subjects who were asked to use them to

evaluate a person between the ages of 20-30, a person between the ages of 40-55 and a person 70-85 years of age. A factor analysis was then performed and used as the basis for refining the instrument. As a result of this analysis, the instrument was reduced to 32 bipolar scales.

This refined version of the instrument was tested on a group of subjects and a factor analysis was performed which yielded three major dimensions. Rosencranz and McNevin did not use "evaluative," "potency" and "activity" as their factor designations. Rather they chose the designations Instrumental-Ineffective for the evaluative score, Autonomous-Dependent for the activity score and Personal Acceptability-Unacceptability as the potency score.

While not conclusive, the research evidence on attitudes toward age points out that perceptions about age are multidimensional and vary depending on culture, age of the perceiver, the reference person or group and the context of the discrimination. Therefore, this study demanded the use of an instrument that was designed to measure multidimensional behavior.

Attitudes Toward Age and Aging

Investigations of perceptions and attitudes toward older people differ in a number of respects such as source of data, instruments used and extent of analysis of attitudes in terms of other variables. A crucial distinction between these studies appears to be in the unit of analysis. One type of study focuses on a cultural or society-

wide unit of analysis and the other concentrates primarily on individual or cultural sub-groups. This study fits into the latter type of inquiry.

However, an assessment of findings from studies of individual perceptions of older people is hampered by the nature of the samples used (generally college students), the nature of measurement instruments (lacking comparability across studies) and reporting practices (often brief and low on technical detail). These studies suggest that old people and old age are meaningful concepts toward which somewhat distinctive perceptions are held by young and old respondents (Aaronson, 1966; Eisdorfer and Altrocchi, 1961; Hickey et. al. 1968; Hickey and Kalish, 1968; Tuckman and Lorge, 1953c, d). Not only are views of old age not uniformly negative, but evidence suggests that orientations are multi-dimensional (Kogan, 1961a). Where factor analytic procedures are used, a strong evaluative factor is usually noted (Eisdorfer and Altrocchi, 1961; Kogan and Wallach, 1961; Rosencranz and McNevin, 1969). Beyond this, the number and character of factors varies from study to study. More work is clearly needed and studies should include the expectation that the complexity of views will vary characteristically by the socio-cultural context and interactive relationship.

Studies of correlates of perceptions of the elderly have explored a relatively narrow range of variables. The main correlates are age, sex, social class, ethnic group,

family, and other attitudes. The overall impression is that associations between attitudes and correlates are small and somewhat inconsistent.

In the current literature, there is almost no systematic attention to the possible effects of negative views of older people. There is a suggestion that the views one holds of the old may have an impact on one's treatment of the old, especially for such groups as physicians and other service professionals (Coe, 1967; Mutschler, 1971; Spence and Feigenbaum, 1968).

A final area of interest in individual level research about attitudes toward the old, concerns the explanation for variation in the views cited. Some possible explanations given some support in the literature are:

a) Age-ism or the existence of age prejudice is the most pervasive view to be found (Barron, 1953; Butler, 1969). Stereotyped views may stem from age-group conflicts over scarce jobs, inheritances or other valued items (Friedenberg, 1969). Slater (1963) hypothesizes a latent conflict between the traditional view of age as the summit of life experiences and a fear of magical contagion because of the unfortunate aspects of aging. Ginzberg (1952) feels that negative attitudes toward old people existed in every society and that these arise from latent feelings of hostility and rejection of the old coupled with pressures of incompatible cultural obligations for support of the aged;

b) Contact - Closeness of contact and life experiences of respondents may also be a factor in determining views of older people, although evidence is contradictory on this point (Adams, 1968; Bekker and Taylor, 1966; Drake, 1957; Pihlbad et. al. 1967; Rosencranz and McNevin, 1969; Tuckman and Lorge, 1958a); and

c) Kinship system - Aspects of the kinship system are also proposed as explanations for attitudes about old people. Related factors include birth order or family size, family conflict and tensions and socialization patterns.

It seems clear that perceptions of age are multidimensional, that they may well vary in dimensional complexity and that attempts to measure them should take these possibilities into account. Another distinction that must be pointed out in terms of the purpose of this study is that the concept of adult is not synonymous with the concept of older people or of aging in general. Research studies do not agree on chronological age descriptions of these concepts nor do they evaluate a subject's ability to judge age accurately. It would seem that the value that has been placed on youth in our society may inhibit our ability to judge age accurately.

Faculty Members

Statistics show that there is a steadily increasing influx of adult students into the universities. The increase in average life expectancy is one of the factors in

the growing prevalence of the idea that an education process limited to the first two decades of life is no longer adequate to the needs of man whose life expectancy has risen in a century from 35 to 70 years.

Research studies investigating professorial attitudes toward a particular group of students are almost nonexistent. The only research study that makes a specific attempt to identify faculty attitude toward adult students is reported by Kitchin (1972). Kitchin obtained the attitudes of evening college faculty members at three state universities by having them describe the ideal college student and a typical evening college adult student on the Gough Adjective Checklist. These faculty members reported a less favorable attitude toward adult students than they had toward their ideal conception of a college student. However, there are several points on which these results can be questioned. First, the faculty members were asked to compare two objects that are not necessarily comparable--the adult student in their classes and the ideal college student of any age or species. The results would seem more valid if Kitchin had asked them to compare the actual adult student with the ideal adult student. The second reason for questioning the results of this study is that when the subjects were grouped according to age, there were no significant differences in the data for any of the checklist scales. This could be due to the fact that the age division was made according to the median age of the

subjects who answered the questionnaire. The older group was composed of all subjects above the median age of 37 and the younger group was composed of all subjects below that age. The third limitation in this work is that of a total population of 143 only 52 subjects or 36% responded.

The Carnegie Commission of Higher Education has recommended that institutions for post secondary education make educational opportunities more available to more people, including women, employed persons, older people and persons from the lower income level. It states that higher education is prejudiced against older students. To correct this situation, the Commission recommends that opportunities be created for persons to re-enter higher education throughout their active careers in regular daytime classes, nighttime classes, summer courses, and special short term programs, with degrees and certificates available as appropriate. The impact of these recommendations on universities has not been studied.

However, in order to investigate the attitudes of faculty members toward older students one must first of all take a look at the position of faculty members on the campus today. Throughout the history of higher education in the United States, the faculty members of colleges and universities have performed unique although changing roles in society. Faculty not only wield power in the domain of higher education, but through their research they also influence a society that depends on new knowledge. The exam-

ination of faculty careers is important. Yet the research that has been done suffers from some of the same gaps found in the research on attitudes toward age such as the nature of the samples used and the nature of what is measured.

The literature on faculty members points out that the professorial role is pluralistic in terms of objectives and pluralistic in terms of clients. This last refers not so much to changes in who the students are but changes that have brought increased cosmopolitanism to the universities as they become more internationally oriented and as they place increasing emphasis on research focusing on pragmatic interests (Shull, 1972; Knapp, 1964; Sanford, 1967). Historically, faculty members are discussed in terms of their contributions in teaching, research and service.

Due to this pluralism of goals and clients, Light et. al. (1972) suggests a three strand model for examining the research on faculty careers. The three strands are the disciplinary (research) career, the institutional (teaching) career, and the external (service) career. While these three strands are interwoven, it is the disciplinary strand that dominates the academic world today. Socialization toward an academic career begins within the discipline. Included in this strand of an academic career are all events specifically connected with a discipline and its goals (not with a job). Students choose their field before they choose teaching as a career and they are influenced to prefer research from the start. Since the academic world today

emphasizes research, young faculty tend to devalue college teaching and to esteem research. The more distinguished the institution, the stronger are these patterns (Light, et. al. 1972).

Research evidence from Gaff and Wilson (1971) supports the idea of socialization into a discipline. Gaff and Wilson suggest that four cultures exist within a college faculty. These cultures are: the Humanities, the Social Sciences, the Natural Sciences and the Professions (education, engineering, business education). They advance two major reasons to account for the existence of these cultures. The first is based on a theory of socialization that asserts that persons acquire the characteristics of an intellectual culture by being socialized within it. The second major reason is based on a theory of attraction meaning that persons with particular patterns of interests and values are attracted to an intellectual culture which is consonant with their predispositions.

Gaff and Wilson examined three aspects of faculty culture-educational values, teaching orientation, and life style--in an attempt to predict difficulties in getting faculty support for interdisciplinary programs. Their data indicate that the more codified the knowledge of a field, the more likely that professors will adopt a tightly focused and structured teaching style, and that the less codified a field, the more professors will tend to adopt a wide ranging discursive teaching style. This leads to the

hypothesis that faculty attitude toward adult students will depend on socialization concerning age and its attractiveness in terms of role concepts as well as contacts and experiences with different age groups.

In the examination of other research on disciplinary careers, one cannot help but notice an imbalance in favor of the predoctorate years. This reflects on the fact that government agencies finance graduate training and they are interested in funding research about it (Light et. al. 1972:31). A study of attrition at the Ph.D. level concluded that the students who left lacked sufficient motivation, ability or commitment to their field. Attrition was higher among those who ascribed importance to "the opportunity to have teaching experience" and lowest among those who wanted opportunities for research (Tucker et. al. 1964:292). Research on the sequence of career decisions has revealed that teaching as an early career goal is conspicuously absent (Dunham et. al. 1966). The relative infrequency with which teaching is mentioned indicates how little support teaching is given in the academic world. This could account in part for the lack of acceptance of the Doctor of Arts degree. If teaching is really important in the academic world, and if teaching degrees are to be awarded, there must be educational experiences and rewards that begin early to support teaching as a primary interest.

There are two periods in the disciplinary career about which more must be learned. The first period is the

time just after a person has received the doctorate, and the second is just after he has become a full professor. We know nothing about how the new faculty member adjusts to his institutional position and a full teaching schedule nor do we know anything about what shifts in perception occur after a faculty member becomes a full professor.

The second strand in the model of academic careers--the institutional--refers to the fact that a professor's career takes place at a college or university. Research on this aspect of a professor's career is uneven. A lot has been written about allocation of time by faculty, particularly about the balance between teaching and research. Academic values and how they are related to faculty orientation toward their institutional roles are not well understood. Consequently we find that little has changed in the initial crunch of an academic career since Logan Wilson wrote of it (Wilson, 1942). The system is competitive and the faculty member must strive for prestige in his discipline, his institution and in the larger market simultaneously.

The research that has been done on institutional careers provides us with evidence on career satisfaction and factors that affect a faculty member's promotion. Two general findings have emerged. Faculty appear to be satisfied with their chosen careers and research and publications determine whether or not one advances, particularly in the better institutions. First, the evidence on career satisfaction will be examined. The character of the sample is

important in the consideration of any of the results of these studies. Different answers come from different segments of the academic profession. Studies by Eckert and Stecklein (1961) and Parsons and Platt (1968) show that faculty are very satisfied with the academic profession and that they would choose this career again. These results are based on samples of faculty from a wide range of institutions. Caplow and McGee (1965) disagree with this finding. But their sample was made up of faculty only from major institutions. Beyond this, Eckert and Stecklein show that the most satisfaction came from working with students and working with good peer associates and administrators. Faculty mentioned low salary as the primary source of dissatisfaction. The other things mentioned with frequency were poor students, too much work and routine duties (Eckert and Stecklein).

However, all faculty regardless of the level of the institution suffer from the strain of balancing teaching and research. The cultural orientation of the academic profession places early and continuing weight on discipline and scholarship. To the extent that it is possible, institutional promotions emphasize research and publications. The better the institution, the more published research counted, and the less teaching (beyond a minimum) mattered. Perhaps as pressures for disciplinary performance, as well as demands for more effective teaching increase, new definitions of work and reward may alter the profession (Light et. al. 1971:38).

Hiring and promotion at high level institutions is based on research promise for junior faculty positions and disciplinary reputation as most important for senior positions. Teaching ability in these institutions is almost irrelevant to promotion. There is some variation in this from department to department but the consideration given to teaching ability is most often very minimal. The final result is that faculties at prestigious institutions are made up of people who are selected as research minded men, and the institution then rewards them for doing what it hired them to do, thus reinforcing their inclinations toward research (Trow, 1965:168).

Parsons and Platt (1972) show that criteria for hiring depended on the rank to be filled and the type of institution. In comparing assistant with full professors, criteria differed among the better research oriented institutions but not among the low level ones. When a candidate was young, his research potential and nascent reputation were emphasized; when he matured, his reputation particularly as a specialist was emphasized. Teaching ability did not matter much, nor did personality. In hiring, as in research and time allocation, research and reputation dominated. At low level institutions, teaching ability and a congenial personality mattered most (Parsons and Platt, 1972).

Criteria for promotion are a direct reflection of the values of the academic profession. While the criteria have not changed for decades, the emphasis has. Academics feel

that the quality of teaching cannot be easily measured. Teaching is important only in so far as it is adequate. Logan Wilson noted that the demand for good teaching came from below; that for research from above (Wilson, 1942: Chp. 10). Jacques Barzun conveys the same impression:

> "Some effort, it is true, is made to recognize the stay at homes who do the most constructive teaching and thereby ballast the balloon. Money and honor are bestowed on such men in the form of Distinguished Teacher Awards. The students feel strongly and turn out in force to applaud. The trustees are sincere in their congratulations. But the aroma of the consolation prize clings to these distinctions. Even on his own campus the "great teacher" can be explained away as a lovable man of average competence--'not enough for a great university.' His counterpart, the average man of research, lovable or unlovable, is still felt to be worth more. The difference tells us what society, in its loving dependence on the new university, instinctively seeks and willingly pays for." (Barzun, 1968:62).

Parsons and Platt show that the relative importance of teaching and research in promotion depends on the type of institution. To decide whether to advance a faculty member at a prestigious institution, research is used as a major criterion seven times more often than teaching ability. In middle level institutions the criteria received equal weight. In low level institutions, research was of no importance. Emphasis varied among fields as well. Research was cited three times more often than teaching as a promotional factor of first importance in the natural sciences. In the social sciences, research was considered more important than teaching by a ratio of about four to three. Only in the humanities was teaching most often mentioned as of

primary importance in promotion and then by only a small margin. Once again, the imperative to teach conflicted with the activities most rewarded in the profession (Parsons and Platt, 1968).

So, faculty find themselves in roles with conflicting obligations based on different value orientations. One's discipline demands research, and the institution assigns duties in teaching and administration. The more highly differentiated universities emphasize research, while the less differentiated emphasize teaching (Parsons and Platt, 1968). Others argue that prestigious institutions are the model for the entire system of higher education (Jencks and Riesman, 1969).

Parsons and Platt compared faculty ideals about time with their actual use of time and they show that faculty want to teach undergraduates fewer hours. At every level of institutions, faculty wanted more time to teach graduate students. Parsons and Platt combined both kinds of teaching and thereby they argue that faculty taught close to the amount of time they stated to be ideal. Their analysis obscures the basic difference between training future researchers and enlightening sophomores. It also hides the desire to increase time for the former and decrease time for the latter. A more useful analysis might be to compare undergraduate teaching with combined graduate teaching and research.

In academic, as in other institutions, the power

structure is a subject of considerable comment. Research on faculty perceptions and actual exercise of power is lacking. Parsons and Platt found that at prestigious institutions the faculty preferred influence over formal positions of power. But this preference reversed itself in lower level institutions. In professional activities, faculty at prestigious institutions implied that a scholarly contribution brings more influence and importance than reputation or salary. But at lower level institutions consideration of salary was greater.

Consistent with this, faculty at highly differentiated institutions preferred disciplinary aspects of their institutions such as reputation and research facilities. Faculty at other institutions attached greater importance to items such as salary and teaching facilities. The locus of the institutional career is the department. No group in Parsons and Platt's study scored high on loyalty, and the proportion of faculty that were loyal to their departments barely exceeded one half at the most. (Parsons and Platt, 1972).

To summarize, data on institutional careers merely outline the reality. The most neglected area of research about academic careers remains the experience of going through one. Career experiences need to be carefully studied. There is no knowledge about how human factors affect intellectual activities. Nor do we know if these data are a valid picture of the situation for the 1970's.

Research on the third strand of the career model--

the external career--has not been done. The place of consulting, research grants and contracts, outside lecturing, private practice and summer teaching and how these activities relate to other parts of academic life is unknown.

To understand faculty careers, one must also be cognizant of the fact that careers take place in a market and the market is dependent on the economic situation of American society as well as on the place of higher education in that society. In 1971, the Carnegie Commission projected that two-thirds of all colleges and universities were already in financial difficulty or were likely to be in the immediate future. Consequently, it is this factor that will be the greatest force in making academic personnel recognize that there are limits to professional education and that their accustomed place in American society has been challenged. Traditionally, priorities have favored first the institutions, second the students and third society. Social changes provide evidence that this balance of priorities needs adjustment (Ashby, 1971; Houle, 1973).

CHAPTER III

METHODOLOGY

Plan For The Study

Two instruments were used to collect data. Instrument A was the Rosencranz-McNevin Semantic Differential, an instrument designed to measure attitudes about age for subjects of any age group. It is composed of 32 bipolar adjectives and through the process of factor analysis provides an evaluative, potency and activity score for each social object rated. The subjects in this study were asked to rate Adult Students and Typical Students on this semantic differential. The evaluative score is the attitude score and is the one of primary concern. Since the nature of the study was exploratory, the investigator felt that the other scores might prove helpful in comparing the perceptions of different groups. The evaluative score is a composite of ratings on nine pairs of adjectives, the activity score is a composite of ratings on nine pairs of adjectives and the potency score is based on the ratings of fourteen adjective pairs. These are identified on the copy of the semantic differential in the Appendix. Differences in scores on one or more of these dimensions will be helpful in prediction of directions for further research.

Instrument B was an interview schedule designed by the investigator. The questions in this schedule were based on information in the literature as well as on interviews with adult students, faculty members, and counselors. The questions were designed to elicit information from each faculty member about satisfaction with his job, preference for particular academic activities, contact with adult students and typical students and opinions about changes that could be made to facilitate the enrollment of adult students at the university. The investigator consulted Dr. Charles Cannell of the Institute for Social Research who made many helpful suggestions about the structure of the questions in the interview schedule and the interviewing of faculty members in general.

The two instruments were pilot-tested on five faculty members not included in the sample. Instrument A was used without any problem by all of these faculty members. The questions that were difficult for these subjects were Questions 11 and 12. These two questions asked the subject which age group of student was hardest to work with and which age group of student was easiest to work with. Three of the five faculty members interviewed said it was not age that made a difference but some other characteristic of students. Therefore another response called 'other' was added to the possible answers. The revised version of Instrument B and a copy of Instrument A are found in Appendix B.

Sampling Procedure

The population for this study was faculty members at the University of Michigan in Ann Arbor. The population was sampled on the basis of two strata-chronological age and subject matter specialization. Chronological age was divided into three age groups--faculty members under 35, faculty members age 35-50 and faculty members over 50 years of age. Subject matter specialization was based on Gaff and Wilson's (1971) four faculty cultures. These are the Humanities, the Natural Sciences, the Social Sciences and the Professional Schools.

A list of the departments and schools that comprise the Ann Arbor campus was prepared and divided into the four subject matter specializations. After consultation with a statistician, it was decided that a sample size of 60 subjects was needed for analysis. It was determined that the sample would be divided on the basis of age and subject matter yielding twelve strata of five subjects each.

The following matrix describes these strata:

Age of Faculty Member	Subject Matter			
	Under 35 Humanities	Under 35 Natural Sciences	Under 35 Social Sciences	Under 35 Professional Schools
	35-50 Humanities	35-50 Natural Sciences	35-50 Social Sciences	35-50 Professional Schools
	50+ Humanities	50+ Natural Sciences	50+ Social Sciences	50+ Professional Schools

Since the investigator was not permitted access to personnel information on faculty, she instructed a staff member from the office of Personnel Information Systems how to select faculty members' names using a representative sampling plan. The staff member prepared a list of 200 faculty members' names divided into the strata previously described. This number of names was chosen to allow for refusals of subjects to be interviewed and subjects who could not be contacted.

Research Questions Asked In This Study

1. Will there be a difference in attitude toward adult students and attitude toward typical students based on a faculty member's chronological age and his field of subject matter specialization?

2. Will the type of contacts with adult students make a difference in the attitude of faculty members toward them?

3. Will the subject matter specialization of the faculty member be related to the attitude expressed toward adult students?

4. Will the chronological age of the faculty member be related to the attitude expressed toward adult students?

5. Will the sex of the faculty member make a difference in the attitude expressed toward adult students?

6. Will the aspects of professorial life-style reported as being important be related to the attitude expressed?

7. Will there be a relationship between the faculty member's area of subject matter specialization and whether or not the age of the students makes a difference in his teaching style?

8. Will there be a relationship between the type of contact the faculty member has with adult students and whether or not the age of the students makes a difference in his teaching style?

9. Will there be a relationship between the aspects of

professorial life-style chosen as important and whether or not the age of the students makes a difference in a faculty member's teaching style?

10. Will the faculty member's years of experience be related to the attitude expressed toward adult students?

11. Will there be a relationship between the attitude of the faculty member toward adult students and the age of student he finds it easiest to work with?

12. Will there be a relationship between the attitude of the faculty member toward adult students and the age of the student he finds it hardest to work with?

13. Will there be a difference between the semantic differential scores and the ratings in the interview schedule developed by the investigator?

14. Will there be a relationship between age of the faculty member and his support or opposition to a reduction in the residency requirement?

15. Will there be a relationship between age of faculty member and his support or opposition to his department's acceptance of off-campus teaching assignments for adult students as a regular part of a faculty member's load?

16. Will there be a relationship between age of the faculty member and his willingness to accept or reject an off-campus teaching assignment for adult students?

17. Will there be a relationship between the age of a faculty member and his support or opposition to his department offering independent study classes for adult students?

18. Will there be a relationship between the age of the faculty member and his willingness to teach such classes?

19. Will there be a relationship between attitude toward adult students and the willingness of faculty members to support or oppose educational changes?

Data Collection

A letter was sent to each faculty member asking him to participate in the study. A brief description of the purpose of the study was included. A copy of the letter is

found in Appendix B. A telephone call a few days later requested an appointment for an interview. When a faculty member refused to participate or could not be reached, another faculty member from the same cell was contacted. In order to obtain sixty completed interviews, one hundred eighty letters were mailed. This was necessary because some faculty members had no contact with the kind of student with which the study was concerned or the faculty member could not be reached since some of the interviewing was done after the term had ended.

When a faculty member agreed to participate in the study, an appointment was made for the interview. Interviews were held in faculty member's offices. Each subject was asked to complete two semantic differentials and to answer the questions in the interview schedule. Each interview lasted an average of forty minutes.

A coding dictionary was then developed for the data collected. The interview schedules and semantic differentials were coded. This information was transferred to IBM cards for statistical analysis.

An analysis of variance program known as BMD8V was used to analyze the data for research question 1. This program performed a three-way analysis of variance for a research design with equal cell sizes. The responses on the semantic differentials were analyzed on the basis of the three dimensions identified by Rosencranz and McNevin (1969). These were an evaluative dimension, an activity

dimension and a potency dimension.

Histograms were drawn on the data. Three types of statistical tests were used to analyze the other research questions. Questions 2, 5, 6 and 10 were analyzed using the Student t-test. Questions 3, 4, 11, 12, 13 and 19 were analyzed by a one-way analysis of variance and questions 7, 8, 9, 14, 15, 16, 17 and 18 were analyzed by creating contingency tables yielding the Chi-square statistics.

Definition of Terms

For the purpose of this study, the following definitions were employed.

1. An adult student is a person beyond the 'typical' student age of 18 to 25 years who is engaged in formalized educational activity at the university on a full-time or part-time basis.

2. An attitude is a relatively enduring organization of beliefs around an object or a situation predisposing one to respond in a preferential manner.

3. A faculty member is a person appointed by the Board of Regents of the University of Michigan, Ann Arbor and holding the rank of professor, associate professor or assistant professor.

Assumptions

1. That attitudes can be measured by a semantic differential rating instrument.

2. That faculty members hold distinctive perceptions

of adult students.

3. That an individual's age influences his pattern of relationship to persons of other ages.

4. That new and expanded conceptions of the student role are important to the future of large universities.

Limitations

1. The study is limited to faculty members at one university.

2. The design of the study relied upon interview methodology.

3. The design of the study is limited by the problem of determining the validity of attitude measurement techniques.

CHAPTER IV

ANALYSIS AND FINDINGS

The report of this investigation would not be complete unless the descriptive data obtained through the personal interviews were also included. The discussion that follows is a summary of this information. It will serve as a basis for further understanding of the answers to the research questions posed in Chapter III.

The purpose of this study was to explore the attitudes of university faculty members toward adult students. It was anticipated that a faculty member's attitude would be influenced most significantly by his chronological age, his area of subject matter specialization and the kind of contacts he had with adult students.

The lack of research on faculty members, and the inconclusiveness of the research on attitudes toward age were discussed in the review of the literature. The research on attitude measurement by the use of a semantic differential supported the use of the evaluative score as the attitude score but provided little evidence on which to interpret activity and potency scores.

The subjects in this study were asked to rate 'Typical Students' and 'Adult Students' on a semantic differential. All of them were able to complete this instru-

ment, but in the course of doing so many stressed the fact that the number of 'Adult Students' with whom they came in contact was very few. Information elicited by the questions asked during the rest of the interview showed that these faculty members all had contact with students over 30 years of age. Only eight percent of those interviewed had contact with a student over fifty years of age. For almost 75 percent of the subjects, these contacts came in graduate courses. One must consider that fifty-five of the sixty subjects interviewed said they could not judge age accurately.

All of the subjects interviewed were able to describe characteristic differences in older and younger students. In general, older students were described as being more mature, more experienced and more willing to take responsibility for their work. Many faculty members felt that adult students were not as bright as younger students but they were willing to try harder. In contrast to this, there were many faculty members who described the older student as needing time to adjust to being a student, but once having made the adjustment, being better students than the younger group.

Each faculty member was asked to select from a list of thirteen items the three aspects of a professor's life-style that were most important to him. A copy of this list is found in the interview schedule in Appendix B. The four aspects of a professor's life-style chosen most frequently by the subjects were:

1. Opportunity for research and study on problems

of great personal interest;

2. Intellectual stimulation of colleagues;

3. The challenge of working with students and helping them to develop, and

4. The intellectual freedom of being able to choose one's own problems and methods of study.

In contrast to this, only five subjects chose a formal teaching situation as being one of the three aspects of professorial life that was of primary importance to them.

There were two aspects of professorial life not chosen as important by any subject; status and prestige in the community, and the teaching of extension courses. The general opinion about extension courses was that it was something the young faculty of the department did to supplement their salary.

When asked how satisfied they were with the three aspects of a professor's life they considered most important, only five subjects reported being unsatisfied. The aspects these five subjects felt were unsatisfactory were the opportunity for research, the intellectual stimulation of colleagues and the challenge of working with students and helping them develop.

All subjects were asked what was the least satisfying aspect of their job. Twenty-five percent reported committee work as being the least satisfying part of their job. Twenty-two percent reported that salary was least satisfactory and twenty-two percent felt that the growth of

bureaucracy at the university was the most unsatisfactory aspect of their job. Fifteen percent of the subjects reported that there was nothing they could think of that was unsatisfactory about their job. The remaining sixteen percent reported they were dissatisfied with rivalry and pettiness among other faculty members, the quality of the students and the facilities in which they were working. These results agree with the results of the studies by Eckert and Stecklein (1961) and Parsons and Platt (1968).

Finally, when the subjects were asked to describe what percent of their time they spent in teaching, advising and counseling, and other activities, the most common initial response was that this changed semester by semester. When pressed for an answer they reported that the amount of time spent in teaching varied from a low of 15% to a high of 50%. Advising and counseling takes from 5% to 15% of their time. Other activities such as research or committee work takes from 40% to 70% of their time. It is impossible to draw any definite conclusions about the meaning of these figures. However, they do suggest some agreement between what faculty members say is very important to them and the relative amounts of time spent in the various activities.

Report On Research Questions Asked In The Study

The first question asked in the study was whether a faculty member's chronological age and his field of subject matter specialization made a difference in his attitude toward adult students as compared with his attitude toward

typical students. A computer program known as BMD8V was used to analyze the data. For this study, six relationships were analyzed.

The three independent variables used in this analysis were the chronological age of the faculty member, his area of subject matter specialization and the five subjects in each of the twelve strata sampled. The dependent variables were the attitude score from the semantic differential for typical students and the attitude score for adult students. The lower the rating is on the semantic differential, the more favorable is the attitude of the subject. The same program was used to compare the activity scores and the potency scores for typical students and adult students.

The analysis of the attitude scores showed four non-significant relationships and two significant relationships. The relationships were not significant when subject matter specialization and chronological age of the faculty member were compared to attitude scores for students in general; when subject matter specialization was compared to the attitude scores of both types of students; when chronological age was compared with the attitude scores for both types of students and when chronological age and subject matter specialization were compared to attitude scores for both types of students.

The analysis of the attitude scores showed a significant relationship between the chronological age of the

faculty member and his attitude toward all students. This means that the oldest group of professors showed the most favorable attitude toward all students. The second significant relationship in this analysis was the difference in the attitude score for typical students and the attitude score for adult students regardless of the faculty member's chronological age or his field of subject matter specialization. Faculty members' mean attitude score for typical students was significantly lower than their mean attitude score for adult students. This means that for the entire sample typical students were viewed more favorably than adult students. Tables 1 and 2 show the mean scores and F-statistics for both of these relationships.

TABLE 1

AGE OF FACULTY MEMBER IN RELATION TO ATTITUDE TOWARDS STUDENTS

	N	Mean
Under 35	20	3.3194
35-50	20	3.0083
50+	20	2.5777
F = 11.0		d.f. = 2,48

An F-statistic of 11.0 with degrees of freedom of 2,48 is significant at the .01 level of confidence.

TABLE 2

TYPE OF STUDENT IN RELATION TO ATTITUDE

	N	Mean
Typical	60	2.7926
Adult	60	3.1444
F = 8.0		d.f. = 1,48

An F-statistic of 8.0 with degrees of freedom of 1,48 is significant at the .01 level of confidence.

For purposes of examination, the data reflecting non-significant results are presented in Tables 19, 20, 21 and 22 in Appendix A.

When scores on the activity dimension were analyzed using the three way analysis of variance design, the results showed that there were three significant relationships. The first significant relationship was on the age factor. The activity scores of the oldest group of faculty members were the lowest for all students. The second significant relationship was the faculty members' mean activity scores for adult students and for typical students. Adult students were rated lower than typical students on the activity dimension over the entire sample of faculty members. This means that on the characteristics described by the activity dimension the adult students were regarded more positively than the typical students by all faculty members. Tables 3 and 4 report these two relationships.

TABLE 3

AGE OF FACULTY MEMBER IN RELATION TO ACTIVITY SCORE

	N	Mean
Under 35	20	3.6777
35-50	20	3.4499
50+	20	3.1027

F = 7.16 d.f. = 2,48

An F-statistic of 7.16 with degrees of freedom of 2,48 is significant at the .01 level of confidence.

TABLE 4

TYPE OF STUDENT IN RELATION TO ACTIVITY SCORE

	N	Mean
Typical	60	3.7981
Adult	60	3.0222

F = 38.4 d.f. = 1,48

An F-statistic of 38.4 with degrees of freedom of 1,48 is significant at the .01 level of confidence.

The third significant relationship on the activity scores occurred when the age of the faculty member was compared with the area of subject matter specialization. For this relationship, the cell means show that students were viewed differently when compared on the basis of subject matter specialization and age on the activity dimension. In the Humanities, Social Sciences and the Professional Schools, the oldest group of faculty members rated students most positively. In the Natural Sciences, the middle age group of faculty members rated students most positively. In the Natural Sciences, Social Sciences and Professional Schools, the youngest group of faculty members rated students most negatively. In the Humanities, the middle age group of faculty members rated students most negatively.

The following table reports these results.

TABLE 5

SUBJECT MATTER SPECIALIZATION AND AGE
IN RELATION TO ATTITUDE TOWARD STUDENTS

	Under 35	35-50	50+
Humanities	3.4777	3.8333	3.2111
Natural Sciences	3.7555	3.1555	3.5777
Social Sciences	4.0555	3.5333	2.8333
Professional Schools	3.4222	3.2777	2.7888

F = 2.85 d.f. = 6,48

An F-statistic of 2.85 with degrees of freedom of 6,48 is significant at the .05 level of confidence. The three relationships that were not significant are reported in Tables 23, 24 and 25 in Appendix A.

When the scores on the potency dimension were analyzed using the three way analysis of variance, the results showed that there were three significant relationships. The first significant relationship was on the age factor as was true on the analysis of attitude scores and activity scores. The potency scores of the oldest group of faculty members were the most positive. The second significant relationship was on the potency scores for typical students compared with adult students. The adult students received the lowest (more positive) score when the entire sample was compared without regard to subject matter specialization and age of the faculty member. The third significant relationship in the analysis of potency scores

occurred when the score for each student type was compared with area of subject matter specialization. The cell means show that within each area of subject matter specialization, faculty members rated adult students lower (more positively) than they rated typical students. Tables showing each of these relationships are below.

TABLE 6

AGE OF FACULTY IN RELATION TO RATINGS ON POTENCY DIMENSION

	N	Mean
Under 35	20	3.4374
35-50	20	3.1892
50+	20	2.9803

F = 4.44 d.f. = 2,48

An F-statistic of 4.44 with degrees of freedom of 2,48 is significant at the .01 level of confidence.

TABLE 7

TYPE OF STUDENT IN RELATION TO POTENCY SCORE

	N	Mean
Typical	60	3.4154
Adult	60	2.9892

F = 11.57 d.f. = 1.48

An F-statistic of 11.57 with degrees of freedom of

1,48 is significant at the .01 level of confidence.

TABLE 8

SUBJECT MATTER SPECIALIZATION IN RELATION TO POTENCY SCORE

	Typical	Adult
Humanities	3.4428	2.9952
Natural Sciences	3.4142	3.3285
Social Sciences	3.5666	2.8285
Professional Schools	3.2380	2.8047

F = 3.31 d.f. = 3,48

An F-statistic of 3.31 with degrees of freedom of 3,48 is significant at the .05 level of confidence. The analysis of potency scores yielded some insignificant results. Tables reporting these are in the Appendix.

II

Will the type of contacts with adult students make a difference in the attitude of faculty members toward them?

No significant relationship was found between the type of contact with adult students and faculty attitude toward them. The data reflecting non-significant statistical tests are presented in Tables 19 through 68 in Appendix A. Appendix A also includes tables showing the relationships of the independent variables with activity and potency scores when these are significant. These tables were not included in the body of this report since there is no basis on which to interpret them.

III

Will the subject matter specialization of the faculty member be related to the attitude expressed toward adult students?

No significant relationship was found between the subject matter specialization of the faculty member and his attitude toward adult students. (Appendix A)

IV

Will the chronological age of the faculty member be related to the attitude expressed toward adult students?

There was a definite relationship between the age of the faculty member and his attitude toward adult students and the age of the faculty member and his attitude toward typical students. This was significant at better than the .01 level of confidence for both types of students. Faculty members in the oldest age group (50+) had the most favorable attitude scores, faculty members in the middle age group (35-50) were next and faculty members in the youngest group (under 35) were least favorable. In the tables below the attitude scores are shown in relation to the age group of the faculty member.

TABLE 9

AGE OF FACULTY MEMBER AND ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Under 35	20	3.4556
35-50	20	3.1778
50+	20	2.8000
N = 60		d.f. = 2,57
F = 7.0318		P = .0019

TABLE 10

AGE OF FACULTY MEMBER AND ATTITUDE TOWARD TYPICAL STUDENTS

	N	Mean
Under 35	20	3.1833
35-50	20	2.8389
50+	20	2.3556

N = 60 d.f. = 2,57
F = 10.625 P = .0001

In Table 9, an F-statistic of 7.0318 with two degrees of freedom in the numerator and 57 in the denominator is significant at the .01 level of confidence. The relationship between age of faculty member and attitude toward the typical student as shown in Table 10 was even more significant. An F-statistic of 10.625 with degrees of freedom of 2,57 is significant at better than the .005 level.

V

Will the sex of the faculty member make a difference in attitude toward adult students?

There was a significant relationship between the sex of the faculty member and attitude toward adult students and attitude toward typical students. The tables below show the t-test results for a comparison between sex and attitude toward adult students and sex and attitude toward typical students.

TABLE 11

SEX OF FACULTY MEMBER IN RELATION TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Male	50	3.2667
Female	10	2.5333

t = 3.8647 d.f. = 58 P = .0003

TABLE 12

SEX OF FACULTY MEMBER IN RELATION TO ATTITUDE TOWARD TYPICAL STUDENTS

	N	Mean
Male	50	2.8822
Female	10	2.3444

t = 2.4621 d.f. = 58 P = .0168

Female faculty members have significantly more favorable attitudes toward both typical students and adult students. The t-test comparison for adult students was significant at the .001 level for 58 degrees of freedom. The comparison between sex and attitude toward typical students showed a t-test score of 2.4621 for 58 degrees of freedcm and this was significant at the .05 level of confidence.

VI

Will the aspects of professorial life style reported as being important be related to the attitude expressed?

No significant relationship was found when attitude scores on adult students were compared to the aspects of pro-

fessorial life style selected by the faculty members as being important (Appendix A).

VII

Will there be a relationship between the faculty member's area of subject matter specialization and whether or not the age of the students makes a difference in teaching style?

There was a definite relationship between a faculty member's area of subject matter specialization and whether or not he changed his teaching style to accommodate adult students. The largest percentage of subjects reporting a difference in teaching style were those who taught in the Humanities. The smallest percentage of subjects to report a difference in teaching style were those in the Natural Sciences. The table below shows the relationship between the subject matter specialization of the faculty member and his teaching style.

TABLE 13

DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS COMPARED TO SUBJECT MATTER SPECIALIZATION

	N	Humanities	Natural Sciences	Social Sciences	Professional Schools
Yes	21	42.8 (9)	4.8 (1)	19.0 (4)	33.4 (7)
No	39	15.4 (6)	35.9 (14)	28.2 (11)	20.5 (8)

$X^2 = 12.683$ d.f. = 3 P = .0054

A Chi-square of 12.683 with three degrees of free-

dom was significant at the .01 level of confidence.

VIII

Will there be a relationship between the type of contact the faculty member has with adult students and whether or not the age of the students makes a difference in his teaching style?

There was no definite relationship between a difference in teaching style and the type of contact the faculty member had with adult students (Appendix A).

IX

Will there be a relationship between the aspects of professorial life-style chosen as important and whether or not the age of the students makes a difference in a faculty member's teaching style?

There was a definite relationship between the selection of the aspects of professorial life concerned with teaching and whether the age of students made a difference in a faculty member's teaching style. In the table below, the percent of those faculty members who chose an aspect of professorial life concerned with teaching is compared with the percent of faculty members who reported that the age of their students made a difference in their teaching style.

TABLE 14

SELECTION OF TEACHING ASPECTS IN RELATION TO A DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
Choice of Non-teaching Aspects of Professorial Life Style	20	20.0 (4)	80.0 (16)
Choice of Teaching Related Aspects of Professorial Life-Style	40	45.0 (18)	55.0 (22)

$X^2 = 4.3705$ d.f. = 1 P = .0366

A Chi-square of 4.3705 with one degree of freedom is significant at the .05 level of confidence. Tables showing the non-significant relationship between the other aspects of professorial life and a change in teaching style are found in Appendix A.

X

Will the faculty member's years of experience be related to the attitude expressed toward adult students?

There was no definite relationship between the years of experience of each faculty member and his attitude toward adult students or in his years of experience and his attitude toward typical students (Appendix A).

XI

Will there be a relationship between the attitude of the faculty member toward adult students and the age of student he finds it easiest to work with?

An F-statistic from an analysis of variance showed

a definite relationship between a faculty member's attitude toward adult students and the age of student he finds it easiest to work with. In the table below the attitude score is compared with the age of students.

TABLE 15

STUDENT EASIEST TO WORK WITH
IN RELATION TO
ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
18-25	7	3.778
30-50	6	3.0741
other	47	3.0591

F = 4.8452 d.f. = 2,57 P = .0114

An F-statistic of 4.8452 with degrees of freedom of 2,57 was significant at the .05 level of confidence. The faculty members with the most favorable attitude toward adult students find that the student who is easiest to work with is not one whose age is of primary importance but who has other qualities such as experience. This relationship was not significant for typical students (Appendix A).

XII

Will there be a relationship between the attitude of the faculty member toward adult students and the age of student he finds it hardest to work with?

No definite relationship was found when attitude of faculty member toward adult students and typical students was compared to different ages of students. (Appendix A).

XIII

Will there be a relationship between the scores on the semantic differential and the ratings given the adult students in the interview schedule developed by the investigator?

Faculty members were asked to compare typical students to adult students on seven characteristics. Two of these characteristics corresponded to adjectives on the semantic differential. The two characteristics that also appear on the semantic differential are "dependent" and "flexible." On the semantic differential, "dependent" was one of the adjectives that made up the score on the activity dimension and "flexible" was one of the adjectives that made up the score for the potency dimension. The ratings faculty members gave adult students on "dependent" were compared with the activity mean score for adult students. The same procedure was followed in comparing the ratings faculty members gave adult students on "flexible" with the mean potency score for adult students. There was a significant relationship between the semantic differential activity score and the rating for adult students on "dependent." In other words, faculty members who rated adult students as more dependent than typical students gave them a higher (less favorable) score on the activity dimension of the semantic differential. The table below shows this relationship.

TABLE 16

COMPARISON OF DEPENDENCY RATINGS FOR ADULT STUDENTS WITH ACTIVITY SCORES FOR ADULT STUDENTS AS ASSIGNED BY FACULTY MEMBERS

Dependence of Adult Students As Compared With Typical Students	N	Mean Activity Score
Less	33	2.9032
Same	18	2.9074
More	9	3.6914

F = 6.2997 d.f. = 2,57 P = .0034

An F-statistic of 6.2997 with degrees of freedom of 2,57 was significant at the .01 level of confidence. There was also a significant relationship between the potency score on the semantic differential for adult students and the faculty member's rating of adult students on "flexible." The following table shows this relationship.

TABLE 17

COMPARISON OF FLEXIBILITY RATINGS FOR ADULT STUDENTS WITH ACTIVITY SCORES (FOR ADULT STUDENTS) ASSIGNED BY FACULTY MEMBERS

Flexibility of Adult Students As Compared with Typical Students	N	Mean Potency Score
Less	21	3.2238
Same	18	3.0579
More	21	2.7143

F = 4.1414 d.f. = 2,57 P = .0211

An F-statistic of 4.1414 with degrees of freedom of 2,57 was significant at the .05 level of confidence.

This means that faculty members who rated adult students as being more flexible than typical students gave them a lower (more flexible) score on the potency dimension of

the semantic differential.

XIV

Will there be a relationship between age of the faculty member and his support or opposition to a reduction in the residency requirement? Will there be a relationship between subject matter specialization and a faculty member's support or opposition to a reduction in the residency requirement?

No significant relationship was found between the age of the faculty member and his support or opposition to a reduction in the residency requirement. The subject matter specialization of the faculty member was not significantly related to his support or opposition to a reduction in the residency requirement (Appendix A).

XV

Will there be a relationship between age of a faculty member and his support or opposition to his department's acceptance of off-campus teaching assignments for adult students? Will there be a relationship between subject matter specialization and his support or opposition to his department's acceptance of off-campus teaching assignment for adult students?

The age of the faculty member and his support or opposition to his department's acceptance of off-campus teaching assignments for adult students were not related. No significant relationship was found between the subject

matter specialization of the faculty member and his support or opposition to his department's acceptance of off-campus teaching assignments for adult students (Appendix A).

XVI

Will there be a relationship between age of the faculty member and his willingness to accept or reject an off-campus teaching assignment for adult students? Will there be a relationship between subject matter specialization and a faculty member's willingness to accept or reject an off-campus teaching assignment for adult students?

There was no significant relationship between age of faculty member and his willingness to accept or reject an off-campus teaching assignment for adult students. (Appendix A). There was a definite relationship between the subject matter specialization of the faculty member and his willingness to accept or reject an off-campus teaching assignment for adult students. In Table 18, the percent of faculty members from each subject matter specialization is shown in relation to support or opposition to off-campus teaching assignments for adult students.

TABLE 18

WILLINGNESS TO TEACH OFF-CAMPUS
IN RELATION TO SUBJECT MATTER SPECIALIZATION

	Humanities	Natural Sciences	Social Sciences	Professional Schools
Oppose	N=11 32.4	N=11 32.4	N=4 11.8	N=8 23.5
Support	N= 4 25.4	N= 4 15.4	N=11 42.3	N=7 26.9

$X^2 = 8.9593$ d.f. = 3 P = .0298

A Chi-square of 8.9593 with three degrees of freedom was significant at the .05 level of confidence indicating that a greater percent of those willing to teach off campus came from the Social Sciences and a greater percent of those unwilling to teach off campus came from the Humanities and the Natural Sciences.

XVII

Will there be a relationship between the age of a faculty member and his support or opposition to his department offering independent study classes for adult students? Will there be a relationship between subject matter specialization and a faculty member's support or opposition to his department offering independent study classes for adult students?

Neither age nor subject matter specialization was related to a faculty member's support or opposition to his department offering independent study classes for adult students (Appendix A).

XVIII

Will there be a relationship between the age of the faculty member and his willingness to teach independent study classes for adults? Will there be a relationship between subject matter specialization and a faculty member's willingness to teach such courses?

There was no significant relationship between a faculty member's chronological age and his willingness to teach

independent study classes for adults. A faculty member's area of subject matter specialization was not significantly related to his willingness to teach independent study classes for adult students (Appendix A).

XIX

Will there be a relationship between attitude toward adult students and the willingness of faculty members to support or oppose educational changes?

There was no definite relationship between attitude toward adult students or attitude toward typical students and the willingness of faculty members to support or oppose educational changes (Appendix A).

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Summary

This study investigated the attitudes of University of Michigan faculty members toward adult students. An adult student was defined as a person beyond the 'typical' student age of 18 to 25 years who is engaged in formalized educational activity at the university on a full-time or part-time basis. Faculty member was defined as a person appointed by the University of Michigan Board of Trustees and holding the rank of Professor, Associate Professor or Assistant Professor.

A random sample stratified on the basis of chronological age and area of subject matter specialization was selected. The total number of subjects was sixty. Each subject was personally interviewed by the investigator.

An important feature of the social space within which those designated as adult students must contend is the extent to which others are oriented to invite or shun, include or ignore, plan for or with, support or attack, and reward or negatively sanction them. The dynamism of the educational process rests in this case on the establishment of a dialogue between the more experienced and the less

experienced where the professor may be in the less experienced role. In view of this, the questions in the interview schedule attempted to find out what impact adult students had on a faculty member's teaching style. Questions about educational changes the university could make to accommodate adult students were included. Each subject was also asked to fill out a semantic differential on Adult Students and a semantic differential on Typical Students.

Data from the interviews were subjected to a number of statistical tests to determine if differences existed in faculty members' attitudes toward adult students on the independent variables being investigated.

Conclusions

Several conclusions based upon this analysis of the attitudes of faculty members toward adult students are suggested.

1. The chronological age of the faculty member was the variable that made a significant difference in the relationships investigated. The oldest group of faculty members (those over 50 years of age) had the most favorable mean attitude score toward students in general. They had the most favorable attitude toward adult students and toward typical students. The only instance in which typical students received a significantly more favorable score than adult students was when they were compared to the attitude scores of the entire sample of faculty without regard to chronological age or subject matter specialization.

2. Female faculty members rated adult students more favorably than male faculty members. This was also true in their attitude scores for typical students. The number of women in the sample was not large enough to analyze statistically the relationship between their age group and their attitude scores.

3. The subject matter specialization of the faculty member was related to whether or not he changed his teaching style to accommodate adult students. It was not related to his attitude toward students.

As reported in Chapter IV, faculty members in the Humanities and the Professional Schools changed their teaching style for adult students while fewer faculty members in the Social Sciences and Natural Sciences made a change in teaching style to accommodate adult students. An explanation for the Professional Schools scoring highly on change in teaching style is that these faculty members deal with graduate students, most of whom would be considered adult students. Faculty members expected graduate students to have experiences that gave them unique ways of contributing to a classroom situation. This was not the expectation with undergraduate students.

Subject matter specialization made a difference in whether or not a faculty member was willing to accept an off-campus teaching assignment for adult students. Faculty members from the Social Sciences were most willing to accept this type of assignment. Faculty members from the

Natural Sciences and the Humanities were least willing to accept such an assignment.

4. The kind of contact a faculty member had with adult students was not significantly related to mean attitude scores nor was it related to whether or not he changed his teaching style.

5. The findings did not confirm a relationship between a faculty member's attitude toward adult students and the aspects of his life-style which he felt were most important. There were thirteen aspects of a professor's life-style for each subject to choose from. These were divided into aspects related to teaching, aspects related to research, aspects related to economics and aspects related to the community. However, there was a significant relationship between the faculty member's choice of a life-style aspect related to teaching and whether or not he altered his teaching to allow for differences in the age of his students.

Faculty members with the exception of five subjects reported that they were moderately or very well satisfied with the aspects of a professor's life-style that were important to them.

The sources of least satisfaction for the majority of faculty members were; working on committees, salary inadequacy and the growth of bureaucracy at the university.

6. The years of experience the faculty member had were not significantly related to the attitude score for either type of student. Faculty members were also asked what age group of student they found it easiest to work with and what group was hardest to work with. The majority of subjects answered this question by saying they felt it had nothing to do with chronological age but was based on other characteristics. The characteristics most often mentioned were the interest of the student in the faculty member's specialty and/or the maturity and experience of the student. This response must take into consideration the fact that faculty members do not get to know very many students well. It was rare for them ever to be in contact with a student beyond 45-50 years of age. One must also take into account that only 5 out of the 60 subjects said they could judge age accurately.

7. The willingness of faculty members to support or oppose educational changes was not related to their attitude toward typical students or their attitude toward adult students. Given the pluralism of the faculty role on a campus like the University of Michigan and the imbalance between teaching and research responsibilities, it was understandable that attitude toward students alone would not account for a faculty member's support or opposition to educational change.

Implications

There is a need for sound research and exploration of the lives of faculty members not only in terms of their

relationships with students of different types but also in terms of other aspects of their pluralistic role. Faculty members are called upon to be researchers, teachers and administrators to varying degrees. Knowledge about faculty members based on research should be included in any framework used to analyze the problems and opportunities faced by the institutions of higher education in the United States today.

The basic raw materials of higher education are faculty, students and money. Recently, institutions of higher education have been made painfully aware that money is in short supply. The economic crunch has forced many large universities to re-evaluate their goals. Money is not the only problem. The other is the question of how to preserve innovation in a system of higher education that has reached its peak in size and how to reconcile the aspirations of a society where mobility depends on education, with the hard fact that a bachelor's degree is not the birthright of every American.

Any discussion of the implications of the data collected in this study is related to the fact that basic assumptions about higher education are being questioned by American society and to the impressions gained from using the personal interview technique.

Until recently, American society has always been supportive of higher education and its goals. Multifunctional universities, like the University of Michigan,

socialize the young, train professionals, produce research and serve as consultants to rural societies, urban communities, industry and government. But the balance of forces that kept these institutions going was disturbed by the campus eruptions of the late 1960's. The basis for the unity of teaching and research was weakened by the rapid rise of research that had little or nothing to do with teaching and by the imbalance of rewards for teaching and for research.

If public support is to be mobilized to meet the needs of institutions like the University of Michigan, those who manage these institutions will have to provide cool rational answers for the problems. To do this, universities will have to question the following basic assumptions (Ashby, 1971): that the benefits of higher education justify the massive investment in it; that devotion to pure research pays off; that educational productivity cannot be increased without loss of quality; that more higher education will promote more social mobility; and finally, the assumption that multifunctional universities will be the right concept for the year 2000.

While the findings in this study are not conclusive, the method of obtaining the information is highly recommended for use in further studies. Seeing and talking with an individual provided many insights that would not have been available to the researcher if the subjects had simply checked off items on a questionnaire. While personal inter-

viewing is more time consuming than mailing questionnaires, faculty members responded positively to this approach.

Two major impressions gained from interviewing across the entire faculty provide some perspective for this discussion. The diversity and size of the university is overwhelming. As a student, one gets to know and deal with certain segments involved with one's goal at the university. The faculty member, in fulfilling the obligations attached to his pluralistic role can have demands made of him from innumerable sources. The ultimate question is how an institution as complex and diverse as the University of Michigan can be managed well for the future.

The second impression gained from the personal interviews was that faculty members saw themselves as having a more difficult time with typical students than with adult students. Faculty members mentioned that younger students are brighter than older students. However, the older student is more motivated and he is more willing to take responsibility for his performance. Faculty members find the younger student's lack of motivation discouraging. This could account for the fact that many faculty members chose student development as an important aspect of their lifestyle rather than choosing any of the aspects that described formal teaching situations.

The main strengths of this study appear to be: it shows that faculty members do differ in their attitudes toward students. The two variables that appear to account for these differences are the age and the sex of the faculty

member. It should be remembered that the findings did not show a significant difference in attitude toward the two types of students within each age group of faculty. The reasons for this difference in attitude and how it influences behavior are unknown.

Chronological age was identified as an important teacher trait by Willard Waller forty years ago in his classic work on the sociology of teaching. Some of his ideas are relevant to the findings about age in this study. According to Waller, older teachers learn to sublimate their own thwarted wishes in furthering the self-development of others, but almost inevitably the young teacher, since he has not found his place in the world, or has not, as many older teachers do, given up the hope of finding such a place, is concerned with the making of his own career. Young teachers have not yet worked out the problem of their own destiny, having neither achieved that destiny nor yet accepted it as a fact that they have none. Young teachers have some advantages. They can be aided in their contacts with students by a greater understanding of the problems of youth and of this particular generation.

Waller goes on to point out that this understanding can never be so satisfactory as that of a person who has passed through youth and has solved its problems but has not lost sympathy or contact with the rising generations. Age does have its disadvantages in relating to young students. The differences in years, experience, ideals, standards and

mores can be an insurmountable gap for some teachers to close (Waller, 1932:215).

If nothing else, the results of this study show that faculty members' views of adult students are complex and they imply that they vary depending on the kind of relationship. Faculty members do perceive adult students differently. The difference perceived is not always reflected in the attitude dimension of the semantic differential instrument. The views held of persons defined as adult students by this study are neither uniformly positive or negative.

A second strength of this investigation is that it shows that a faculty member's support or opposition to educational change is not related to attitude toward students. This finding only serves to reinforce the fact that the role of the faculty member has become very complex and that attitude scores do not predict overt behavior. Research about the trade-offs faculty members make as they perform their duties has not been done. Another strength of this study is the fact that faculty members expected adult students to contribute to classes because they had experiences the faculty member did not have. This reaction was common when the faculty members talked about their relationships with graduate students. Fewer faculty members could discuss class contributions of undergraduate adult students. They usually attributed this to the fact that their undergraduate classes were so large that the amount of class participation by any student was minimal.

The main weaknesses of this study appear to be the limitations in the design and interpretation of the measuring instruments and the relatively small sample size. While the subjects were able to fill out the semantic differentials rather easily, there is little research on the meaning that can be attributed to the activity and potency scores. This particular semantic differential was designed to measure attitude toward a person's age but not necessarily toward other specific roles. The subjects in this study were rating student behavior and age behavior. Perhaps other adjective pairs need to be added to improve the validity of the semantic differential for evaluating social objects like adult students and typical students. This may explain why the three way analysis of variance did not indicate that there was a significant difference between attitude toward adult and typical students when compared with the age and subject matter specialization of the faculty member.

Some of the questions in the interview schedule could be restructured in order to make the statistical analysis of the responses more fruitful. While the sample size was large enough for the nature of this particular study, it would be essential to expand this in further studies. Perhaps the investigation of separate units of the total university would be a plausible next step.

In spite of these weaknesses and limitations, this study has some strengths not yet mentioned. Faculty members are able to describe characteristic differences be-

tween typical and adult students. The differences they described for adult students, e.g., more motivated, harder working, less bright than the younger student, contributes to an explanation as to why potency and activity scores were more significant than attitude scores in some instances. It was characteristics reflected in potency and activity scores that were usually described as differences between adult and typical students.

This study is only a small beginning but it is a start. Further research about the actual experiences of adult students at the university could yield valuable information about the interpretation of the findings described here. This study strongly suggests that American society needs to question the seemingly unconscious idea that the universities should be responsible for the socialization of the young. Perhaps what is needed is some re-organization of our economic system so that the options open to the 18 year old are more varied. With the changes in the life span, it is quite possible the universities are 'educating' too limited a section of the population. In terms of the economic problems the universities are faced with, it makes better sense to educate those who know why they want to be on the campus.

If a balance between research and teaching is to be restored on the campus, several steps have to be taken. Faculty members need to learn or re-learn the potential and value of good teaching skills. One of the ways this could

happen is if the policy governing promotion and hiring were changed. The intent here would not be to eliminate research but to re-direct it in terms of usefulness to the university community and the present economic situation. If excellence in teaching were to become a vital part of being a faculty member at the University of Michigan, there would be no need to worry about the viability of the university's reputation in a world of shrinking college enrollments. If the university continues to pursue research to the exclusion of other goals, it may have to face the idea that this may not be a viable conception of the university for the future.

Suggestions For Further Research

1. More research needs to be done to find out how to interpret the activity and potency scores of semantic differentials. When information about the interpretation of these scores is available, they may prove useful in theoretical frameworks for describing the relationship between attitudes and behavior.

2. The evidence in this study implies that older professors could be a valuable resource in humanizing the institutional setting for students. As campuses have felt an economic pinch, lowering the retirement age is often mentioned as an attractive method of solving economic problems. The consequences other than economic of such a solution need to be studied. Recommendations for new options for post-secondary education made by the Carnegie Commission

describe options for students only. The report does not discuss the changes that faculties would have to make in the adoption of new options. It is increasingly possible for a faculty member to become a full professor with tenure by the time he is forty. When this happens, he faces twenty-five years of service for which the institution provides few, if any rewards. It is necessary for institutions of higher learning to create options for older faculty that could make use of their positive attitude toward students. At the same time, such options would create a continuation of the rewards system once one became a full professor.

If the universities accept early retirement as the answer, they will be cutting down the age distribution of faculty considerably. Research is definitely needed to find out what kinds of options would be useful in preventing the faculty from becoming an age ghetto. Studies of emeritus professors and their continued involvement with their institutions may be an initial stage of further work.

Further research is also indicated on the attitude of faculty members of different sexes. The number of women interviewed was small (10) and the majority came from the School of Nursing. Perhaps this was an unrecognized bias. Certainly, it indicates an area of further research that would be of interest to the administration in light of the movement for Women's Liberation and the establishment of Affirmative Action offices.

3. There is a definite need further to explore the

feelings of faculty members toward the lack of responsibility they see in younger students. If these feelings are pervasive among a majority of faculty members, they could be a vital force in the restructuring of the system of higher education in terms of who should be admitted to the university.

4. In this study, there were faculty members in both of the younger age categories who had attitudes similar to those of the oldest group of professors. This result emphasizes the need for measurements of age that go beyond what chronological age tells the social scientist. One such concept, 'social age', is being researched by Charles Rose (1972). Rose defines social age as a changing composite of social life styles, attributes and attitudes at various points of the life cycle. It is an attempt to get a picture of social reality for a particular subject by regressing chronological age on a number of social correlates of age, e.g., life-styles relating not only to work but to family and retirement as well. The use of a concept like social age in future studies would help explain differences and similarities not accounted for by chronological age.

5. An investigation should be conducted on the adjustment period new faculty members go through in shifting from graduate student to a professorial appointment. The responsibilities are so very different and there is no information about how the adjustment is made.

6. If the university is to make a genuine attempt to restore a balance between teaching and research, then

the good teachers need to be identified and used as a resource in helping other faculty members. Research to develop programs to help orient new faculty members to their jobs would be very valuable.

7. If universities decide to restore a balance between teaching and research, there will be a need to restructure the procedures for hiring and promotion. An investigation comparing the methods and procedures used by different units in the university would be a valuable guide for planning and carrying out the necessary changes in the rewards system.

8. There is a great need to investigate the relationship between attitudes and overt behavior. Older faculty members and female faculty members had more favorable attitude scores. Further research is needed to find out if this difference in attitude affects behavior in various roles.

9. Future research that involves perceptions of students should take into account the fact that faculty members perceive undergraduates and graduate students differently. The subjects in this study indicated that they have different expectations for graduate students not necessarily because they are older but because of their experience and interest in the faculty member's specialty.

APPENDIX A

TABLE 19

SUBJECT MATTER SPECIALIZATION IN RELATION TO AGE OF FACULTY MEMBER AND ATTITUDE SCORE

	Under 35	35-50	50+
Humanities	3.1000	2.7666	2.6111
Natural Sciences	3.3777	3.0444	2.9666
Social Sciences	3.6111	3.2222	2.3666
Professional Schools	3.1888	3.0000	2.3666

F = 1.03 d.f. = 6,48

TABLE 20

SUBJECT MATTER SPECIALIZATION IN RELATION TO TYPE OF STUDENT'S ATTITUDE SCORE

	Typical	Adult
Humanities	2.7333	2.9185
Natural Sciences	2.8296	3.4296
Social Sciences	2.9333	3.2000
Professional Schools	2.6740	3.0296

F = .5148 d.f. = 3,48

TABLE 21

AGE OF FACULTY MEMBER IN RELATION TO TYPE OF STUDENT'S ATTITUDE SCORE

	Typical	Adult
Under 35	3.1833	3.4555
35-50	2.8388	3.1777
50+	2.3555	2.8000

F = 1.630 -01 d.f. = 2,48

TABLE 22

AGE AND SUBJECT MATTER COMPARED TO ATTITUDE SCORES FOR TYPICAL AND ADULT STUDENTS

	Typical	Adult
Field: Humanities		
Under 35	3.2222	2.9777
35-50	2.4888	3.0444
50+	2.4888	2.7333
Field: Natural Sciences		
Under 35	3.1777	3.5777
35-50	2.7555	3.3333
50+	2.5555	3.3111
Field: Social Sciences		
Under 35	3.3222	3.9111
35-50	3.2222	3.2222
50+	2.2666	2.4666
Field: Professional Schools		
Under 35	3.0222	3.3555
35-50	2.8888	3.1111
50+	2.1111	2.6222

F = 1.81 d.f. = 6,48

TABLE 23

SUBJECT MATTER IN RELATION TO TYPE OF STUDENT'S ACTIVITY SCORE

	Typical	Adult
Humanities	3.9629	3.0518
Natural Sciences	3.7703	3.2222
Social Sciences	3.8518	3.0962
Professional Schools	3.6074	2.7185

F = .4380 d.f. = 6,48

TABLE 24

AGE OF FACULTY MEMBER IN RELATION TO TYPE OF STUDENT'S ACTIVITY SCORE

	Typical	Adult
Under 35	4.0388	3.3166
35-50	3.9055	2.9944
50+	3.4499	2.7555
F = .2947	d.f. = 2,48	

TABLE 25

AGE AND SUBJECT MATTER COMPARED TO ACTIVITY SCORES FOR TYPICAL AND ADULT STUDENTS

	Typical	Adult
Field: Humanities		
Under 35	3.7111	3.2444
35-50	4.7333	2.9333
50+	3.4444	2.9777
Field: Natural Sciences		
Under 35	4.0888	3.4222
35-50	3.1777	3.1333
50+	4.0444	3.1111
Field: Social Sciences		
Under 35	4.3333	3.7777
35-50	4.1111	2.9555
50+	3.1111	2.5555
Field: Professional Schools		
Under 35	4.0222	2.8222
35-50	3.6000	2.9555
50+	3.1999	2.3777
F = 1.97	d.f. = 6,48	

TABLE 26

SUBJECT MATTER SPECIALIZATION IN RELATION TO AGE OF FACULTY AND POTENCY SCORE

	Under 35	35-50	50+
Humanities	3.1428	3.3142	3.2000
Natural Sciences	3.5857	3.1428	3.3857
Social Sciences	3.2857	3.2357	2.6785
Professional Schools	3.4357	2.9714	2.6571

F = 1.5481 d.f. = 6,48

TABLE 27

AGE AND SUBJECT MATTER COMPARED TO POTENCY SCORES FOR TYPICAL AND ADULT STUDENTS

Field: Humanities		
	Typical	Adult
Under 35	3.2857	3.0000
35-50	3.6000	3.0285
50+	3.4428	2.9571
Field: Natural Sciences		
Under 35	3.5142	3.6571
35-50	3.1428	3.1428
50+	3.5857	3.1857
Field: Social Sciences		
Under 35	3.9714	3.1999
35-50	3.7000	2.9571
50+	3.0285	2.3285
Field: Professional Schools		
Under 35	3.5285	3.3428
35-50	3.3000	2.6428
50+	2.8857	2.4285

F = 4.32 -01 d.f. = 6,48

TABLE 28

AGE OF FACULTY MEMBER IN RELATION TO TYPE OF STUDENT AND POTENCY SCORE

	Typical	Adult
Under 35	3.5750	3.2999
35-50	3.4357	2.9428
50+	3.2357	2.7250

F = 1.0298 d.f. = 2,48

TABLE 29

CONTACT IN UNDERGRADUATE COURSES COMPARED TO ATTITUDE SCORES FOR ADULT STUDENTS

	N	Mean
Yes	28	3.3016
No	32	3.0069

t = 1.9111 d.f. = 58 P = .0609

TABLE 30

CONTACT IN GRADUATE COURSES COMPARED TO ATTITUDE SCORES FOR ADULT STUDENTS

	N	Mean
Yes	53	3.1384
No	7	3.1905

t = .2110 d.f. = 58 P = .8336

TABLE 31

CONTACT IN EXTENSION COURSES COMPARED TO ATTITUDE SCORES FOR ADULT STUDENTS

	N	Mean
Yes	6	2.9815
No	54	3.1626

t = .6877 d.f. = 58 P = .4943

TABLE 32

OTHER KINDS OF CONTACT COMPARED TO ATTITUDE SCORES FOR ADULT STUDENTS

	N	Mean
Yes	35	2.9175
No	25	3.4622

t = 3.7812 d.f. = 58 P = .0004

TABLE 33

SUBJECT MATTER SPECIALIZATION IN RELATION TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Humanities	15	2.9185
Natural Sciences	15	3.4296
Social Sciences	15	3.2000
Professional Schools	15	3.0296

F = 2.1176 d.f. = 3,56 P = .1082

TABLE 34

AGE OF FACULTY MEMBER IN RELATION TO ACTIVITY SCORE ON ADULT STUDENTS

	N	Mean
Under 35	20	3.3167
35-50	20	2.9944
50+	20	2.7556

F = 3.8159 d.f. = 2,57 P = .0278*
* = .05

TABLE 35

AGE OF FACULTY MEMBER IN RELATION TO ACTIVITY SCORES ON TYPICAL STUDENTS

	N	Mean
Under 35	20	4.0389
35-50	20	3.9056
50+	20	3.4500

F = 3.2901 d.f. = 2,57 P = .0444*
* = .05

TABLE 36

AGE OF FACULTY MEMBER IN RELATION TO POTENCY SCORES ON ADULT STUDENTS

	N	Mean
Under 35	20	3.3000
35-50	20	2.9429
50+	20	2.7250

F = 5.0852 d.f. = 2,57 P = .0093*
* = .01

TABLE 37

AGE OF FACULTY MEMBER IN RELATION TO POTENCY SCORES ON TYPICAL STUDENTS

	N	Mean
Under 35	20	3.5750
35-50	20	3.4357
50+	20	3.2357

F = 1.6508 d.f. = 2,57 P = .2009

TABLE 38

SEX OF FACULTY MEMBER IN RELATION TO ACTIVITY SCORES ON ADULT STUDENTS

	N	Mean
Male	50	3.0911
Female	10	2.6778

t = 1.8018 d.f. = 58 P = .0768

TABLE 39

SEX OF FACULTY MEMBER IN RELATION TO ACTIVITY SCORES ON TYPICAL STUDENTS

	N	Mean
Male	50	3.9222
Female	10	3.1778

t = 2.8827 d.f. = 58 P = .0055*
* = .01

TABLE 40

SEX OF FACULTY MEMBER IN RELATION TO POTENCY SCORES ON ADULT STUDENTS

	N	Mean
Male	50	3.1100
Female	10	2.3857

t = 3.7645 d.f. = 58 P = .0004*
* = .001

TABLE 41

SEX OF FACULTY MEMBER IN RELATION TO POTENCY SCORES ON TYPICAL STUDENTS

	N	Mean
Male	50	3.4857
Female	10	3.0643

t = 2.0837 d.f. = 58 P = .0416*
* = .05

TABLE 42

SELECTION OF TEACHING ASPECTS COMPARED TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Yes	40	3.0889
No	20	3.2556

t = .9923 d.f. = 58 P = .3218

TABLE 43

SELECTION OF RESEARCH ASPECTS COMPARED TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Yes	49	3.1973
No	11	2.9091

t = 1.4308 d.f. = 58 P = .1579

TABLE 44

SELECTION OF ECONOMIC ASPECTS COMPARED TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Yes	45	3.1951
No	15	2.9926

t = 1.1174 d.f. = 58 P = .2684

TABLE 45

SELECTION OF COMMUNITY ASPECTS COMPARED TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Yes	16	3.0625
No	44	3.1742

t = .6252 d.f. = 58 P = .5343

TABLE 46

CONTACT IN UNDERGRADUATE COURSES IN RELATION TO DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
Yes	27	25.9 (8)	74.1 (19)
No	33	42.4 (14)	57.6 (19)

$X^2 = 1.1921$ d.f. = 1 P = .2749

TABLE 47

CONTACT IN GRADUATE COURSES IN RELATION TO DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
Yes	52	38.4 (20)	61.6 (32)
No	8	25.0 (2)	75.0 (6)

$X^2 = 1.4374$ d.f. = 1 P = .2306

TABLE 48

CONTACT IN EXTENSION COURSES IN RELATION TO DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
Yes	6	50.0 (3)	50.0 (3)
No	54	31.4 (17)	68.6 (37)

$X^2 = 1.5770$ d.f. = 1 P = .2092

TABLE 49

CONTACT IN OTHER WAYS IN RELATION TO DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
Yes	35	42.9 (15)	57.1 (20)
No	25	28.0 (7)	72.0 (18)

$X^2 = 1.6296$ d.f. = 1 P = .2018

TABLE 50

SELECTION OF RESEARCH ASPECTS IN RELATION TO A DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
Yes	11	54.5 (6)	45.5 (5)
No	49	30.6 (15)	69.4 (34)

$X^2 = 2.4185$ d.f. = 1 P = .1199

TABLE 51

SELECTION OF ECONOMIC ASPECTS IN RELATION TO A DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
No	15	46.7 (7)	53.3 (8)
Yes	45	33.3 (15)	66.7 (30)

$X^2 = 1.3294$ d.f. = 1 P = .2489

TABLE 52

SELECTION OF COMMUNITY ASPECTS IN RELATION TO A DIFFERENCE IN TEACHING STYLE FOR ADULT STUDENTS

	N	Difference	No Difference
No	44	34.0 (15)	66.0 (29)
Yes	16	37.5 (6)	62.5 (10)

X^2 = .89035-1 d.f. = 1 P = .7654

TABLE 53

YEARS OF EXPERIENCE IN RELATION TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
0-4	18	3.4754
5-9	9	3.1111
10-14	9	3.0000
15-19	18	2.8889
20-24	5	3.0889
25-29	0	
30 or more	1	3.6667

F = 2.1491 d.f. = 5,54 P = .0734

TABLE 54

YEARS OF EXPERIENCE IN RELATION TO ATTITUDE TOWARD TYPICAL STUDENTS

	N	Mean
0-4	18	3.1667
5-9	9	2.7160
10-14	9	2.7778
15-19	18	2.6049
20-24	5	2.3333
25-29	0	
30 or more	1	2.5556

F = 2.2050 d.f. = 5,54 P = .0671

TABLE 55

STUDENT EASIEST TO WORK WITH
IN RELATION TO
ATTITUDE TOWARD TYPICAL STUDENTS

	N	Mean
18-25	7	3.1905
30-50	6	2.8519
other	47	2.7258

F = 1.5817 d.f. = 2,57 P = .2145

TABLE 56

STUDENT HARDEST TO WORK WITH
IN RELATION TO
ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
18-25	3	3.0741
30-50	3	3.6296
other	54	3.1214

F = 1.0111 d.f. = 2,47 P = .3703

TABLE 57

STUDENT HARDEST TO WORK WITH
IN RELATION TO
ATTITUDE TOWARD TYPICAL STUDENTS

	N	Mean
18-25	3	2.7403
30-50	3	3.1852
other	54	2.7737

F = .55886 d.f. = 2,57 P = .5750

TABLE 58

REDUCTION IN RESIDENCY REQUIREMENT
IN RELATION TO AGE OF FACULTY MEMBER

	Under 35	35-50	50+
Oppose	N= 8 25.0	N=12 37.5	N=12 37.5
Support	N=12 42.8	N= 8 28.6	N= 8 28.6

X^2 = 2.0983 d.f. = 2 P = .3502

TABLE 59

REDUCTION IN RESIDENCY REQUIREMENT
IN RELATION TO
SUBJECT MATTER SPECIALIZATION

	Humanities	Natural Sciences	Social Sciences	Professional Schools
Oppose	N=9 31.0	N=8 27.6	N=8 27.6	N= 4 13.8
Support	N=6 19.3	N=7 22.6	N=7 22.6	N=11 34.9

X^2 = 4.7270 d.f. = 3 P = .1929

TABLE 60

WILLINGNESS TO TEACH
OFF CAMPUS
IN RELATION TO AGE OF FACULTY MEMBER

	Under 35	35-50	50+
Oppose	N=11 32.4	N=11 32.4	N=12 35.3
Support	N= 9 34.6	N= 9 34.6	N= 8 30.8

X^2 = .1357 d.f. = 2 P = .9344

TABLE 61

OFFERING OF INDEPENDENT STUDY CLASSES BY DEPARTMENT IN RELATION TO AGE

	Under 35	35-50	50+
Oppose	N= 7 41.2	N= 6 35.3	N= 4 23.5
Support	N=13 30.2	N=14 32.6	N=16 37.2

X^2 = .7880 d.f. = 2 P = .6743

TABLE 62

ACCEPTANCE BY DEPARTMENT OF OFF-CAMPUS TEACHING ASSIGNMENTS FOR ADULTS IN RELATION TO AGE OF FACULTY MEMBER

	Under 35	35-50	50+
Oppose	N=11 47.8	N= 8 34.8	N= 4 17.4
Support	N= 9 24.3	N=12 32.4	N=16 43.2

X^2 = 5.2174 d.f. = 2 P = .0736

TABLE 63

ACCEPTANCE BY DEPARTMENT OF OFF-CAMPUS TEACHING ASSIGNMENTS FOR ADULTS IN RELATION TO SUBJECT MATTER SPECIALIZATION

	Humanities	Natural Sciences	Social Sciences	Professional Schools
Oppose	N= 4 17.4	N=9 39.1	N=6 26.1	N= 4 17.4
Support	N=11 29.7	N=6 16.2	N=9 24.3	N=11 29.7

X^2 = 4.7239 d.f. = 3 P = .1932

TABLE 64

OFFERING OF INDEPENDENT STUDY CLASSES
BY DEPARTMENT IN RELATION TO
SUBJECT MATTER SPECIALIZATION

	Humanities	Natural Sciences	Social Sciences	Professional Schools
Oppose	N= 4 23.5	N= 5 29.4	N= 3 29.4	N= 3 17.7
Support	N=11 25.6	N=10 23.3	N=10 23.3	N=12 27.9

X^2 = .69421 d.f. = 3 P = .8746

TABLE 65

WILLINGNESS TO TEACH INDEPENDENT
STUDY IN RELATION
TO AGE OF FACULTY MEMBER

	Under 35	35-50	50+
Oppose	N= 4 21.0	N= 7 36.9	N= 8 42.1
Support	N=16 39.0	N=13 31.7	N=12 29.3

X^2 = 2.9818 d.f. = 2 P = .2252

TABLE 66

WILLINGNESS TO TEACH INDEPENDENT STUDY
IN RELATION TO SUBJECT MATTER SPECIALIZATION

	Humanities	Natural Sciences	Social Sciences	Professional Schools
Oppose	N= 4 21.0	N=7 37.0	N= 4 21.0	N= 4 21.0
Support	N=11 26.8	N=8 19.5	N=11 26.8	N=11 26.8

X^2 = 2.6005 d.f. = 3 P = .4574

TABLE 67

WILLINGNESS TO SUPPORT EDUCATION CHANGES IN RELATION TO ATTITUDE TOWARD ADULT STUDENTS

	N	Mean
Supports No Proposal	7	3.2063
Residency Department	4	3.1667
Off Campus Personal	9	3.3086
Off Campus Department	17	3.2745
Indep. Study Personal	13	2.9145
Indep. Study	10	3.0222

F = .73567 d.f. = 5,54 P = .6000

TABLE 68

WILLINGNESS TO SUPPORT EDUCATIONAL CHANGES IN RELATION TO ATTITUDE TOWARD TYPICAL STUDENTS

	N	Mean
Supports No Proposal	7	2.6032
Residency Department	4	3.4722
Off-Campus Personal	9	2.7654
Off-Campus Department	17	2.9085
Indep. Study Personal	13	2.8291
Indep. Study	10	2.4333

F = 1.8020 d.f. = 5,54 P = .1280

APPENDIX B

Letter Requesting Interview

2092 Pauline Blvd.
Ann Arbor, Mi 48103
April, 1974

The reason you have received this letter is to ask you to participate in a small research study. As you perhaps are aware, the enrollment of adults as students in the nation's universities has been steadily increasing both at the graduate and undergraduate levels. There has been no investigation of the reaction of university faculties to this change in the population of students. Consequently, the implications of this changing enrollment for university development are unknown.

The purpose of the study I am conducting is to find out how University of Michigan faculty members perceive adult students. For the purposes of this study, an adult student is to be defined as a person beyond the 'typical' student age of 18 to 25 years who is engaged in formalized educational activity at the university on a full-time or part-time basis.

The data for the study will be collected by personal interview. The information that the interviews will provide is of interest to many units on the campus such as the Center for the Continuing Education of Women as well as the School of Education and the Institute of Gerontology. The information obtained during the interview will be confidential. I hope that you will be able to participate in this study. In the next day or so, I will telephone you to ask if you are willing to participate. If you have further questions concerning the study, I will be happy to answer them at that time.

Yours truly,

Mary E. Thompson
Doctoral Candidate
School of Education
Institute of Gerontology
University of Michigan

INSTRUMENT A

The Rosencranz McNevin Semantic Differential

Below are listed a series of polar adjectives accompanied by a scale. You are asked to place a check mark along the scale at a point which in your judgment best describes the social object indicated. Make each item a separate and independent judgment. Do not worry or puzzle over individual items. Do not try to remember how you have marked earlier items even though they may seem to have been similar. It is your first impression or immediate feeling about each item that is wanted.

SOCIAL OBJECT_____

Progressive	___	___	___	___	___	___	Old-fashioned (E)
Consistent	___	___	___	___	___	___	Inconsistent (A)
Independent	___	___	___	___	___	___	Dependent (A)
Rich	___	___	___	___	___	___	Poor (A)
Generous	___	___	___	___	___	___	Selfish (P)
Productive	___	___	___	___	___	___	Unproductive (E)
Busy	___	___	___	___	___	___	Idle (E)
Secure	___	___	___	___	___	___	Insecure (A)
Strong	___	___	___	___	___	___	Weak (E)
Healthy	___	___	___	___	___	___	Unhealthy (E)
Active	___	___	___	___	___	___	Passive (E)
Attractive	___	___	___	___	___	___	Ugly (P)
Cooperative	___	___	___	___	___	___	Uncooperative (P)
Optimistic	___	___	___	___	___	___	Pessimistic (P)
Satisfied	___	___	___	___	___	___	Dissatisfied (A)
Expectant	___	___	___	___	___	___	Resigned (E)
Flexible	___	___	___	___	___	___	Inflexible (P)
Hopeful	___	___	___	___	___	___	Dejected (P)

Organized___: ___: ___: ___: ___: ___: ___: Disorganized (A)

Happy___: ___: ___: ___: ___: ___: ___: Sad (P)

Friendly___: ___: ___: ___: ___: ___: ___: Unfriendly (P)

Neat___: ___: ___: ___: ___: ___: ___: Untidy (P)

Trustful___: ___: ___: ___: ___: ___: ___: Suspicious (P)

Self-reliant___: ___: ___: ___: ___: ___: ___: Dependent (A)

Liberal___: ___: ___: ___: ___: ___: ___: Conservative (E)

Certain___: ___: ___: ___: ___: ___: ___: Uncertain (A)

Tolerant___: ___: ___: ___: ___: ___: ___: Intolerant (P)

Pleasant___: ___: ___: ___: ___: ___: ___: Unpleasant (P)

Ordinary___: ___: ___: ___: ___: ___: ___: Eccentric (P)

Aggressive___: ___: ___: ___: ___: ___: ___: Defensive (E)

Exciting___: ___: ___: ___: ___: ___: ___: Dull (P)

Decisive___: ___: ___: ___: ___: ___: ___: Indecisive (A)

(E) = Evaluative (attitude)

(A) = Activity

(P) = Potency

INSTRUMENT B

INTERVIEW SCHEDULE

Date_____

Interview No._____

Sex of Subject____M ____F

Subject Matter: ____Humanities

____Natural Sciences

____Social Sciences

____Professional Schools

Interviewer: Recent enrollment figures for colleges and universities show that more and more adults are going to college either as full-time or part-time students. The purpose of this interview is to find out how university faculty members perceive the adult students.

In keeping with university regulations, will you please read and then sign this consent form? Thank you.

The interview consists of a semantic differential rating scale on the adult student and on the typical student as well as questions dealing with your life style as a professor, the contact you have with adult students and your opinion about changes that could be made to facilitate the enrollment of adult students at the university. The adult student is defined as a person beyond the 'typical' student age of 18 to 25 years who is engaged in formalized educational activity at the university on a full-time or part-time basis. Are there any questions you would like to ask before we begin?

Here are two copies of the semantic differential. One is labeled Adult Students and the other is labeled Typical Students. You will notice that there are directions at the top of the page. Please read them through before you begin to rate the adjective pairs.

Interviewer: Thank you for completing the semantic differentials. As I mentioned before, the questions I am about to ask deal with your personal history as a professor, the contacts you have had with adult students and your feelings about some of the changes

that are predicted as more and more adults enter the university. The first group of questions is concerned with the aspects of a professor's life style that are important to you and how you view your position at the University of Michigan.

1. On the card I have just handed to you, there is a list of some of the aspects of a professor's life style that other faculty members have reported as being important to them. Which of the aspects listed are most important to you?

a.	Opportunity for research and study on problems of great interest to me.	_____
b.	Intellectual stimulation of colleagues.	_____
c.	Adequate salary.	_____
d.	Status and prestige in the community.	_____
e.	Job security.	_____
f.	Working and living in an intellectual community.	_____
g.	The challenge of working with students and helping them to develop.	_____
h.	The personal freedom of life style of a professor affords such as being able to set own schedule and have summers free.	_____
i.	The intellectual freedom of being able to choose own problems and methods of study.	_____
j.	Teaching undergraduate courses.	_____
k.	Teaching graduate courses.	_____
l.	Teaching extension courses.	_____
m.	Other	_____

2. You have told me which aspects of professorial life style are most important to you. In general, how satisfied are you with these aspects of your life at the University of Michigan?

a.	_____	h.	_____
b.	_____	i.	_____
c.	_____	j.	_____
d.	_____	k.	_____
e.	_____	l.	_____
f.	_____	m.	_____
g.	_____		

3. What aspect of your job here is the least satisfactory to you?

Interviewer: At the beginning of the interview, the adult student was defined as a person beyond the 'typical' student age of 18 to 25 years who is engaged in formalized educational activity at the university on a full-time or part-time basis. The questions now deal with your knowledge of this type of student.

4. Which of the following chances do you have to be with adult students?

a. teaching undergraduate courses _____
b. teaching graduate courses _____
c. teaching extension courses _____
d. other, e.g., advising or counseling students _____

5. What characteristic differences have you noticed between younger students and adult students? (Probe: Can you explain or give me an example?

6. Do you feel you are able to judge the ages of your students accurately? (Probe: Could you explain that a little further?)

7. As far as you can tell, what is the age range of the students you come in contact with in any of the following situations?

a. teaching undergraduate courses _____
b. teaching graduate courses _____
c. teaching extension courses _____
d. other, e.g., advising or counseling students _____

8. As compared with typical students, are adult students?

a.	more dependent___	less dependent___	the same___
b.	more flexible___	less flexible___	the same___
c.	more close minded__	less close minded___	the same___
d.	more arrogant___	less arrogant___	the same___
e.	more rigid___	less rigid___	the same___
f.	more motivated___	less motivated___	the same___
g.	more realistic___	less realistic___	the same___

9. How much of your time is spent each week in these activities?

a. teaching undergraduate courses _____
b. teaching graduate courses _____
c. teaching extension courses _____
d. advising and counseling students _____
e. other _____

10. Does the age of your students make any difference in your teaching style? (Probe: Could you give me an example?)

11. If students were divided into two age groups (18 to 25 and 30 to 50), which group would you say you find it easiest to work with?

a. 18 to 25 _____
b. 30 to 50 _____
c. other _____

12. If students were divided into two age groups (18 to 25 and 30 to 50), which group would you say you find it hardest to work with?

a. 18 to 25 _____
b. 30 to 50 _____
c. other _____

Interviewer: It is predicted that universities will have to make changes to meet the needs of adult students. This could mean changes in the scheduling of classes (both in regard to time and place), adjusting teaching methods and adjustment of residency requirements if these students are to be eligible for degrees.

13. Would you support or would you oppose the reduction of the residency requirement for a degree from the University of Michigan for the sake of adult students?

14. In your department, would you support or oppose off-campus teaching assignments for adult students as a regular part of a faculty member's load on a rotating basis?

15. Would you accept or would you reject an off-campus teaching assignment for adult students on a rotating basis as a regular part of your load?

16. In your department, would you support or would you oppose the offering of independent study classes designed to serve adult students?

17. Would you be willing or would you be unwilling to conduct an independent study class for adult students as a regular part of your load?

Interviewer: For the purpose of this research, I need some demographic information. While I check to see that I have recorded all your answers, would you fill out this form?

Instructions: Please place a check mark beside the answer that best describes you.

1. What is your faculty rank?

   a. Instructor _____
   b. Assistant Professor _____
   c. Associate Professor _____
   d. Professor _____
   e. Other _____

2. How many years experience do you have as a member of the faculty?

   a. 0-4 _____
   b. 5-9 _____
   c. 10-14 _____
   d. 15-19 _____
   e. 20-24 _____
   f. 25-29 _____
   g. 30 or more _____

3. How old are you?

   a. under 35 _____
   b. 35 to 50 _____
   c. 50+ _____

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