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COLLEGE STUDENT POPULATIONS
FROM 1958 TO 1968

by

Daniel Albert Ondrack

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ABSTRACT

AN INVESTIGATION INTO CHANGES IN THE LEVEL OF AUTHORITARIANISM AMONG COLLEGE STUDENT POPULATIONS FROM 1958 TO 1968

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The much publicized "generation gap" has been widely discussed but the actual extent of the generation gap is a question that has not been as extensively studied. Until recently, there has been very little evidence as to whether student activists are representative of a trend toward lower levels of authoritarianism in general among college students, or if the activists are simply an isolated sub-group at one extreme end of the distribution of authoritarianism among college students. The purpose of this study was to specifically examine the possibility that contemporary students as a whole are significantly lower in authoritarianism than the "silent generation" of the 1950's.

Previous research on changes in authoritarianism levels among college students has mostly been concerned with measuring changes among students as they progress within college from being freshmen to seniors. Almost none of the previous research was concerned with longitudinal studies of changes in authoritarianism between generations of students, but the limited available

evidence suggested that a decline in levels of authoritarianism would be a significant dimension of the difference between the generations.

The research design of this study was to simulate a longitudinal study in order to test the general hypothesis that from 1958 to 1968 the level of authoritarianism among college students in general would show a marked decline. In order to simulate such a longitudinal study it was necessary to undertake a secondary analysis of the historical data published on authoritarianism which involved college students in the time period. The Rokeach Dogmatism Scale was chosen to be the standard measure of authoritarianism and a search of the literature on dogmatism obtained 209 usable dogmatism norms for the time period. The data was subjected to regression analysis and subsample tests of the data were conducted to control for the influence on the trend from the demographic variables: geographic region, college quality, and student maturity.

The regression line found for the data in the time period had a significant negative slope with a correlation coefficient of $r = -.38$ (p less than .01%) which confirmed the hypothesis. Subsample tests controlling for the demographic variables showed results consistent with the principal hypothesis although not all negative slopes were significant. A conspicuous exception was that norms from Southern schools did not show a negative slope.

The conclusion from these results was that the trend to lower levels of authoritarianism was a general phenomenon among the college

student population and was not limited to just the student activists. It was felt that organizations attempting to hire and employ contemporary college graduates would soon be significantly affected by these trends and the implications for organization theory were discussed along with suggestions for further research.

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The help, advice, and assistance provided by the members of my thesis committee were especially useful to me in working on this project and I feel that I learned something from every one of them. Lastly, I want to especially acknowledge the training and guidance provided during my time in the doctoral program by my committee chairman, Professor Lee E. Danielson. His commitment to teaching and his guidance of the progress of my thesis has given me an understanding of the field and of the nature of social science research which I greatly appreciate.

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CHAPTER 1

A. Introduction

The words from a popular song, "your sons and your daughters are beyond your command, for the times, they are a-changing", are a capsule comment on a prominent feature of our present day society. Change has long been a characteristic feature of North American society but the pace of change seems to be increasing now so that life styles appear to be quite different than they were as little as ten years ago. We now seem to live in a time that is dominated by rapid and continuous change, so much so, that one contemporary philosopher has observed that "change is the only constant now."^{1,2} While the most obvious changes are occurring in technology, the phenomenon of change is much wider in scope, encompassing changes in attitudes, values, social norms, and customs. For some parts of society, notably student youth, the changes have been very dramatic, as though a cultural upheaval had taken place.

Students today appear to be much different in their attitudes and values from their counterparts in the past decade, particularly in such matters as attitudes toward authority and career aspirations. While changes in the attitudes and values between student generations are

¹Marshall McLuhan, Lecture, University of Toronto, December, 1965.

²The same observation is made by Kenneth Keniston, "Social Change and Youth in America" in Erik H. Erikson, (Ed.) The Challenge of Youth, (New York, Doubleday Anchor Books, 1965) p. 199.

undoubtedly part of the overall trend of change being observed in our society, it is also possible that some changes are unique to student youth. The forces that contribute to social change cannot have equal effect on all parts of society. Some parts of society, such as student youth, should change faster or in different ways from other parts of society because their youth makes them more vulnerable to whatever forces are at work influencing the course of society.

Student youth could be at the vanguard of changes because they are more likely to be conditioned by contemporary forces than are older people who were conditioned by previous societal forces. Thus societal change could tend to create a potential for alienation between generations. In addition to this potential for alienation, the students' role in society requires them to spend a large part of their life experience learning and studying as observers, rather than as participaters in society.^{3,4,5} Also, student-youth live in the youthcult pattern of

³ ibid, Keniston, p. 201

⁴ Kaspar D. Naegle, "Youth and Society: Some Observations", in Erik H. Erikson, (Ed.) op. cit., p. 63.

⁵ Edward E. Sampson, "Student Activities and the Decade of Protest", Journal of Social Issues, 1967, 23(3) pp. 29 - 30.

always striving to be up to date with the latest trends, styles, and activities.⁶ Of course not all students would necessarily be at the vanguard of social change. Fortune recently described college students as being in two main groupings: the "forerunners" who are in college largely for idealistic motives (40% by Fortune's estimate) and the practical minded students who are in college for economic motives (60% estimate).⁷ Others such as Keniston,⁸ Sampson,⁹ and Trent and Craise¹⁰ have made similar distinctions but all feel that the relative influence of the forerunners is out of proportion to their numbers.

The question this particular study is going to try to examine is whether a change in attitudes between contemporary students and their predecessors has occurred that can be measured in some way. Because college graduates are a vital source of potential managers for organizations, the effect of these changes in attitudes upon the manpower needs

⁶Youth does not have an exclusive role as the vanguard of change, McLuhan has also postulated that artists as a group tend to be at the vanguard of change and that the function of art is to act as a DEW line for society. Marshall McLuhan, Understanding Media, (New York, McGraw-Hill, 1965) p. 65.

⁷Daniel Seligman, "A Special Kind of Rebellion", Fortune, January 1969, p. 68.

⁸Kenneth Keniston, "The Sources of Student Dissent", Journal of Social Issues, 1967, 23 (3), p. 109.

⁹Sampson, E.E., op.cit., p. 4.

¹⁰James W. Trent and Judith L. Craise, "Commitment and Conformity in the American College", Journal of Social Issues, 1967, 23(3) p. 35.

and practices of organizations will also be discussed. The particular aspect of attitudes studied for measurable changes will be in the area of attitudes toward authority. This class of attitudes is felt to be a relevant area for study because organizations have long been structured in a hierarchy of authority which assumes that subordinates will respect the authority of superiors.

The remainder of this chapter will discuss in greater detail the nature of the apparent changes in students and the possible manpower problems for organizations posed by these changes. There will be some discussion of the general nature of attitudes toward authority and possible reasons for changes in attitudes toward authority. Finally, there will be a brief discussion of some of the methods for studying changes in attitudes toward authority.

B. Changes in Student Attitudes Between the
Silent Generation and the Active Generation

The attitudes and values of contemporary college students seem to have changed greatly since the 1950's especially among the fore-runners. In the 1960's there was a fairly good consensus on the nature of college students so that they could be described as being quiet, serious, career orientated and rather satisfied with their society. William F. Whyte, in The Organization Man could describe them as a generation of bureaucrats, passive and conservative.¹¹ Jacobs, in 1957, reported that "the impact of the college experience is that of socialization so that the individual can fit comfortably into the ranks of American college alumni".¹² Even as late as 1964, Etzioni was able to conclude that "the modern family and the modern education system produce the type of person who will make a good organization man".¹³

¹¹William F. Whyte, The Organization Man, (New York, Anchor Books, 1957) pp. 70 and 71.

¹²P. E. Jacobs, Changing Values in College, (New York, Harper, 1957), quoted in Theodore M. Newcomb, and Kenneth A. Feldman, The Impacts of Colleges Upon Their Students, (Ann Arbor, Report to the Carnegie Foundation for the Advancement of Teaching, January 1968) p. 3.

¹³Amatai Etzioni, Modern Organizations, (New York, Prentice-Hall, 1964) p. 110.

However, from the mid 1960's onward, there was a marked change in the descriptions of college students' attitudes and values. Study after study remarked on both the contrast in attitudes and values, and the suddenness with which the contrast appeared. For example, Block, Haan and Brewster-Smith remarked that:

During the 'Eisenhower era' of the 1950's, complaint was frequently voiced about the apathetic, conforming, success-oriented youth in American campuses. As we write in the late 60's, quite other complaints predominate. Viewers, with alarm, wonder whether American colleges are becoming politicized like those of Latin America where the mounting of political goals often takes priority over educational goals.¹⁴

Katz, in another study said that "the sudden emergence of student activism came as a surprise even to those who had been studying students for a long time....The period between 1948 and 1958 had been one of general quiescence....After 1948, it became quite common for observers and students alike, to refer to college students as apathetic....and relatively unconcerned with larger national and international issues".¹⁵

A similar contrast was given by Sampson.

Given the relatively quiet campus years of the 1950's, with the Silent Generation, born in war, bred in war, participants in war,

¹⁴ Jeanne H. Block, Norma Haan, and M. Brewster Smith, "Activism and Apathy in Contemporary Adolescents", in J.F. Adams, (Ed), Understanding Adolescence, (Boston Allyn and Bacon, 1968) p. 198.

¹⁵ Joseph Katz, The Student Activists: Rights, Needs and Powers of Undergraduates, Stanford, California, Institute for the Study of Human Problems, Stanford University, 1967) p. 1

seeking only security in income, home and career, one would not think to look to the university campus for leadership in national protest and dissent....Silence and seriousness were seen by many to be appropriate behavior for the mature collegian....We no longer expected any organized political, headline grabbing activist movement to emanate from the college community. It was surprising when students rose up in protest over their education, their society, and their world.¹⁶

Lastly, this comment by Peterson: "In striking contrast to students in many other countries, American college students have not been known until recently for their interest in politics and national affairs.... It is in part because of the sharp break with the past that the surge in student political behavior during the 1960's has so captured the fancy of observers...."¹⁷

This commentary upon the marked contrasts in student attitudes, values and behavior has not been confined to learned journals or publications. Countless popular magazine and newspaper articles have appeared lately such as Newsweek, June 24, 1968 "The Graduate: Snapshot of Three Generations", Newsweek, Sept. 30, 1968, "Rebels on the Campus", Newsweek, June 23, 1969 "Class of '69: The Violent Years", The Atlantic, October 1968, "The War Against the Young", The Atlantic, Nov. 1968, "On Misunderstanding Student Rebels", all examining the contrasts between the "silent generation" and the

¹⁶ Sampson, E.E. op. cit., pp. 1 - 2.

¹⁷ Richard E. Peterson, "The Student Left in American Higher Education", Daedalus, Winter 1968, p. 293.

"active generation".

Modern students can no longer be described by some broad generalization, now it is necessary to speak of sub-population within the general population. As previously mentioned, some authors, such as Trent and Craise¹⁸, Brown,¹⁹ and Keniston²⁰, feel that the large majority of contemporary college students are still career-oriented and not too different from students of the 1950's. A small percentage of students (estimates vary from 1 - 10%) are responsible for all the noise which is magnified by the mass media. Thus when the attempt is made to describe the attitudes and values of contemporary students, one might only be describing a small segment of the student population, unless that small segment is really the tip of a sympathetic but non-activist iceberg. If a wholesale change in attitudes and values was occurring, then the "forerunner" group might stay relatively the same while the main body was slowly but surely shifting in attitudes and values. Some evidence for this large scale shift is provided by Fortune's survey of student attitudes and values wherein they found that the

¹⁸Trent, J.W. & Craise, J.L., op.cit., p. 34.

¹⁹Donald R. Brown, "Student Stress and the Institutional Environment", Journal of Social Issues, 1967, 23 (3) p. 98.

²⁰Keniston, K., op.cit., p. 109.

minority was both sizeable and growing.²¹ Fortune reported the size of the forerunner group as being 42% of a national sample taken in October 1968²² and this group had grown to 44% by April of 1969²³. In addition, Fortune's survey team showed a shifting of attitudes among the practical-minded students toward the forerunner group. Despite dividing the college students surveyed into a forerunner group and practical-minded group, Fortune still found that in the area of political beliefs, 89% of their total sample was contained in the range of categories from "revolutionary" to "moderate", while only 11% were in the category "conservative". "Reformers" and "radical dissidents" made up 48.8% of the sample.²⁴

Similar evidence of a large body of silent sympathy for the student activists was gathered in a survey conducted by Watts and Whittaker among Berkeley students in 1965 about the Free Speech

²¹Seligman, D., op.cit., p. 68

²²"What they Believe", Fortune, January 1969, p. 70.

²³Jeremy Main, "A Special Report on Youth", Fortune, June 1969, p.73.

²⁴ibid., p. 74.

Movement. The survey found that "a third of the student body favored not only the goals but also the tactics of the F.S.M., and another 30 per cent supported the goals but not the tactics"²⁵

The conclusion of the Cox Commission which investigated the disturbances at Columbia University also supports the possibility of widespread student support for the aims and goals of the student activists. "The grievances of the rebels were felt equally by a still larger number, probably a majority of the students. The trauma of the violence that followed police intervention intensified emotions but support for the demonstrators rested upon broad discontent and widespread sympathy for their position"²⁶

Thus there is some justification for describing contemporary students in terms of the forerunners rather than the old passive and conservative students of the 1950's. In brief, contemporary students are characterized by a concern for the nature and direction of society and their role in helping to change it. They are not satisfied by the status quo and want society to change for the better, although there are marked differences in the tactics for change and rates of change

²⁵William A. Watts and David N. Whittaker, "Free Speech Advocates at Berkeley", Journal of Applied Behavioral Science, 1966, 2(1) p. 47.

²⁶Archibald Cox, Crisis at Columbia: Report of the Fact Finding Commission Appointed to Investigate the Disturbances at Columbia University in April and May 1968, (New York, Vintage Books, 1968) p. 190.

they want. Secondly, their personal goals and ambitions for careers are concerned with two needs: self actualization and development in work, and meaningfulness of work, especially in terms of contributing to society. Thirdly there is a strong desire for participation in decision-making, openness of communications, and an unwillingness to abide unquestioningly by societal norms and conventions. Lastly, there is a general unwillingness to acquiesce to any authority perceived as being illegitimate.

This description, of course, only highlights the contrasts between contemporary students and the silent generation. It does not cover changes in political ideology because such changes could be independent of changes in attitudes and values towards careers and roles in society. In sum then, contemporary students could be described as being non-passive, non-conservative, idealistic, open-minded, democratic, and humanitarian. They could also be described as irreverent, disrespectful of authority, non-conforming, and perhaps threatening, especially to those who still strongly retain the traditional attitudes and values.

Many more differences between generations could be described as evidence of the changes because many factors appear to be undergoing change at the same time. The boundaries of change are not well defined nor is the overall trend clear as yet. The purpose of this paper is to help

clarify part of the picture by selecting one aspect of the larger system of changes and trying to obtain a measured appreciation of what the trend is for that selected part of the larger system. In this case, the aspect selected for study is the trend of changes in attitudes toward authority among college student populations.

In order to provide some perspective to the study of the trend, a point of view should be adopted which gives some relevance to the nature and implications of the trend. While it is possible to study a social phenomenon as an isolated entity, it is difficult to analyse the implications of that phenomenon without having some frame of reference for the analysis. The frame of reference chosen for this study is one which is concerned with the possible implications from these changes in attitudes toward authority for the structure and operation of organizations. Organizations have long been structured on some sort of hierarchy of authority and any significant change in attitudes toward authority could have profound effects on the structure and operations of organizations. The next section of this chapter is an elaboration of this frame of reference and a discussion of some of the implications for organizations.

C. Possible Manpower Problems for Organizations

Modern organizations, whether they are business, government or institutional are very dependent upon college graduates to provide a supply of future managers and administrators. This dependency is especially true for large scale organizations and has been the result of a trend that has accelerated greatly since World War II. For a long time, organizations got exactly the sort of person they wanted in the college graduates, one who would be willing to live and serve in an organization in return for the promise of secure income and eventual promotion. This happy marriage of individual compliance and organizational need was lamented by Whyte in The Organization Man, but was appreciated by the organizations because the task of providing a pool of potential managers was relatively easy. Etzioni sums up the situation in the following excerpt:²⁷

The fact that most people in organizations have the requisite psychological characteristics for organizational life is in part a result of selective recruitment by which the organization rejects or removes those whose personalities make them unfit to participate. The major credit for this convergence of personality and organizational requirements, however, must go to the modern family and the modern educational system, both of which produce the type of

²⁷ Etzioni, A., op.cit., p. 110.

person who will make a good organization man. The middle-class stress on the values of punctuality, neatness, integrity, consistency, the accent on conformity, and above all achievement are the foundation of qualities which facilitate adjustment to organizational demands. The organization's effectiveness with respect to this aspect of the recruitment and placing of personnel is due more to the social environment which provides the "right" kind of participants than to any deliberate efforts by the organization to shape personalities according to its needs.

But what would happen to organizations if society and the education system no longer conspired to produce a large group of people so suited to life in large scale organizations? If there was a drying up of the pool of potential managers among college graduates, then organizations would be faced with a slow crisis of not being able to replace retiring managers or of not being able to expand the organization. They would be faced with this crisis as long as they continued to be dependent upon college graduates as a source of supply, or as long as they continued to offer the conventional rewards, inducements, and career opportunities toward college graduates. While organizations are also characterized by change, the nature of the organizational climate in some organizations may not have changed sufficiently to offer a compatible environment for contemporary college graduates.

Argyris has already characterized some organization environments as being incongruent with needs of a mature personality²⁸ and his

²⁸Chris Argyris, Personality and Organization, (New York, Harper and Row, 1957), chapter 3.

description of a mature personality sounds somewhat similar to a description of contemporary students (i.e.: the desire for self-actualization, the desire for independence, the desire for self-determination, the desire for equality among peers).²⁹

Holland has put forth a theory of vocational choice based on a matching of personality type and organizational environment³⁰ wherein he postulates that people will try to find careers in organization environments that are congruent with their personality characteristics. Those who work in an incongruent situation will feel dissatisfaction, lack of achievement and instability³¹ with the result being eventual turnover. Thus persons not only eliminate many employment possibilities from consideration due to the perceived environment of the job prior to taking a job, but will also leave the job if they find too great an incompatibility with the environment on the job.

²⁹ibid., pp. 49 -- 53.

³⁰John L. Holland, The Psychology of Vocational Choice, (Waltham, Mass, Blaisdell, 1966), p. 63.

³¹ibid., p. 75.

Vroom has reviewed the literature extensively on job satisfaction and has concluded that need satisfaction on the job is an important correlate of job satisfaction and turnover. "The more satisfied a worker, the stronger the force on him to remain in his job and the less the probability of his leaving it voluntarily."³² Vroom also concluded that "job satisfaction must be assumed to be the result of the operation of both situational and personality variables"³³ and he also surmised that the situational aspects of a job would have to be congruent with the personality of the occupant for satisfaction to be felt.³⁴

Thus there is a body of opinion to the effect that organizations can only expect to attract and hold potential managers if the organizational environment is compatible with the attitudes, values, and personalities of the potential managers. To use a rather extreme example, the effect of an organization environment being incompatible with the attitudes and values of the constituents is cited by Cox as

³²Victor Vroom, Work and Motivation, (New York, John Wiley & Sons, 1964), p. 175.

³³ibid., p. 173.

³⁴ibid., p. 174.

being an especially impressive cause of student unrest at Columbia.

"At a time when the spirit of self-determination is running strongly, the administration of Columbia's affairs too often conveyed an attitude of authoritarianism and invited distrust. In part, the appearance reflected the true state of affairs".³⁵

Those organizations which cannot provide suitable employment environments for college graduates may find either that few of the better students are interested in joining the organization, or that the organization will suffer from a great deal of dissatisfaction and turnover among those hired.

A study reviewed by Vroom, that was done by Rosenberg in 1957 on the values of students and the occupations they choose, found that marked differences occurred in the characteristics of students choosing different occupations. For the Self-Expression Oriented index, the highest scores came from students choosing the fields of architecture, journalism, drama and art; while the lowest scores were obtained by students choosing business occupations. The business occupations

³⁵Cox, op. cit., p. 193.

stood highest on the Extrinsic - Reward Oriented index while social work and teaching stood lowest.³⁶ If the majority of today's students were not oriented toward extrinsic rewards and instead preferred self-expression occupations, then it would be difficult for an organization not providing a self-expression environment to hire anyone, except business majors, (assuming they have remained unchanged, which may be a tenuous assumption).

There is now a body of opinion to the effect that the manpower crisis has already begun to occur. There are many articles in the major business periodicals pointing with alarm at the tendency of graduates from the better U.S. colleges to forego business careers in favor of public service occupations, graduate school, or professional training.³⁷

³⁶Vroom, op. cit., p. 61

³⁷Duncan Norton-Taylor, "The Private World of the Class of 1966", Fortune, February 1966, pp. 128 - 132, 166 - 172.

Roger Blough, "Business Can Satisfy the Young Intellectual", Harvard Business Review, Jan. - Feb. 1966, pp. 49 - 57.

Peter Drucker, "Is Business Letting Young People Down?", Harvard Business Review, November - December, 1965, pp. 49 - 55.

George Odiorne, "Are the Intellectual and the Corporation Compatible?" (unpublished mimeo, Bureau of Industrial Relations, University of Michigan, 1967.)

Paul O. Gaddis, "Winning Over Indifferent Youth", Harvard Business Review, July - August, 1969, pp. 154 - 160.

Surveys of students' attitudes toward business organization careers have shown some disturbing signs too. Students surveyed as long ago as 1961 by the National Opinion Research Centre, regardless of their field of study, rated as their highest occupational value the "opportunity to be helpful to others or useful to society". This strong orientation toward public service far outshadowed "making a lot of money" which was a distant seventh on their list of occupational values. Of the 19,000 male students surveyed, less than half felt that a business career would satisfy their major occupational values. The study concluded that the prime concern of college graduates was the type of work they would do and not so much where they would do it. This means that there is still a good chance for organizations to attract college graduates if the type of work is suitable. But if students are correct in believing that their occupational values will not be satisfied in a business career, then "some alterations are due in the business world if it wants to recruit these people."³⁸

Perhaps organizations could satisfy their manpower needs by recruiting only students majoring in business administration as these

³⁸"Attitudes of College Students Toward Business Careers", Journal of College Placement, December, 1967, special supplement, pp. 85 - 100.

students would presumably have attitudes and values compatible with organization environments. However, there is some evidence that even these students may be a declining source of college graduates with the "right" attitudes and values. A study done by Ondrack on students in business administration and arts at the University of Michigan compared attitudes held by business students with attitudes held by arts students using a variety of attitude scales. The study found that business students without prior work experience (only summer jobs) were very similar in attitudes overall to the arts students and both groups were low in authoritarianism. Business students who were older on the average and who had prior work experience had attitudes that were more conservative, more authoritarian and generally quite different from both the non-work business students and the arts students. When asked about expectations of job satisfaction after graduation, the highest expectations were held by arts students, few of whom expected to work in business careers. The lowest level of expectations were held by the business students with previous full-time work experience.³⁹ This finding is consistent with attitude surveys of college students done by Herzberg which found that

³⁹ Dan Ondrack, "Attitudes of Business and Arts Students", (unpublished mimeo, School of Business Administration, University of Michigan, 1967.)

job satisfaction plummets to its lowest level after the first year on the job.⁴⁰

In another study, conducted by the Society for the Advancement of Management in 1967, 2,421 undergraduates from colleges all over the U.S. were surveyed on their attitudes toward business as a career. Of the non-business majors in the sample, only 15% gave first choice to business as a career. Even among the business majors, only 67% gave first choice to business as a career.⁴¹

These and other similar statistics lend weight to the feeling that organizations, and business organizations in particular, are already beginning to feel the impact of the changes in attitudes and values among college students.

As the Cox report concluded, "the simple fact is that a constantly growing population of the best students does not look forward to careers moulded along the established lines of professional or business success".⁴²

⁴⁰Frederick Herzberg, "Motivation, Morale, and Money", Psychology Today, March 1968, p. 67.

⁴¹How College Students See Business as a Career, (New York, Society for the Advancement of Management, March, 1968) p. 16.

⁴²Cox, op. cit., p. 22.

The oft mentioned "generation gap" could exist just as much in employment relationships as it does in educational and family relationships. The possibility of a manpower crisis for organizations cannot be ignored as long as the environment offered by organizations fails to be compatible with the needs, aspirations, attitudes, and values of contemporary college students, or as long as organizations remain dependent upon college graduates as a source of managerial supply. To reiterate, since most organizations are structured in a hierarchy of authority and since most superior-subordinate relationships involve some sort of inequality of authority, a prime variable in the environment of an organization is the degree of authoritarianism in the organization. Therefore, any possible changes in attitudes toward authority among the potential supply of manpower to organizations should be of some concern to organizations and this concern should provide a reasonable frame of reference to assess the changes in attitudes toward authority. In order to begin the study of any changes in attitudes toward authority, it is first necessary to get some idea of the nature of general authoritarianism and this is discussed in the next section.

D. General Authoritarianism

As previously mentioned, it would not be possible in this thesis to examine all the changes in attitudes and values that may have occurred among college student populations from the silent generation to the active generation. Instead, it is necessary to choose some sub-set of attitudes or values that is relevant to the characteristics of contemporary students, that appears to have undergone a change between generations, and has some relevance to organizational environments. It is suggested that the cluster of attitudes known as general authoritarianism would satisfy these requirements in many ways and also has the virtue of being measurable.

General authoritarianism is an attitude construct composed of several closely correlated factors such as submissiveness to authority or high status figures, aggression toward low status or non-conformist figures, intolerance of ambiguity, prejudice, insecurity, low self-esteem, and relative immaturity. A person high in general authoritarianism could be described as having various degrees of passivity, obedience, dependence, conservatism, conformity, intolerance and insecurity. He would prefer a well structured, well ordered, stable world with everything in its place and strong benevolent leaders, whom one could depend upon much like an idealized parent. A person low in general authoritarianism would tend

to be relatively open-minded, tolerant of ambiguity, tolerant of non-conformists, independent, wanting to participate in decision-making, relatively mature emotionally and striving for self-actualization. Low authoritarian persons also tend to be relatively liberal in their political beliefs as opposed to the general political conservatism of high authoritarianism persons.⁴³

It is suggested that the descriptions of persons in the two extremes of authoritarianism have a great deal of similarity to description of students in the silent generation (high authoritarianism) and students in the active generation (low authoritarianism). Many studies recently done on student radicals and demonstrators have shown them to be distinctly lower in authoritarianism than the norm of the student body.⁴⁴

⁴³T. W. Adorno, Else Frenkel-Brunswik, Daniel Levinson, and R. Nevitt Sanford, The Authoritarian Personality, (New York, John Wiley, 1964) chap. 13.

Milton Rokeach, The Open and Closed Mind, (New York, Basic Books, 1960), chapters 1 & 3.

Roger Brown, Social Psychology, (New York, Free Press, 1965) chapter 10.

⁴⁴Trent and Craise, op. cit., p. 44.

Richard Flacks, "The Liberated Generation: An Exploration of the Roots of Student Protest", Journal of Social Issues, 1967, 23(3), p. 56.

Christian Bay, "Political and Apolitical Students: Facts in Search of a Theory", Journal of Social Issues, 1967, 23(3), p. 82.

Katz, op. cit., p. 15.

Watts and Wittaker, op. cit., pp. 59 - 60.

Authoritarianism, then, would not only seem to have some relevance to the characteristics of present-day students, but also would appear to have undergone a change from the silent generation to the active generation. Students in the 1950's did not appear to have many of the characteristics of low authoritarianism and, in fact, seemed to have many of the characteristics of persons higher in authoritarianism as evidenced by the description given by Flacks:⁴⁵

during the fifties, sociologists and social psychologists emphasized...the rise of a bland, security-oriented conformism...particularly among college students. The variety of studies conducted then reported students as overwhelmingly unconcerned with value questions, highly complacent, status-oriented, privatized, uncommitted.

Authoritarianism also has significance for employment relationships. Vroom has found that persons low in authoritarianism and high in need for independence had high job satisfaction and high performance under work conditions of participation in decision making.⁴⁶ In another study using homogeneous groups of people either low or high in authoritarianism, Haythorn found distinct behavioral differences between the groups. A more democratic group culture prevailed in low authoritarianism groups and

⁴⁵Flacks, op. cit., p. 54.

⁴⁶Vroom, op. cit., p. 119.

they were more effective in dealing with task problems. There was much more participation in group decision-making and emergent leaders were more sensitive to the opinions of group members. In groups with high authoritarianism, observers noted more frequent personality conflicts, less membership competence, more direction of the group by the leader, less motivation toward the group goal and less productivity than in non-authoritarian groups.⁴⁷

A study by Zagona and Zurcher also provided some implications for organizations having to deal with groups of people low in authoritarianism.⁴⁸

Both experimenters were struck by the differences in general scholastic performance and level of participation and interaction, differences in approaches to subject matter, differences in capacity and willingness to communicate, differences in getting at the heart of theoretical issues, and in general, differences in the approach to the intellectual challenge between the two sections. (One section high authoritarian, one section low authoritarian).

⁴⁷William Haythorn, "The Effects of Varying Combinations of Authoritarian and Equalitarian Leaders and Followers," in Eleanor Maccoby, et al (Eds.), Readings in Social Psychology, (New York, Holt, Rhinehart and Winston, 1958), p. 511.

⁴⁸Salvatore V. Zagona, and Louis A. Zurcher, "Relationship of Verbal Ability and Other Cognitive Variables to the Open-Closed Cognitive Dimension", Journal of Psychology, 1965, 60, pp. 213 - 9

Intellectual lethargy characterized the atmosphere of the high authoritarian classroom....an unwillingness to relate to the subject matters, or instructor....in the low authoritarianism group, an air of free discussion pervaded each class meeting, with spirited debates, high class enthusiasm, and general intellectual curiosity.

The implications for organizations should be relatively clear.

Persons who are low in authoritarianism seem to prefer free and open communications, participation in decision-making and a democratic style of working in a group or organization. As Bennis has said, the work-relevant values of such people will change with increased levels of education and mobility. "People will want to be more intellectually committed to their jobs, will probably require more involvement, participation and autonomy in their work."⁴⁹

These sorts of changes in the attitudes and values of students, especially with respect to lower levels of authoritarianism will cause great pressure on the employment relationship in organizations to provide a compatible environment for persons low in authoritarianism. This would mean moving toward a more democratic style of management, which Bennis feels is inevitable if organizations are to survive,⁵⁰ or moving towards Likert's "system four" style of management, which he feels provides the most compatible environment for satisfying the needs for participation,

⁴⁹ Warren Bennis, Changing Organizations, (New York, McGraw-Hill, 1966) p. 11.

⁵⁰ Bennis, op. cit., chapter 2.

self-actualization, and satisfaction.⁵¹ The question of whether the levels of general authoritarianism among college student populations have changed from the 1950's to the 1960's would seem to be a suitable area of study with a view to answering some of the questions about the characteristics of present day students and assessing the implications from these changes in characteristics to organizations hoping to hire these students.

⁵¹Rensis Likert, The Human Organization (New York, McGraw-Hill, 1967) p. 76.

E. Possible Reasons for Changes in General Authoritarianism

There are two main bodies of opinion about the reason for the apparent change in the levels of authoritarianism among college student populations. One school of thought, as exemplified by Lewis Feuer, holds that the apparent change is merely another manifestation of the periodic youthful rebellions that college students seem to go through and is a natural part of the youth experience. Once they leave university and start working, they will settle down and become part of mainstream society just as previous generations had done. Thus there is nothing new in the current rebelliousness and it will pass with time.⁵²

Another, more sophisticated version of this cyclical phenomenon school of thought is given by Eisenstadt. In this opinion, it is natural for youth to be somewhat alienated from mainstream society due to insufficient socialization and ambiguities of role. They seek out others of the same problems and tend to form youth cultures, relatively distinct from the adult culture. In time and with maturity, youth tends to adopt the adult culture and simply grows out of the youth culture. More intensive types of youth movements "tend to develop in those societies and periods in which the onset of modernization is connected with great upheavals and sharp cleavages in the social structure

⁵²Lewis Feuer, The Conflict of Generations, (New York, Basic Books, 1968) pp. 30 - 31.

and the structure of authority and with the break down of symbols of collective identity."⁵³ In other words, a crisis of authority, or an apparent change in levels of authoritarianism among youth may occur when their normal tendency toward alienation is exacerbated by social crises, but the cycle still prevails.

Eisenstadt's cyclical phenomenon theory is certainly compatible with today's social and political conditions, but there are other authors who argue that a more fundamental change is taking place in modern youth. This other school of thought argues that a change in the psychology of modern youth has occurred to render them psychologically different from previous generations, and lower levels of authoritarianism is one result of this change in psychological development. The reasons given for the psychological change vary from author to author. For example, Marshall McLuhan has put forth a theory that the widespread development of electronic circuitry and communications devices, particularly television, has had a profound impact on the psychological development of post World War II youth. Being exposed to an environment of television and a barrage of electronic information practically since birth has subtly altered their perceptual modes and conditioned them in such a way as to make them

⁵³S.N. Eisenstadt, "Archetypal Patterns of Youth" in Erik H. Erikson, (Ed.), The Challenge of Youth, (New York, Anchor Books, 1965) p. 36.

psychologically distinct from previous generations. To adapt to this information over-loaded environment, they have to think in different patterns than before, behave in different patterns and are able to adopt quite different attitudes and values than before. One of the consequences of this quantum change is that they no longer automatically respect older authority and in fact became quite challenging of conventional norms and values and are not satisfied with conventional career patterns. Thus there will be no settling down to conventional behavior patterns as previous generations did because the gap is too fundamentally distinct.⁵⁴

Other authors have used a more conventional socio-political approach to explain why this generation may be psychologically distinct from previous generations. Keniston argues that:⁵⁵

As our society becomes even more technical, more specialized, more highly organized, it seems to me likely that a continuing group of the most talented, sensitive, and suitably predisposed of our youth will be repelled by our society, and will experience a transient, and in many cases, an enduring phase of alienation...Cultural alienation among a segment of our most talented and sensitive youth is, I think, an almost inevitable consequence of the kind of society we live in.

Two factors are at work in Keniston's theory: the emerging

⁵⁴McLuhan, M., Understanding Media, op. cit., p. 335. See also Marshall McLuhan and Leonard, G.B., "The Class of 1989", Look, February 21, 1967., pp. 23 - 25.

⁵⁵Kenneth Keniston, Young Radicals, (New York, Harcourt, Brace and World, 1968), p. 342.

conditions of our society which tend to be alienating, and secondly, the presence of a body of youth that is talented, sensitive, and suitably predisposed. The second factor arises primarily from the family backgrounds of the students. Keniston's investigations into the backgrounds of his student activist sample determined that they had a fairly distinct pattern of family background. Students who were "committed" activists were alienated from contemporary society, but in an idealistic fashion. Although dissatisfied by the short-comings of contemporary society, they were strongly committed to the ideals society professes to hold and were usually concerned with trying to better society (a strong interest in public service). The "committed" students are generally open-minded, non-authoritarian, adaptable, and have good relationships with their parents. They come from a background of loving, non-authoritarian parents, but they are often somewhat disappointed with their parents because the parents often appear to have compromised on the ideals which they had taught their children.

Another type of student is highly alienated and disenchanted by society and is not committed to anything except a negative attitude toward authority. These students seem to come from a background pattern of a weak and/or inattentive father and an overly dominant mother. These "uncommitted" students come very close to being social drop-outs in that they reject conventional societal norms and authority without having any alternative norms or goals.

Many other researchers have noted the similarity in backgrounds of the student activists and have suggested that they are psychologically unique from previous rebellious generations. Block, Haan and Brewster Smith, in survey of research by Flacks, Gales, Heist, Katz, Keniston, Peterson, and Watts and Whittaker on activism among students have classified contemporary students into four main categories for purposes of comparison: student activists, individualists, the alienated, and constructivists.⁵⁶ Student activists "receive significantly higher scores on scales reflecting non-authoritarian attitudes and independence of authority, skepticism about conventional religious beliefs."⁵⁷ They were more likely to "proclaim values that are concerned with self expression, intellectual orientation and a sense of community with and responsibility for one's fellow man".⁵⁸

The child rearing practices of parents of activists were characterized as being Spockian in nature.

the influence of Benjamin Spock, who as an articulate pediatrician, led a revolt against the more authoritarian, rigid, constraining child rearing practices characteristic of an earlier generation of American parents. The Spock oriented mother of the future substituted inductive reasoning for insistence upon blind obedience, corrective discipline for punitive discipline, flexible responses for rigid scheduling, and reasonable limits for arbitrary prohibitions.

⁵⁶Block, et al, op. cit., pp. 213 - 223.

⁵⁷ibid., p. 216

⁵⁸ibid., p. 217.

It may be argued that the emergence of a dedicated, spontaneous generation concerned with humanitarian values and personal authenticity is a triumph of Spockian philosophy and principles.⁵⁹

Of course not everyone shares this enthusiasm for the results of Spockian principles and as Block, et al later point out "a less benign interpretation is that activism is a consequence of excessive parental permissiveness, a failure to teach respect for authority, and an unfortunate submission to the needs and feelings of the child."⁶⁰ However, Block, et al further state that other studies have shown that:

the parents of activist students do not appear to have been more permissive than those of non-activist students. Instead it is the alienated students, who seem to have had overly permissive parents who were inconsistent with love, values, ideals, and direction for the children. It would be very easy for such children to perceive that their parents didn't really care about them and they react as 'a disaffiliate estranged from both family and society'.⁶¹

The results of all the studies surveyed by Block et al are remarkably consistent in the finding that the student activists come from similar parental backgrounds which can be loosely characterized as Spockian. Other more conservative or less newsworthy students such as Block, et al's individualists and constructivists also come from Spock influenced back-grounds, but these are tempered by strongly achievement-oriented home environments. These findings by several independent

⁵⁹ibid., pp. 217 - 218.

⁶⁰ibid., p. 218.

⁶¹ibid., p. 223.

researchers that the student activists come from family backgrounds likely to produce people low in authoritarianism serves to corroborate earlier research done by Frenkel-Brunswik,⁶² Rokeach,⁶³ and Harvey⁶⁴ on the type of parental environment that produces low-authoritarian people. Their research shows that people high in authoritarianism tend to come from backgrounds where the parents were strict disciplinarians, where a high premium was placed on socially proper behavior, and where the child learned to be respectfully obedient under ~~threat~~ of punishment. People low in authoritarianism tend to come from backgrounds where the parents are warm and loving, where overly strict punishment and rules are avoided, and where the child is allowed to have some influence over his environment.

It seems likely that the authoritarian type of background as a mode of child rearing is on the wane in our contemporary society and most parents are practicing a form of child rearing more consistent with non-authoritarian development. Whether this trend is due primarily to Dr. Spock as claimed by some popular articles,⁶⁵ or due simply

⁶²Frenkel-Brunswik in T.W. Adorno, et al, op. cit., pp. 348 - 9, and 474 - 86.

⁶³Rokeach, op. cit., pp. 357 - 65.

⁶⁴O.J. Harvey, Experience, Structure and Adaptability, (New York, Wiley, 1967), Chapter 2.

⁶⁵"Bringing up Baby: Is Dr. Spock to Blame?", Newsweek, September 23, 1968 cover story, pp. 68 - 72.

to a greater enlightenment and relaxation in general about child rearing (especially among the better educated segments of society), the effect is still the same. The post World War II generation as a whole could be psychologically different from previous generations and these differences could be greatly evident whenever rapid social changes or crises occur.

A slightly different interpretation of this trend has been put forward by Roger Brown in his discussion of the authoritarian personality. While admitting that the concept of an authoritarian personality has a psychological validity, it also seems to be closely associated with a particular ideology for high authoritarian people. This essentially conservative, defensive, prejudiced, rigid, moralist and conformist ideology seems to be a characteristic of people low in socio-economic status, low in education levels, or falling in socio-economic status. In other words, high authoritarianism may be "a pattern of norms for the underprivileged sub-culture...or the world-view of the uneducated in Western industrial societies".⁶⁶ Even with this interpretation of authoritarianism, it is still apparent that college students, by virtue of their socio-economic and educational status, would be moving farther and farther away from high levels of authoritarianism.

While some authors still prefer to regard the current phenomenon of student activism as a cyclical phenomenon, others have argued that it is

⁶⁶ Roger Brown, Social Psychology, op. cit., pp. 522 - 3.

more than just a cycle and more than just a response to the current social problems. With the possibility of a psychological differentiation between generations in the area of authoritarianism, the current "generation gap" may be more significant than previously suspected.

F. Studying Changes in General Authoritarianism

In order to confirm the suspicion or the rough hypothesis that there is a significant difference in the level of authoritarianism between students in the silent generation and students in the active generation, it will be necessary to try to get some measures of levels of authoritarianism from college student populations covering both periods of time. Ideally, measures of authoritarianism levels should come from all regions of the country and all types of colleges and universities to see if it is a general phenomenon or one localized to the better quality universities. Keniston has suggested that students at the more academically prominent and selective universities will be in the vanguard of student activism,⁶⁷ but if a generational difference in levels of authoritarianism does exist, then it should be present (possibly to a lesser extent) at the less selective and less prominent universities as well.

By studying the levels of authoritarianism reported in various research studies using student populations at different universities over the time period in question, one should be able to discern through statistical analysis whether a trend in the levels of authoritarian norms is identifiable. Naturally a negative slope to the trend would be

⁶⁷Keniston, Young Radicals, op. cit., p. 339

predicted and this hypothesis could be tested by appropriate statistical techniques. If a negative slope in the levels of authoritarianism is identified for college student populations, then some of the concern expressed earlier for the future manpower needs of organizations would be justified.

In the chapters which follow, Chapter Two will be devoted to a discussion of the literature pertaining to changes in authoritarianism among college student populations plus a review of some of the cultural factors which seem to affect levels of authoritarianism. Chapter Three will be a description of the research methodology for the study, the hypotheses to be tested, and some of the problems inherent in the research. Chapter Four will be a description of the results of the study and the findings for each of the hypotheses. Chapter Five will conclude the study with a discussion of the results and possible future research implied by the results.

CHAPTER II

PREVIOUS RESEARCH ON AUTHORITARIANISM AND COLLEGE STUDENTS

A. Authoritarianism and Student Activists

A very large body of research exists on authoritarianism and much of it uses college students as subjects for the research. However, this body of research is mainly concerned with delving further into the nature of authoritarianism and examining the relationship of authoritarianism to other variables or its behavioral manifestations. Studies concerned specifically with the level of authoritarianism among college students have been comparatively few in number. After locating and examining the studies dealing in one way or another with levels of authoritarianism, it has been found that they could be divided into three main classifications: research on student activist personality profiles, follow-up studies on changes in authoritarianism in college student populations as they progress through college, and longitudinal studies of changes in authoritarianism by sampling populations over time. The research on student activist personality profiles will be discussed first.

Among the earliest of the studies of student activists was one done by McCarthy and Johnson on student attitudes toward the "city hall riots" in San Francisco in 1961. Subjects who were high in authoritarianism,

as measured by the Rokeach Dogmatism scale, tended to accept the police (authority) version of events, whereas those low in dogmatism tended to accept the student account of the disturbance. Among a sample of 85 undergraduates at San Jose City College, the mean dogmatism score for conservatives was 166, for neutrals 162, and for liberals 150. A comparative sample of 65 students at San Jose State College showed exactly the same trend, the mean dogmatism score for conservatives was 147, for neutrals 135, and for liberals 130.¹ Thus neutral and liberal students at two different colleges had clearly lower authoritarianism norms than did students classified as conservatives.

Largely due to the fact that the Berkeley campus of the University of California was so prominent in student activism, much of the research on student activists used Berkeley students for studies. Watts and Whittaker conducted a well-known study in 1964 on Berkeley students using the personality dimension of Flexibility - Rigidity. They felt that "such individuals (activists) might be expected to parallel those described in detailed surveys by Stouffer as tolerant and those by Rokeach as open-minded, both of which characteristics are generally associated with flexibility."²

¹John McCarthy, and Ronald C. Johnson, "Interpretation of the 'City Hall Riots' as a Function of General Dogmatism", Psychological Reports, 1962, II, pp. 243 - 5.

²William A. Watts and David Whittaker, "Free Speech Advocates at Berkeley", Journal of Applied Behavioral Science, 1966, 2 (1), p. 44.

Their study found that the mean rigidity scores for the Free Speech Movement sample were 9.19 and for the Berkeley student cross section sample were 11.11. This difference was reported as being highly significant, yielding at value of 4.66 ($p=.001$), which offered "strong support for the prediction of greater flexibility among the F.S.M. members".³ They concluded the study by noting that "personality - flexibility has been shown by many sources to be negatively related to conformity, authoritarianism, and ethno-centrism".⁴

In 1965, a further study was done on Berkeley students by Heist comparing F.S.M. activists and persons arrested in the Sproul Hall demonstration with a cross section of Berkeley students on a variety of attitude scales. Heist found that F.S.M. members received "significantly higher scores on scales reflecting non-authoritarian attitudes and independence of authority, skepticism about conventional religious beliefs and a tendency to reject them, tendency to express feelings and impulses directly, and four intellectual dispositions: Theoretical Orientation, Thinking Introversion, Estheticism and Complexity."⁵ Heist later developed an eight-point Intellectual Disposition index from six

³ibid., p. 59.

⁴ibid., p. 60.

⁵Heist, P., "Intellect and Commitment: the Faces of Discontent", (unpublished mimeo, Center for the Study of Higher Education, University of California, Berkeley, 1965), quoted in Block et al "Activism and Apathy in Contemporary Adolescents", in Adams, J.F. (Ed.), Understanding Adolescence, (New York, Allyn & Bacon, 1967), p. 216.

of the twelve scales in his attitude inventory and found that almost 70% of the F.S.M. sample was in the top 3 ranks of the index and none were in the bottom three. Only 25 - 31% of the general sample of Berkeley students were in the top three ranks, leading Heist to conclude that the F.S.M. "drew extraordinarily large proportions of students with strong intellectual orientations, at all levels, freshman through graduate."⁶

Heist's results were corroborated in a study by Trent and Craise which compared scores obtained by Heist for Berkeley students on the Omnibus Personality Inventory with scores obtained by Trent in 1963 for a national sample of college students. Two results are immediately apparent from the comparison. First, the Berkeley students as a whole are quite different from the national sample in almost all the scales, and secondly, the F.S.M. sample is significantly different from both the Berkeley general sample and the national sample. The Free Speech members had "far more interest in intellectual inquiry, tolerance for ambiguity, objectivity, and independence of thought than the members of the other groups".⁷ The fact that the Berkeley sample as a whole scored higher than the national sample could be due either to the greater selectivity and general higher level of student ability at Berkeley, or due to the difference in time period between the two samples.

⁶Heist, P. (1965) as quoted by Christian Bay, "Political and Apolitical Students: Facts in Search of a Theory", Journal of Social Issues, 1967, 23 (3), p. 84.

⁷James W. Trent and Judith L. Craise, "Commitment and Conformity in the American College," Journal of Social Issues, 1967, 23 (3), p. 40.

Flacks' research delved into the backgrounds and value patterns of student activists at the University of Chicago in 1965 and 1966. He found that activists largely came from upper middle class backgrounds, grew up in a non-authoritarian environment, and largely shared the liberal values of their parents. The critical differences between activists and their parents, which some have called a revolt, was that the activists tried to live the value patterns which their parents had professed. Non-activists and their parents tended to express:

conventional orientations toward achievement, material success, sexual morality, and religion, the activists and their parents tend to place greater involvement in intellectual and esthetic pursuits, humanitarian concerns, opportunity for self expression, and tend to de-emphasize or positively disvalue personal⁸ achievement, conventional morality and conventional religiosity.

These pattern differences were born out by Flacks' measure of value patterns among activists and non-activists. Table 1, which appears below, is adapted from Flacks' data.⁹

⁸ Richard Flacks, "The Liberated Generation: Roots of Student Protest", Journal of Social Issues, 1967, 23 (3), p. 68.

⁹ ibid., p. 69.

TABLE 1

SCORES ON SELECTED VALUES BY ACTIVISTS AND NON-ACTIVISTS

<u>Intellectualism scale</u>	<u>Activists (N=34)</u>	<u>Non-activists (N=37)</u>
High Score	32	3
Medium "	65	57
Low "	3	40
	100%	100%
<u>Humanitarianism scale</u>		
High Score	35	0
Medium "	47	22
Low "	18	78
	100%	100%
<u>Moralism scale</u>		
High Score	6	54
Medium "	53	35
Low "	41	11
	100%	100%

The Moralism scale reflects the extent to which a value is placed on "keeping tight control over emotion - adherence to conventional authority; adherence to conventional morality....very few activists score high on this variable, while the majority of non-activists are high scorers."¹⁰

¹⁰ ibid., p. 70

Flacks was able to conclude that one of the major characteristics of activists was "anti-authoritarianism." which he described as:

A strong antipathy toward arbitrary rule, centralized decision-making, manipulation. The anti-authoritarian sentiment is fundamental to the widespread campus protests during the past few years....Anti-authoritarianism is manifested further by the styles and internal processes within activist organizations....members are strongly critical of leadership within the organization when it is too assertive.¹¹

Petersen also did a study comparing the value patterns of student activists with those of a non-activist sample, using data obtained from Michigan State University in 1966. He used his College Student Questionnaire as a measure of value patterns among samples of 25 student activists, 25 student government leaders, and a control group of 25 people carefully matched to the activist sample. The student activists were very much higher in the Family Independence scale, Peer Independence scale, Liberalism scale, Social Conscience scale and Cultural Sophistication scale.¹² (The Liberalism scale mean was the highest heretofore obtained with any other student group)¹³ While concluding that the pattern of mean scores tended to agree with the results of similar studies of activists, Petersen also felt that the type of institution

¹¹ibid., p. 56.

¹²Richard E. Petersen, "The Student Left in American Higher Education", Daedalus, Winter 1968, p. 304.

¹³ibid., p. 304.

was significant for the incidence of activism.

Additional institutional characteristics are also important in understanding the current status and future prospects of the student left: location of a college in a large urban center where the country's social ills tend to be focussed; a tradition of student radicalism as at Berkeley...; the degree to which a college...is closed and rigid or open and libertarian with regard to its students' personal and political lives...The reasonably affluent student preselects three or four colleges whose images he thinks are compatible with his own interests, values and aspirations.¹⁴

The trend of these and other studies has been noted by reviewers of the literature in their discussions and analyses of student activism. Katz gives the following summary:¹⁵

Activist students, measured by a variety of personality instruments, consistently score significantly higher not only on the dimensions of theoretical orientation and aesthetic sensitivity.... but also in their degree of psychological autonomy, social maturity, tendency to express feelings and impulses directly, and lack of authoritarianism. This means that activists, according to these measures, tend to be more flexible, tolerant, and realistic, less dependent upon authority, rules, or rituals;...they tend to be independent of authority as traditionally imposed through social institutions and oppose infringement on the rights of individuals...One might think of them as psychologically rich people who are likely to smart under institutional conditions that restrict their opportunity for personal experience, sensitivity and intense communication with other people.

Similar results and conclusions are obtained from Block,

¹⁴ ibid., p. 306.

¹⁵ Joseph Katz, The Student Activists: Rights, Needs and Powers of Undergraduates, (Stanford University, Institute for the Study of Human Problems, 1967), p. 15.

et al¹⁶ and Keniston from research done in 1967. Thus there is an impressive body of research on the value patterns of student activists and one distinct pattern that emerges is the lower level of authoritarianism among activists. At the same time, this body of research does not answer all the questions about levels of authoritarianism among student populations. Very little is known about levels of authoritarianism among the general student body except that it might be higher than among the activists. Most of the research has been done using student samples from academically prominent universities so little is known about the levels of authoritarianism among less prominent schools. Finally, the research surveyed so far does not concern itself with possible changes in the level of authoritarianism in the student populations. There is no attempt to compare the levels of authoritarianism found at one point in time to another to see if any trend is apparent. Therefore, some gaps in the literature on authoritarianism and student activism remain. The intent of this project will be to fill in some of those gaps by trying to survey patterns in authoritarianism over time for the general student bodies at both academically prominent and less prominent schools.

¹⁶Jeanne H. Block, Norma Haan, and M. Brewster Smith, "Activism and Apathy in Contemporary Adolescents", In Adams, J.F. (Ed.), Understanding Adolescence, (Boston, Allyn and Bacon, 1968), p. 216.

¹⁷Kenneth Keniston, "The Sources of Student Dissent", Journal of Social Issues, 1967, 23 (3), p. 118.

B. Panel Studies on Changes in Authoritarianism Among College Students

There has been a body of research concerned with studying the possibility of changes in the levels of authoritarianism among college students over time but it is independent of the research done on student activists. This body of research is primarily concerned with differences in the levels of authoritarianism among student samples as they progress through college from freshmen to seniors. Such studies are generally of two types: the cross-section study where authoritarianism is measured and compared simultaneously for freshmen and seniors, and the panel study, where a freshman class is measured for authoritarianism and periodic measures of the same class are taken as it progresses through its university career. The object of most of these studies is to assess the impact of the college experience upon the attitudes and values of students as they progress through college. The cross sectional study is felt to be the weaker in research design because it assumes that a contemporary freshman class is not materially different than a freshman class of possibly four years ago.¹⁸

An early example of a cross-sectional study was done by Selvin and Hagstrom in 1957 using a sample of Berkeley students. In a study on

¹⁸ Theodore M. Newcomb and Kenneth A. Feldman, The Impacts of Colleges Upon Their Students, (Ann Arbor, Report to the Carnegie Foundation for the Advancement of Teaching, January, 1968), p. 56.

attitudes toward civil liberties, they constructed a Libertarianism index and found a positive linear relationship to exist between high libertarianism and seniority as a student. In general, "the proportions of highly libertarian students on the Berkeley campus ascend from freshman to senior and graduate level: 21% - 20% - 34% - 40% - 54%."¹⁹

An early example of a panel study was done by Ehrlich using a sample of Ohio State University students from 1955 to 1960. He found that the mean score on the Rokeach Dogmatism scale in 1955 was 142.6 and in 1960 was 134. The variance of the distribution of the scores also tended to shrink over the time period suggesting both lower authoritarianism and greater homogeneity to have occurred over the time period.²⁰

More sophisticated panel studies were conducted by Plant and by Lehman and Dressel. Both sets of researchers did panel studies, but in this case, they measured dogmatism scores of students prior to their entering colleges, periodically during college, and as the students graduated from college. They also tried to get dogmatism scores for those who did not enter college after all, and for those who dropped out

¹⁹ Hanan C. Selvin and Warren O. Hagstrom, "Determinants of Support for Civil Liberties," in Seymour M. Lipset, and Sheldon S. Wolin, (Ed.), The Berkeley Student Revolt, (New York, Anchor, 1965), p. 503.

²⁰ Howard J. Ehrlich, "Dogmatism and Learning: A Five Year Follow Up", Psychological Reports, 1961, Vol. 9, pp. 283 - 6.

during college.

Plant's research was done using students from San Jose State College from 1958 to 1962. The dogmatism mean for freshmen at San Jose in 1958 was 157, by 1960 after 4 semesters, this mean dropped to 141.5, and by 1962, after 8 semesters, the mean was 136.5. A similar trend was observed for those who did not progress as far through college but their mean scores did not drop as low. Plant observed that dogmatism scores also declined over time for those who did not enter the college, but his data shows that the mean for this group was much higher initially and never went as low as the college sample. (1958, D = 164, 1960 D = 153). Plant concluded by noting that there was a general tendency for the students with the highest number of semesters to have the lowest mean scores on ethnocentrism, authoritarianism, and dogmatism but it also seemed as though the greatest impact on the change in authoritarianism occurred for all groups in the first two years of college.²¹

The Lehman and Dressel Study was done for the same time period, 1958 - 1962, using students from Michigan State University. The dogmatism mean score for all freshmen in 1958 was 166, after 4 semesters the mean score for the panel had dropped to 152.5, and by

²¹ W.T. Plant, Personality Changes Associated with a College Education, (Washington U.S. Office of Education, Department of Health, Education and Welfare, Cooperative Research Branch Project 348, 1962) pp. 62 - 5.

1962 the mean score had dropped to 150.5. Thus Lehman and Dressel were able to report that there are significant changes in critical thinking ability, attitudes, and values from the freshman to senior year. Students became less rigid, more flexible and less authoritarian as they progressed through college, although those who stayed longest in college did not change markedly more than other groups.²² Lehman and Dressel also added an observation that students coming as freshmen to M.S.U. today (1962) are less stereotypic, less rigid and authoritarian than their counterparts in the 1950's.²³ Unfortunately, they did not present any data to support this observation nor did they indicate that such a longitudinal study of changes in the levels of authoritarianism between generations of freshmen was being undertaken.

Although both Plant, and Lehman and Dressel showed some evidence that authoritarianism levels tended to decline independently of college experience, neither was able to show that non-college samples ever declined as low as college samples. A study reported by Trent and Craise using the Omnibus Personality Inventory which contains the Non-authoritarianism scale showed considerable differences over a four year period between a college sample and a sample of consistently employed peers. In 1959 there were no significant differences

²²Irvin J. Lehman and P.L. Dressel, Critical Thinking, Attitudes and Values in Higher Education, (Lansing, Final Report of Cooperative Research Project 590, U.S. Office of Health, Education and Welfare, published by Michigan State University, 1962), pp. 31 - 33.

²³ibid., p. 33

in the non-authoritarianism scores of the college group or the employed group. By 1963, the college group had advanced in non-authoritarianism by a difference of 15.84 for men ($p = .01$) to 18.36 for women ($p = .01$). The employed group, by contrast, had remained virtually unchanged in non-authoritarianism. As Trent and Craise concluded, "the young men and women who entered employment immediately after high school showed considerably less tolerance for ambiguity and less interest in intellectual inquiry after four years than they had initially demonstrated."²⁴

A more recent panel study done by Hassenger using a sample from Mundelein College in Chicago, a Catholic Women's College, also showed much the same trend as previous studies. Freshmen students measured in September 1963 had a mean dogmatism score of 162.3, by May 1964, their mean score had dropped to 157.5 and by March 1965 their mean dropped further to 146.2²⁵ Thus the trend toward lower levels of authoritarianism through college experience can even be found in small, mid-western, Catholic women's colleges which are not ordinarily noted for their liberal influence on students.

Although they did not conduct any panel studies on authoritarianism themselves, Newcomb and Feldman undertook a truly massive review of the literature on the effect of the college experience upon levels of authoritarianism. This review was part of their

²⁴Trent and Craise, op. cit., p. 44.

²⁵Robert Hassenger, "Varieties of Religious Orientations", Sociological Analysis, 25 (4), Winter 1964, pp. 189 - 199.

larger study on the general impact of colleges upon students. After reviewing more than thirty research reports which variously used as measures of authoritarianism the Rokeach Dogmatism Scale, the California F scale, the Social Maturity Scale, the Omnibus Personality Inventory non-authoritarianism scale, and various derivations of these scales, the authors were able to come to a conclusion:

As shown on Table 2H in Appendix 2, freshman - senior differences are strong and strikingly consistent from sample to sample. Nearly without exception,²⁶ the studies show seniors to be less authoritarian, less dogmatic, less ethnocentric, and less prejudiced than freshmen. Also with very few exceptions these differences are relatively large and are statistically significant. Further, these differences are evident in such diverse colleges and universities as the University of Santa Clara (a Jesuit university in California), Bennington College (a small, select liberal arts college for women on the East Coast), and Michigan State University (a large, state multiversity in the Mid-West).²⁷

²⁶ An exception was reported by Boyd F. Dowell in his Ph.D. thesis. He gave the dogmatism test to 193 freshmen at Cedarville College, Ohio, a "Baptist College for Baptist students with a fundamentalist orientation." (p. 144). The first time the test was taken the mean score was 175.35, one semester later the mean score had risen to 179. Dowell concluded that the trend of the scores "tends to imply that both institutional atmosphere and geographic locality are factors which may affect a subject's dogmatism level (p. 145)....and "all groups became more dogmatic during the course of the semester" (p. 155).

Boyd F. Dowell, "The Effects of Various Teaching Methods Upon the Self-Concept, Attitude Toward Psychology, Anxiety Level, Dogmatism Level and Level of College Achievement of First Semester Cedarville College Freshmen" (Unpublished Ph.D. Thesis, University of Tennessee, 1967)

²⁷ Newcomb and Feldman, op. cit., p. 34.

Even though there is some evidence that authoritarianism may decrease regardless of whether one goes to college, perhaps due to some maturation process, the evidence is very clear that "the decreases for college students are both more reliable and larger than those for non-college students."²⁸ In other words, college environments appear to facilitate decreases in authoritarianism more than non-college environments. This means that people graduating from college will have come from a low-authoritarian environment and most likely will be looking for a similar environment in the next stage of their careers. Secondly, any attempt to study possible changes in authoritarianism between generations of college students must be careful to control for these experiential changes that occur while students are in college. It would be difficult to compare freshmen scores in the 1950's to senior scores in the 1960's in any meaningful way because of the interference from the college experience-maturation effect.

None of the studies reviewed by Newcomb and Feldman attempted to measure changes in authoritarianism between generations nor did Newcomb and Feldman directly consider this question. Nonetheless, the studies reviewed in this section all offer an impressive body of evidence for the opinion that the majority of college graduates are lower in authoritarianism than the general population. This finding

²⁸ ibid., p. 34

alone should be enough to cause employers to consider whether their organization environment is compatible to such groups.

C. Longitudinal Studies on Changes in Authoritarianism

So far, none of the studies discussed have been able to shed any light on the question of whether changes in authoritarianism have occurred between generations of college students. Actually there appear to have been very few studies which have been concerned with any such longitudinal changes. Ideally, such a study would take periodic measurements of samples from a population that was constant over time. For example, measuring the level of authoritarianism among the freshmen students at a given university every year from say 1955 to 1965 would be an ideal study. Unfortunately, an extensive search of the literature does not reveal the existence of such an ideal study, although a few longitudinal studies have been found.

A study was conducted by Freedman in 1959 using students and alumni from Vassar College which attempted to measure the levels of authoritarianism from 1904 to 1959. Freedman gave the California F scale to Vassar alumni from the classes of 1904, 1914, 1921-24, 1929-35, 1940-43, and 1956. His sampling was standardized to the extent that he only measured the authoritarianism of graduates of Vassar, but obviously it was not standardized for ages of the various samples. His results are shown in Table 2 below.²⁹

²⁹ Mervin B. Freedman, "Changes in Attitudes and Values Over Six Decades", in Marie Jahoda, and Neil Warren, (Eds.), Attitudes, (Middlesex, England, Penguin Books, 1966), p. 128.

TABLE 2F SCALE SCORES FOR CLASSES OF VASSAR GRADUATES

<u>Classes</u>	<u>N</u>	<u>F scale mean</u>	<u>S. D.</u>
1904	85	121.14	35.84
1914	43	99.53	33.99
1921-24	73	100.96	28.86
1929-35	50	87.98	22.15
1940-43	77	87.56	24.44
1956	200	95.09	23.87

Freedman felt that his sample was relatively homogeneous for the time period studied and he was "inclined to rule out chronological age as a cogent explanation factor"³⁰ for the largely downward trend in authoritarianism. Another interesting trend was the narrowing of the variance over the time period studied which appeared to be due to a developing reluctance among the later samples to take an extreme view on any of the Likert type items in the questionnaire. In order to explain the higher mean score for the 1956 sample, Freedman had to investigate the responses to individual items in the questionnaires and he found that different samples responded in different ways to the same items. This finding led him to conclude that the differing socio-political environments of the respective samples' college experience affected their responses to the content of the questionnaire.

The conclusion seems obvious that social and individual psychological processes parallel one another rather closely.

³⁰ ibid., p. 130.

Changes in American society and culture seem to be accompanied by changes in individual personality structure as well as by changes of opinion and attitudes....

....In general I believe that we may see in the above comparisons of the Class of 1956 with the other groups some of the smugness and the attachment to the status quo which is characteristic of many segments of American society today (1959)³¹.

Thus we have from Freedman's study not only evidence of a longitudinal general trend toward lower levels of authoritarianism (with some peaks and valleys) but also some indication that at least one sample of students in the mid 1950's was noticeably higher in authoritarianism.

Similar evidence is obtained for a shorter time period in a study done by Ross at Michigan State University between 1958 and 1962 using the Vassar College Attitude Inventory. Ross found that there was a substantial difference in the attitudes and values held by freshmen women students at M.S.U. from 1958 to 1962. Freshmen groups of women entering in 1958 represent more nearly "the midpoint of the continua....they were neither ultra-liberal nor ultra-conservative. They no longer accepted all of their parents values but they hadn't discarded all of them either."³² The groups from the more recent samples (1961, 1962) held different attitudes and values, "the 1961 sample is distinguished for its malajustive behavior" (Ross' interpretation), i.e.: "anxiety,

³¹ ibid., p. 134.

³² Dorothy R. Ross, "The Story of the Top 1% of the Women at Michigan State University", (Unpublished mimeo, Michigan State University, September 1963), p. 29.

defensiveness, pessimism....The samples from the more recent groups did not accept the status quo. They were oriented toward challenge and change. They were critical of institutional authority and beginning to question parental authority....also rejection of established procedures and traditions."³³

In the same study, Ross also did a panel study with the 1958 freshmen class and found that by 1962, they had become less authoritarian and dogmatic, less fundamental in religious beliefs, more critical of established institutions and traditions and more resistant to the authority of family, state and university.³⁴ Curiously, she interpreted the results of the panel study as being a positive indication of the maturity and other benefits from the college experience, and at the same time interpreted the same characteristics, when they were found in the freshman of 1961 and 1962, as being evidence of maladjustment and immaturity.

In any case, the Ross study is a longitudinal study that measures the sample population (female freshmen at M.S.U.) with the same instrument over a period of time and shows that a lowering of authoritarianism had occurred independent of college experience. Unfortunately the time period studied was only from 1958 to 1962 and there was no indication of any longer time period being studied.

³³ibid., p. 35.

³⁴ibid., p. 49.

Earlier in this chapter, reference was made to a study reported by Trent and Craise on student activists. This same study also compared scores on the Omnibus Personality Inventory between a national sample of college seniors in 1963 and a representative sample of Berkeley seniors in 1965. Although the study was designed to see if the Berkeley activists were atypical of the general student body at Berkeley on the attitudes and values measured by the O.P.I., it also showed that the sample of Berkeley seniors in 1965 was also quite different from the national sample of seniors in 1963. The direction of the difference between the 1963 sample and the 1965 sample was clearly toward higher levels of intellectual orientation, tolerance of ambiguity and independence of thought.³⁵ Of course these two samples may not really be comparable at all and without knowing the scores of Berkeley seniors on the O.P.I. in 1963, one cannot draw strong conclusions from these results.

The only other evidence of a longitudinal study is a recently published study by Lehman and Hill. This study surveyed several characteristics of freshman classes entering Michigan State University from 1958 to 1967. Although this study did not use a measure of authoritarianism, it did have a value orientation scale which appears to have some relevance to authoritarianism. The predominant finding on the

³⁵Trent and Craise, op. cit., p. 39.

changing nature of freshman entering M.S.U. was that:

today's freshman is different from his counterpart of 1958 . He is brighter, more articulate, more relativistic in his moral values, less concerned about the future and he has some rather definite opinions concerning what rights the student should have with respect to the curriculum, the faculty, the administration, and the rules and regulations of the University....He will not be satisfied to be told: These are the rules that we have, and you must behave according to the rules.....Because of his relativistic outlook on life and his emergent pattern of values, he will interpret regulations according to the times in which he lives.

....In a previous longitudinal study conducted at Michigan State University from 1958 to 1962, it was evident that, as they passed through college, students became generally more emergent in their value orientation. If the same tendency holds for the 1967 freshmen, we may not expect them to 'settle down'. On the contrary, they are likely to become more questioning, more demanding.³⁶

A further finding in Lehman and Hill's study, which is of interest to this project, is the fact that there was a marked change in the choice of majors among freshmen. For both males and females, the most marked change was the decrease in the proportion of students enrolling in Business (down 13%) and the increase in the proportion of students enrolling in Science and Arts (up 23.5%).³⁷

If the Lehman and Hill study had used an authoritarianism scale, they would have provided an ideal longitudinal study of possible

³⁶Irwin J. Lehman and Walker H. Hill, Michigan State University 1958 and 1967 Freshmen: A Contrast in Profile, (East Lansing, Michigan, Office of Evaluation Services, Michigan State University, 1969, # 1), p. 8.

³⁷ibid., p. 13.

changes in the levels of authoritarianism among freshmen entering M.S.U. While their findings on changing patterns in attitudes and values are consistent with the results of the previously discussed longitudinal studies, we are still left with unanswered questions about changes in the levels of authoritarianism between the generations of the 1950's and 1960's. The available longitudinal studies on changes in the levels of authoritarianism among college student populations are only suggestive so far. There is some evidence that a trend to lower levels exists, independent of the college experience/maturity effect upon authoritarianism, but no study consciously deals with the problem of actually trying to measure any possible changes from the 1950's to the 1960's. This review on the research on authoritarianism has shown strong evidence of low authoritarianism among student activists, strong evidence of low authoritarianism among college seniors, and only suggestive evidence of a longitudinal trend toward lower authoritarianism among college student populations in general. The gap in the research on authoritarianism is in the longitudinal studies and it is a longitudinal study that can best attempt to answer the questions about the generation gap posed in Chapter One.

D. Research Design Problems in Longitudinal Studies

The research design for a longitudinal study on changes in the level of authoritarianism would have to overcome several problems that could interfere with the data. Both the quality of the schools and the geographic regions of the schools have been found to have some effect on the levels of authoritarianism found in college student populations. Several authors³⁸ have noted that authoritarianism means tend to be lower at better quality schools, urban area schools, and non-religious schools. Stouffer, for example, in his research on attitudes towards conformity and civil liberties, found "a clear relationship between urbanization and liberalism, both nationally and for each region of the United States: West, East, Middle West, South. The degree of liberalism is also related to the region, with descending degrees from West to South in the order listed."³⁹

Peterson has noted that conservative students are most active

³⁸ see Milton Rokeach, The Open and Closed Mind, (New York, Basic Books, 1960), p. 196, p. 111, p. 119; Richard D. Alter, and Jack B. White, "Some Norms for the Dogmatism Scale", Psychological Reports, 1966 19, pp. 967 - 9; Ralph. B. Vacchiano, David C. Schiffman, and Paul S. Strauss "Factor Structure of the Dogmatism Scale", Psychological Reports, 1967, 20, pp. 847 - 52.

³⁹ Samuel A. Stouffer, Communism, Conformity and Civil Liberties, as quoted by Christian Bay in "Political and Apolitical Students: Facts in Search of a Theory", Journal of Social Issues, 1967, 23 (3), p. 78.

at smaller colleges, "especially church-related ones, southern universities, technical and other career oriented institutions",⁴⁰ whereas student activists are most common at the prestigious and academically prominent schools.⁴¹ Peterson also conducted research to see if colleges could be ranked in terms of their "openness" or permissiveness toward student freedoms. He found that a rough correlation existed between the incidence of student activism and the openness of the institution.

A crude ranking of the eight types of student bodies in terms of civil rights activism would be: independent universities, independent liberal arts colleges, public universities and Catholic institutions...public liberal arts colleges, Protestant institutions, technical institutions, and teachers colleges. ...proportionately fewer colleges in the South reported student activism in relation to off-campus issues.⁴²

Thus any longitudinal study would have to try to control for the influence of quality of schools and geographic region of the schools. The other source of interference would of course come from the college experience/maturity phenomenon. Ideally the samples over time should be consistently freshmen or consistently seniors, or consistently lower division students and consistently upper division students.

Lastly, a valid instrument is needed for measuring general

⁴⁰Peterson, op. cit., p. 294.

⁴¹ibid., p. 306.

⁴²ibid., p. 309.

authoritarianism, one that is relatively independent of changes in political ideology⁴³ that may have occurred in the time period studied, and one that has remained relatively unmodified during the time period studied.

Once a research design is developed for a longitudinal study that incorporates controls for the aforementioned sources of interference, then it is necessary to find data that satisfies the requirements of the study. In an ideal longitudinal study, researchers would have begun measuring levels of authoritarianism for consistent samples of students back in the 1950's and would have continued such measuring through routine freshman assessment at various universities, but no such published studies have been uncovered in a search of the literature. Lacking such ideal data, a longitudinal study conducted now would have to rely on historical sources of data on levels of authoritarianism and historical data always imposes the risk of being incomplete. However, if a research design can be formulated that answers some of the problems discussed here and if sufficient historical data can be found, then it should be possible to conduct a simulated longitudinal study that will attempt to answer the question of whether significant changes have occurred in the levels of general

⁴³ A strong criticism of the California F scale is that it is biased toward right-wing authoritarianism. See Rokeach op. cit., p. 13.

authoritarianism among college student populations from the silent generation to the active generation. The intent of this dissertation is to formulate just such a research design which controls for the influence factors, and then search through the available studies on authoritarianism to gather the necessary historical data on authoritarianism norms. Once a sufficiently large body of norms is gathered representing samples from the mid 1950's to the present time, then the body of data will be analyzed according to the research design of a simulated longitudinal study. Thus an attempt will be made using historical data to provide a close approximation of an ideal longitudinal study.

CHAPTER III

RESEARCH DESIGN

A. Plan of the Study

A longitudinal study of the levels of authoritarianism reported for college student population from the 1950's to the 1960's would be the most appropriate way of answering the general question of whether a significant drop in the level of general authoritarianism had occurred between the silent generation and the active generation. Such a study would have to overcome or control for the influence of demographic variables referred to in Chapter II and would have to rely on historical sources for measurements of levels of authoritarianism in the preceding years.

The plan of this study would be to first obtain a relatively dependable measure of authoritarianism and then conduct an extensive search of the literature for studies that had used this instrument with college student populations. The mean score on the authoritarianism instrument is generally reported in such studies and regardless of the original purpose of the studies, the mean scores reported should serve as some indication of the level of authoritarianism for the student sample at the time of the study. Once enough authoritarianism norms had been gathered to represent most of the years in the time interval, then appropriate statistical analyses

could be conducted to test the general hypothesis that a negative slope would occur in the reported norms. The reported norms would also have to be divided into various sub-samples of geographic region, college quality levels, and student divisions to see if similar negative trends are observed under conditions of controlling for the influence of demographic variables.

B. Instrument for Measuring Authoritarianism

There have been a great many instruments developed for measuring authoritarianism and most of them are derived in some way from the original California F scale developed by Adorno and associates. Unfortunately, this scale is unsuitable for a long range study for several reasons. First, it has undergone considerable revision since its inception and it would not be valid to say that contemporary versions of the scale are directly comparable to older versions. The revisions have occurred due to the demonstrated right-wing bias of the scale,¹ and the susceptibility to acquiescence response-set of the scale.² Subsequent versions of the scale appeared with both positively and negatively worded items and with varying numbers of items.

A similar problem exists with the Omnibus Personality Inventory. It too has undergone revisions since its inception with the Non-authoritarian scale eventually becoming the Social Maturity Scale.³ Other lesser known scales that in some way measured aspects of authoritarianism were also reviewed by Newcomb and Feldman and all share similar histories of revision.

¹Milton Rokeach, The Open and Closed Mind, (New York, Basic Books, 1960), p. 13.

²Roger Brown, Social Psychology, (New York, The Free Press, 1965) p. 511.

³Theodore M. Newcomb and Kenneth A. Feldman, The Impact of Colleges Upon Their Students, (Ann Arbor, Michigan, Report to the Carnegie Foundation for the Advancement of Teaching, January 1968), p. 369.

A scale for the measurement of general authoritarianism was developed by Rokeach in 1955 and it was specifically designed to be free of either right-wing or left-wing bias. Although originally a sixty-six item scale, it was eventually refined to a forty item scale and has remained the same since 1955.^{4,5} The instrument, variously called the Rokeach Dogmatism Scale or the Open-and-Closed-Mindedness Scale has undergone extensive validation studies, both by Rokeach and his assistants and by many other researchers.⁶ It successfully distinguishes highly authoritarian people whether they are leftist or rightist in their political ideology, a feature which satisfied Rokeach's desire for it to be largely free of political bias. The scale is considered to be a measure of general-authoritarianism and has been widely used as a research instrument, thus providing a widespread body of authoritarianism norms from 1955 to the present day. In sum then, it appears as though the Rokeach Dogmatism Scale would be an ideal instrument for trying to measure changes in the levels of authoritarianism from 1955 to 1968.

⁴Rokeach, op. cit., pp. 71 - 91.

⁵Smaller versions of the scale were later developed by Troidahl and Powell (20 items) and by Schulze (10 items). Neither of these scales were used for more than crude measures of dogmatism. See Vernon Troidahl and Fred Powell, "A Short Form of the Dogmatism Test", Social Forces, 1965, 44, pp. 211-14; and Rolf K. Schulze, "A Shortened Version of the Rokeach Dogmatism Scale", Journal of Psychological Studies, 1962, 13, 93-97.

⁶Virtually the entire book, The Open and Closed Mind, is concerned with validation of the dogmatism scale.

It should be mentioned that the dogmatism scale has been found to have some susceptibility to acquiescence response-set because all the items are positively worded, but the response-set has not been of sufficient magnitude to offset the content validity.^{7,8} Another possible quirk to the scale has been found by Becker and Johnson in two independent studies. Both researchers found some evidence of curvilinearity in the behavioral aspects of dogmatism. That is, persons scoring very low in the scale seemed to share many of the characteristics of those persons scoring very high in the scale.^{9,10} These findings raise the possibility that a "denial response-set" or extreme open-mindedness can be as maladaptive in some ways as extreme closed-mindedness.

These two limitations on the Rokeach Dogmatism Scale are not deemed to be of sufficient importance to preclude its use as an instrument for a longitudinal study. In fact, the curvilinearity aspect to the scale may even be helpful in explaining some of the apparently dogmatic behavior of some of the more extreme student activists. Use of the dogmatism scale does limit the time period studied to the years 1955 - 1968.

⁷Rokeach, op. cit., p. 406.

⁸Dean Peabody, "Attitude Content and Agreement - Set in Scales of Authoritarianism, Dogmatism, Anti-Semitism and Economic Conservatism," Journal of Abnormal and Social Psychology, 1961, 3(1), pp. 1 - 11.; Harold A. Korn, and Norman S. Giddon, "Scoring Methods and the Construct Validity of the Dogmatism Scale", Educational and Psychological Measurement, 1964, 24(4), p. 867.

⁹Gary Becker, "Ability to Differentiate Message from Source as a Curvilinear Function of Scores on Rokeach's Dogmatism Scale", Journal of Social Psychology, 1967, 72(2), pp. 265 - 73.

¹⁰Bruce R. Johnson, "An Investigation of the Cognitive and Defensive Aspects of Dogmatism", (Unpublished Ph.D. Thesis, Washington University, 1965) p. 59.

C. Sources of Data

Due to the widespread use of the dogmatism scale in social science research, there should be a large body of norms for various student populations published in the social science literature. Because of the standardized format and scoring procedure of the dogmatism scale, it should be possible to use historical data with confidence for comparisons to contemporary data. Other sources of data would be the research files of Professor Rokeach, correspondence with researchers who have used the dogmatism scale, dissertations and theses that have used the scale, and finally, current sampling of student populations to get current norms for the scale. It is expected that at least two hundred norms would be obtainable from these various sources, which should be sufficient to measure a trend for the time period in question.

A strong assumption built into such a research design is that the historical sample measures of authoritarianism will be representative of the student population at that time and at that institution. There is a definite tendency for social science researchers to use social science or humanities students as subjects for their research. The question could be asked then of whether arts and social science students are generally representative of the student body of a college, or whether some systematic bias would be built into the historical

data due to the nature of the sampling.

Various studies have been done comparing the levels of dogmatism scores found among students from different disciplines in colleges. Holt found that students in the Arts and Science faculty at Cornell had a lower dogmatism mean than students in Education or Home Economics, but she did not report whether the differences were significant or not.¹¹ Rosenfeld did a similar study and found that student teachers with undergraduate degrees in the "pragmatic" fields (Home Economics, Physical Education, Business Administration) tended to have higher dogmatism norms than students with more intellectually oriented undergraduate degrees (Mathematics, English, Languages, Social Sciences).¹² Todd conducted a study of student norms at Cornell University and found that Agriculture and Engineering students had lower dogmatism mean scores than did students in the School of Veterinary Science.¹³

Thus the available evidence is certainly suggestive of the possibility that student samples from the Social Sciences and Arts

¹¹Barbara A. Holt, "Dogmatism and 'Other Culture', Experience of Students Preparing to Teach Home Economics" (unpublished Masters Thesis, Cornell University, June 1966).

¹²Vila M. Rosenfeld, "The Influence of Student Teachers Upon Their Cooperating Teachers", (unpublished D.Ed. Thesis, Pennsylvania State University, Department of Home Economics, December 1963).

¹³G.C. Todd, "How Dogmatic are Veterinarians", Journal of the American Veterinary Medical Association, 1965, January, p. 49.

disciplines would tend to have lower dogmatism means than samples from the more pragmatic disciplines. Since there is a greater likelihood of finding student samples from the social sciences in the literature, the possibility of a bias in favor of lower norms does exist. Such a downward bias might cause some difficulty for testing the general hypotheses if the bias caused the available norms from the mid 1950's to be lower than the norm for the general student population in mid 1950's. On the other hand, if the bias remains consistent throughout the time period studied, then it may have a negligible effect on the overall trend of the norms. Certainly, the presence of any norms from the non-social science disciplines would tend to counteract the downward bias.

With a suitable instrument chosen for measuring authoritarianism norms, and with the availability of a large body of published studies which have used that instrument, it now becomes possible to test hypotheses about the nature of changes in authoritarianism norms. The next section discusses and lists the various hypotheses to be tested.

D. Hypotheses to be Tested

There is essentially one general hypothesis to be tested and then a number of sub-hypotheses. The previous discussions of authoritarianism and the differences between student generations suggest a general hypothesis which predicts that a negative slope will be found among all the dogmatism norms obtained for the time period in question. The sub-hypotheses predict the same negative slope to be found among subsamples of the data stratified to control for the influence factors of geographical region, quality of institution, and experience/maturity of students. The subsamples could be further tested by controlling for such influences within the subsample. For example, the data from the Eastern schools could be tested for a negative slope among the high quality Eastern schools, the mid quality Eastern schools and the low quality Eastern schools. In all cases, a negative slope to the norms will be expected.

The first hypothesis is stated as follows:

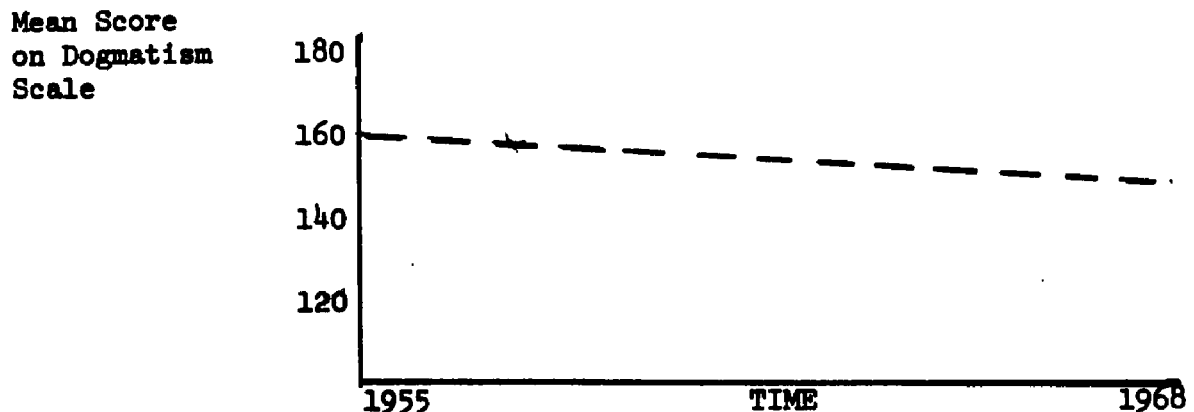
Hypothesis One. The trend in the level of general authoritarianism found among college student populations, as represented by mean scores on the dogmatism scale for samples of college students, will show a negative slope from the 1950's to 1968.

This is the general hypothesis which predicts lower levels of authoritarianism to be found among the activist generation than among

the silent generation. It will be tested by gathering together all the available dogmatism norms from 1955 to the present, without regard for distinctions between geographical regions, quality of institution, or experience/maturity of students, and then conducting a regression analysis between the time of the sampling and the score of the sample. This type of analysis uses an assumption of convenience that "Time" is the independent variable X and Authoritarianism is the dependent variable Y. A linear relationship between the two variables is assumed ($Y = a + bX$) where the slope "b" is negative and the correlation coefficient for the two variables is both negative and significantly different from zero. Table 3 shows the predicted linear trend of dogmatism norms over the time period studied.

TABLE 3.

PREDICTED TREND OF DOGMATISM
NORMS FROM 1955 TO 1968



Note: The regression line is the line of best fit between all the points in the scattergram of dogmatism norms.

The first set of sub-hypotheses are those designed to control for possible geographical influence of the dogmatism norms. In the review of the literature on authoritarianism it became apparent that there were some geographical influences on both the tendencies toward political and economic conservatism and the levels of authoritarianism found among college student populations. Obviously, it is the relative sociological differences among geographical regions that cause these effects and not the actual geography of regions, but geographical regions provide a convenient way of categorizing the sociological differences. A cautionary note on the use of geographical regions has been given, however, by Astin. He found that there were considerable differences between geographic regions in the qualities of their colleges, which distorted the evidence he had gathered on the scholastic ability of students from different regions. When he controlled for the quality of institutions in geographical regions, he found that differences between student bodies in different geographical regions were negligible.¹⁴

Bearing Astin's cautionary note in mind, hypothesis two will be stated as follows in the form of a null hypothesis: Hypothesis two: There will be no significant differences found between the levels of authoritarianism among college student samples from the

¹⁴A.W. Astin. Who Goes Where to College?, (Chicago, Science Research Associates, Inc., 1965), p. 40.

Eastern, Midwestern, Southern, and Western geographical regions for the time period studied.

However, if socio-cultural changes are occurring in North American society to cause a downward trend in authoritarianism among college students, then this trend should neither be isolated to any particular geographic locality, nor should it decline at the same rate for all regions. The trends may appear to be more pronounced in some areas, such as those traditionally viewed as being more liberal (i.e. the East), or it may be that students from some areas (i.e. the East) may always have had lower levels of authoritarianism. It is also possible that students from traditionally conservative geographic areas, notably the South, may have started from much higher levels of authoritarianism, or may not have declined as much as students from other areas. In any case, a negative slope of the data for each of the four geographic regions is predicted in the following hypotheses:

Hypothesis three A: Authoritarianism norms for the Eastern institutions subsample will show a negative trend for the time period studied.

Hypothesis three B: Authoritarianism norms for the Midwestern institutions subsample will show a negative trend for the time period studied.

Hypothesis three C: Authoritarianism norms for the Southern institutions subsample will show a negative trend for the time period studied.

Hypothesis three D: Authoritarianism norms for the Western institutions subsample will show a negative trend for the time period studied.

In order to adequately measure any significant trends in the geographical subsamples of levels of authoritarianism it is necessary to formulate geographic subsamples of the available data and try to assess the trend for each geographic area. A geographic categorization of colleges in the United States into four categories (East, Midwest, West, South) is provided by the American Council on Education.¹⁵ This geographic breakdown has been used by the Council for their research on quality in graduate schools and the same categorization will be adopted for this study. The same statistical analysis as described for Hypothesis one will be used for each of the four geographic subsamples. In addition, the mean authoritarianism scores for each geographic region will be tested for significant differences. The geographical breakdown of the various institutions will be shown in Appendices A. to D.

The review and discussion of the literature on authoritarianism strongly suggested that the relative quality of an academic institution

¹⁵ Allan M. Cartter, An Assessment of Quality in Graduate Education, (Washington, D.C., American Council on Education, 1966), Appendix E., pp. 129 - 31.

could have a noticeable effect on the level of authoritarianism norms found at that institution. That is, the level of authoritarianism should vary inversely with the quality of the institution, whether due to the higher level of students' ability at selective institutions, or due to the higher quality of education at selective institutions. Hypothesis four is designed to test this inverse relationship and it is stated as follows:

Hypothesis Four: Sample means from academically prominent and selective institutions will show lower levels of authoritarianism among the student bodies than will be shown by sample means from less selective institutions.

Of course the proposition that authoritarianism should vary inversely with institution quality should not negate the possibility of a decline in authoritarianism norms at various qualities of institutions. A decline is still predicted in the authoritarianism norms for institutions of all qualities, although the trend for lower quality institutions would probably start a decline from relatively higher levels of authoritarianism. The following set of hypotheses show the predictions for institutions of different qualities:

Hypothesis five A: Authoritarianism norms from institutions classified as being High Quality will show a negative trend for the time period studied.

Hypothesis five B: Authoritarianism norms from institutions classified as being Middle Quality will show a negative trend for the time period studied.

Hypothesis five C: Authoritarianism norms from institutions classified as being Low Quality will show a negative trend for the time period studied.

These then are the hypotheses designed to control for the quality factor in universities and its influence on the levels of authoritarianism observed at various institutions. The problem of assessing the relative quality of academic institutions in the United States is very complex, but there are actually a number of indices of quality available. The simplest indices of relative quality are provided by the common guides to colleges in the United States which are used for assessing the admission requirements of various institutions. These guides, such as Barron's Profiles of American Colleges¹⁶ rank the colleges in terms of selectiveness or the degree of competition a student would face in applying to a college. Barron's uses the ranking "Most Competitive" (SAT scores 675-800), "Highly Competitive" (SAT scores 600-675), "Very Competitive" (SAT scores 550-600), "Competitive" (SAT scores 450-550), "Less Competitive" (SAT scores below 450), and "Non Competitive". This is a fairly crude ranking

¹⁶ Benjamin, Fine, Barron's Profiles of American Colleges, (Woodbury, N.Y., Barron's Educational Series, Inc., 1967), pp. 739-744.

of institutions and is somewhat unsatisfactory in the middle ranges of quality. For example, such institutions as Indiana State University, Ohio State University, Oregon State University, University of Colorado, University of Oklahoma and the University of Texas are all placed in very low categories because they have low admission standards for instate students.

The American Council on Education recently published a study which assessed the relative quality of graduate education in various institutions.¹⁷ Various departments in the institutions receive a numerical score which is derived from surveys conducted by the Council on the reputation of the departments. Then each department receives a national ranking in relation to the same departments in other universities. The universities themselves are not ranked, just the various graduate departments within the universities. Theoretically, a single rank score could be derived for each university by taking the mean of the ranks of each of the departments within the university but this has proven to be an unsatisfactory procedure. The numerical rankings rarely extend beyond twenty-five although 106 institutions were surveyed, and even the Council was forced to group schools according to four categories: Distinguished, Strong, Good, and Adequate plus.¹⁸ They were easily able to determine the dozen or so distinguished institutions

¹⁷ Cartter, op. cit., chapter III.

¹⁸ ibid., p. 15.

but could not offer an over-all ranking for the remaining institutions except in general terms.

Research conducted primarily by Astin attempted to categorize institutions by the type of environment they offered. He eventually defined six types of college environments: realistic orientation, scientific orientation, social orientation, conventional orientation, enterprising orientation, and artistic orientation, and developed an Environmental Assessment Technique (E A T) for assessing a given college in terms of his six environmental variables. The second part of his work was to study the types of students who went to the various types of colleges to see if there were any significant relationships between student types and college environments. The student input variables were defined as: intellectualism, estheticism, status, leadership, pragmatism, and masculinity. His findings were that significant relationships did exist between student input variables and college environment variables so that one could meaningfully assess a college environment for purposes of counselling students on college applications. At the end of his book,¹⁹ he published a table of scores on the six E A T variables for 248 colleges and universities in the United States. It is a simple matter to draw a profile of an institution from its E A T scores and thus compare the profile to other institutions. Unfortunately, a reliable quality ranking is not possible because of the

¹⁹A.W. Astin, op. cit., pp. 57 - 83.

variability within the scales and because no one of the variables alone is a reliable guide to college quality. Colleges with Realistic and/or Scientific environments tend to be higher in quality but no simple reliable relationship exists between the E A T variables and quality rankings. In a further study conducted by some associates of Astin, it was found that no clear relationship existed between scores on the dogmatism scale and the six E A T variables for student samples at 22 colleges.²⁰

So far, the various attempts at rating the quality of institutions have suffered from two faults: crude differentiation of schools, and inconsistent rankings in the middle ranges. An attempt has been made by Gourman to overcome these faults in his confidential ratings of American colleges. The Gourman Report²¹ examines many factors in a college and culminates in two ratings: the Academic rating and the Administrative rating. These two scores are averaged to provide a single numerical index of quality for every university plus an item by item rating for each factor considered. The scores themselves are designed to be comparable to S A T scores so that a person should be able to compare his own S A T score with the Gourman rating to see if he qualifies for a particular college. The feature of providing a

²⁰James M. Richards, John L. Holland and Sandra W. Lutz, The Prediction of Student Accomplishment in College, (Iowa City, Iowa, American College Testing Program, Research Report 13, 1966).

²¹Frank Gourman, The Gourman Report: Ratings of American Colleges, (Phoenix, Arizona, Continuing Education Institute, 1968).

single numerical score for each college in the Gourman Report makes it very useful for ranking colleges, especially at the middle levels. Since the assessment techniques used incorporate most of the aspects considered by the Barron's guide and the American Council on Education, one should be able to use the Gourman ratings with some confidence.

Therefore, the Gourman ratings will be used to stratify the data available from the college samples into three ranks: high quality institutions (Gourman scores 600 +), middle quality institutions (Gourman scores 450 - 600), and low quality institutions (Gourman scores less than 450). The institutions placed in the various categories along with their Gourman ratings are shown in Appendices A-D. The same statistical analyses as described for previous hypotheses will be used for each of the quality sub-sample hypotheses.

The review and discussion of the literature on authoritarianism clearly showed a marked influence on levels of authoritarianism from students' college experience/maturity. That is, students who had a longer exposure to college had lower levels of authoritarianism than did students with less exposure. Therefore, Hypothesis six predicts that an inverse relationship between levels of authoritarianism and college experience/maturity will be found in the dogmatism norms gathered for this study. Hypothesis six is stated as follows:

Hypothesis six: Sample authoritarianism norms for lower division students (freshmen and sophomores) will show higher levels of

authoritarianism, regardless of region or quality of school, than will be shown by sample norms from upper division students (juniors and seniors).

The predicted inverse relationship between levels of authoritarianism and students' college experience/maturity should not negate the possibility of a negative slope being found in the dogmatism norms for subsamples divided into upper and lower division students. A decline is still predicted in the trend of authoritarianism norms although the trend for lower division samples should start from a higher origin. The following are hypotheses for the upper and lower division samples:

Hypothesis seven A: Authoritarianism norms for the sub-sample composed of upper division students will show a negative trend for the time period studied.

Hypothesis seven B: Authoritarianism norms for the sub-sample composed of lower division students will show a negative trend for the time period studied.

These then are the hypotheses designed to measure the trends in authoritarianism while controlling for the influence of the previously discussed experience/maturity effect on changes in authoritarianism. The division of the sample into a lower division (freshmen and sophomores) and an upper division (juniors and seniors) is

chosen due to the finding by Plant that "the greatest change in authoritarianism and intolerance occurred with all groups in the first two years of college."²² This means that scores for the upper division sample should be relatively free of interference from the experience/maturity effect on authoritarianism. It is hoped that the historical studies will provide an adequate description of the samples being tested so that they may be assigned to one of the two classifications. The same statistical analyses as described for previous Hypotheses will be used for Hypotheses six and seven.

²²W.T. Plant, Personality Changes Associated with a College Education, (Washington, D.C., U.S. Office of Education, Department of Health, Education, and Welfare, Cooperative Research Branch Project 348, 1962, p. 62.

E. Organization of The Data Into Sub-samples
For Further Testing of the Various Hypotheses

Although the sub-sample tests for the various hypotheses were previously discussed in terms of controlling for demographic variables, it is still possible that interference could exist within the sub-samples. For example the trend in authoritarianism scores for Eastern Universities could be affected by the quality of the schools in the Eastern sample and the experience levels of the students in the sample. Therefore, it is necessary to further stratify the sub-samples for each hypothesis to provide controls for each influence source. This further stratification of a collection of data raises the problem of insufficiency of data. The historical sources of data may simply not provide enough norms to be statistically reliable for each possible sub-sample. Nonetheless, all possible sub-samples for the various combinations of demographic variables will be explored for their effects on the hypotheses. The following tables give the sub-sample tests for each of the hypotheses:

Hypothesis One: regression analysis for all data for the time period.
 (Test 1)

Hypotheses Two and Three: regression analysis for all the sub-samples listed.

- | | |
|-----------------------------------|------------|
| A. 1. Eastern schools - all data | Test A - 1 |
| 2. Eastern schools - High Quality | Test A - 2 |

A. continued

3. Eastern schools - Mid Quality	Test A - 3
4. Eastern schools - Low Quality	Test A - 4
5. Eastern schools - Upper Division	Test A - 5
6. Eastern schools - Lower Division	Test A - 6
7. Eastern schools - High Quality, Upper Division	Test A - 7
8. Eastern schools - High Quality, Lower Division	Test A - 8
9. Eastern schools - Mid Quality, Upper Division	Test A - 9
10. Eastern schools - Mid Quality, Lower Division	Test A - 10
11. Eastern schools - Low Quality, Upper Division	Test A - 11
12. Eastern schools - Low Quality, Lower Division	Test A - 12

B. 1. Midwestern schools - all data	Test B - 1
2. Midwestern schools - High Quality	Test B - 2
3. Midwestern schools - Mid Quality	Test B - 3
4. Midwestern schools - Low Quality	Test B - 4
5. Midwestern schools - Upper Division	Test B - 5
6. Midwestern schools - Lower Division	Test B - 6
7. Midwestern schools - High Quality, Upper Division	Test B - 7
8. Midwestern schools - High Quality, Lower Division	Test B - 8
9. Midwestern schools - Mid Quality, Upper Division	Test B - 9
10. Midwestern schools - Mid Quality, Lower Division	Test B - 10
11. Midwestern schools - Low Quality, Upper Division	Test B - 11
12. Midwestern schools - Low Quality, Lower Division	Test B - 12

C.

1. Southern Schools - all data	Test C - 1
2. Southern Schools - High Quality	Test C - 2
3. Southern Schools - Mid Quality	Test C - 3
4. Southern Schools - Low Quality	Test C - 4
5. Southern Schools - Upper Division	Test C - 5
6. Southern Schools - Lower Division	Test C - 6
7. Southern Schools - High Quality, Upper Division	Test C - 7
8. Southern Schools - High Quality, Lower Division	Test C - 8
9. Southern Schools - Mid Quality, Upper Division	Test C - 9
10. Southern Schools - Mid Quality, Lower Division	Test C - 10
11. Southern Schools - Low Quality, Upper Division	Test C - 11
12. Southern Schools - Low Quality, Lower Division	Test C - 12

D. 1. Western Schools - all data	Test D - 1
2. Western Schools - High Quality	Test D - 2
3. Western Schools - Mid Quality	Test D - 3
4. Western Schools - Low Quality	Test D - 4
5. Western Schools - Upper Division	Test D - 5
6. Western Schools - Lower Division	Test D - 6
7. Western Schools - High Quality, Upper Division	Test D - 7
8. Western Schools - High Quality, Lower Division	Test D - 8
9. Western Schools - Mid Quality, Upper Division	Test D - 9

D. continued

10. Western Schools - Mid Quality, Lower Division	Test D - 10
11. Western Schools - Low Quality, Upper Division	Test D - 11
12. Western Schools - Low Quality, Lower Division	Test D - 12

Hypotheses Four and Five: regression analysis for all the sub-samples listed.

E. 1. Top Quality schools, all regions, all student divisions.	Test E - 1
2. Top Quality, all regions, Upper Division	Test E - 2
3. Top Quality, all regions, Lower Division	Test E - 3
F. 1. Middle Quality, all regions, all divisions	Test F - 1
2. Middle Quality, all regions, Upper Division	Test F - 2
3. Middle Quality, all regions, Lower Division	Test F - 3
G. 1. Low Quality, all regions, all divisions	Test G - 1
2. Low Quality, all regions, Upper Division	Test G - 2
3. Low Quality, all regions, Lower Division	Test G - 3

Further geographical stratification of the quality sub-samples have been accounted for in the test series A. to D.

Hypotheses Six and Seven: regression analysis for all the sub-samples listed.

- | | |
|--|------------|
| H. 1. Upper Division, all regions, all qualities | Test H - 1 |
| 2. Lower Division, all regions, all qualities | Test H - 2 |

All further stratification has been accounted for in previous test series A. to G.

The next chapter will describe the results of the statistical analysis of the data for each of the hypotheses and their sub-samples.

CHAPTER IV

RESULTS OF THE STUDY

A. Discussion of Data

The various searches for data yielded 209 usable norms for the dogmatism scale for the time period 1955 to 1968. Very few norms were available from the early years but by 1960, a large number of norms was available. The frequency distribution of norms for the time period is given in Table 4.

TABLE 4

FREQUENCY DISTRIBUTION OF DOGMATISM NORMS
FROM 1955 TO 1968.

<u>Year</u>		(f)	<u>Year</u>		(f)
1955	-	1	1962	-	29
1956	-	1	1963	-	27
1957	+	1	1964	-	28
1958	-	7	1965	-	24
1959	+	6	1966	-	18
1960	-	26	1967	-	16
1961	-	17	1968	-	8

Total n = 209

More than 300 studies were surveyed to obtain the 209 usable norms. Many of the unusable studies either did not use college student samples, or did not report norms, or modified the scale in some way so as to render it unusable. Those authors who did not report norms were sent letters asking them if they still had the data available and a large

number either no longer had the data available or did not reply.¹ Table 5 below shows the distribution of the dogmatism norms over the time period among the geographic regions.

TABLE 5
DISTRIBUTION OF DOGMATISM NORMS OVER
TIME AMONG GEOGRAPHIC SUBSAMPLES

Year	East	Midwest	South	West	Year	East	Midwest	South	West
1955	0	1	0	0	1962	7	10	4	8
1956	0	1	0	0	1963	8	13	2	4
1957	1	0	0	0	1964	5	12	6	5
1958	1	4	0	2	1965	8	4	6	6
1959	0	0	3	3	1966	7	5	2	4
1960	3	17	0	6	1967	4	7	3	2
1961	1	4	3	9	1968	1	7	0	0

East n = 46, Midwest n = 85, South n = 29, West n = 49.

The time distributions of the various geographic samples show that most of them are concentrated in the period 1960 to 1968 and that only the Midwestern region has much data from 1955 to 1960. This type of time distribution forces a certain amount of reliance in the Midwestern data for any conclusions about the levels of authoritarianism in the 1950's but hopefully the data from 1960 to 1968 will still show the predicted negative slope for each of the geographic subsamples tested.

Where insufficient data is available for regression analysis of some of the subsample tests, it will be necessary to conduct "t" tests to examine the data to see if a trend is apparent. What follows next are the results of the tests for each of the hypotheses described in Chapter III.

¹ A copy of the questionnaire sent to researchers is shown in Appendix "E"

B. Results of Hypotheses Tests

Hypothesis one: The trend in the level of general authoritarianism found among college student populations, as represented by mean scores on the dogmatism scale for samples of college students, will show a negative slope from the 1950's to 1968.

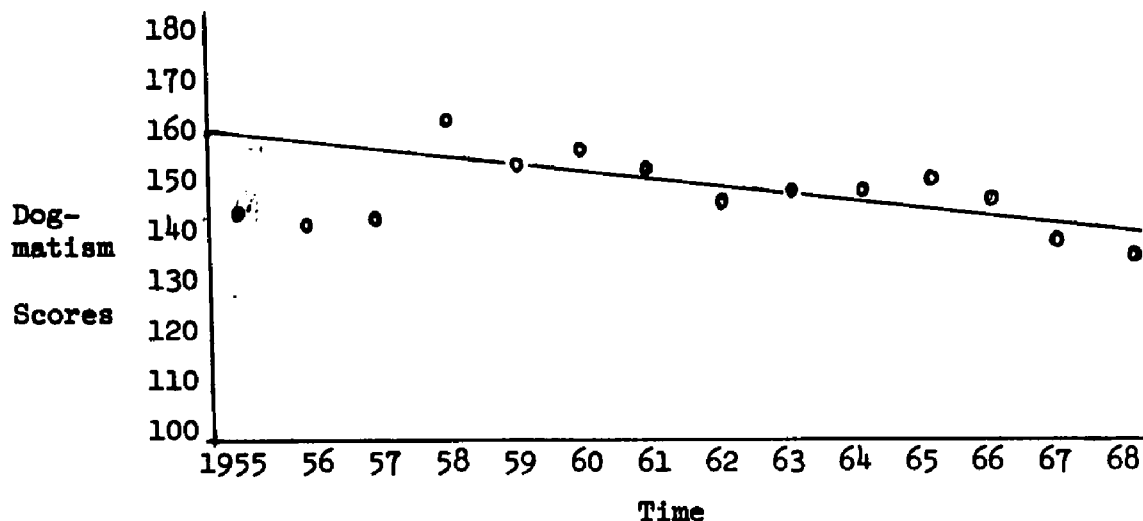
The mean of all the 209 dogmatism norms from 1955 to 1968 was 148.215 and the standard deviations reported with the norms from 1955 to 1968 have ranged from 28 to 15 with the average being 22.5. The regression analysis performed on the 209 norms for the time period 1955 to 1968 provided a regression line $Y = 327.7 - 1.645X^1$, $r = -.38$ (p less than $.01$)². The analysis of variance for simple linear regression between the independent and dependent variables yielded an "F" ratio of 35.259, also significant at the 1% level (F crit for 1% = 6.76). Thus the regression line for Hypothesis one has a negative slope and a negative correlation coefficient that is significantly different from zero. The results confirm Hypothesis

1. Note: In calculating the regression line, the years of the samples were coded so that 1955 = 101, 1956 = 102...1968 = 114. To calculate the predicted level of dogmatism for any given year, use the code date of that year for the X value.

2. All significance levels reported in this chapter are taken from Herbert Arkin and Raymond Coltin, Tables for Statisticians (New York, Barnes and Noble, Second edition, 1966).

one that from 1955 to 1968, the level of dogmatism decreases as a general trend without regard for such factors as geographical region, quality of schools, and divisions of student experience/maturity. Figure 1 below shows the observed trend line and the predicted trend line of dogmatism norms from 1955 to 1968.

FIGURE 1
OBSERVED AND PREDICTED DOGMATISM NORMS
AMONG COLLEGE STUDENTS SAMPLES
1955 - 1968



Hypothesis two: There will be no significant differences between the levels of authoritarianism found among college student samples from Eastern, Midwestern, Southern, and Western geographical regions for the time period studied.

The results of the null hypothesis for the four geographic regions, are given in Table 6.

TABLE 6
COMPARISON OF DOGMATISM SCORES
IN THE FOUR GEOGRAPHIC REGIONS

<u>Region</u>	<u>Mean of Dogmatism Scores</u>	<u>s.d.</u>
East (n = 46)	144.75	9.5
Midwest (n = 85)	146.76	13.4
South (n = 29)	151.89	7.9
West (n = 49)	151.57	10.0
<u>"t" test</u>		
East v Midwest,	t = -1.00, n.s.	
East v South,	t = -3.50, p less than .01,	
East v West,	t = -3.40, p less than .01,	
Midwest v South,	t = -2.45, p less than .01,	
Midwest v West,	t = -2.37, p less than .01,	
South v West,	t = -0.15, n.s.	

(Note: the possible range for dogmatism scores is 40 - 280. Very few scores are observed outside the range 100 - 200, which seems to suggest that the response intervals in the Likert-type items are unequal near the extreme positions.)

The null hypothesis is only partly confirmed. There is no significant difference in levels of authoritarianism between Eastern and Midwestern schools, and there is no significant difference in levels of authoritarianism between Southern and Western schools. However, Eastern and Midwestern have significantly lower levels of authoritarianism than do Southern and Western schools. Thus the presence of a geographic effect on levels of authoritarianism is demonstrated by the difference in levels of authoritarianism for the Eastern and Midwestern geographic regions and the Southern and Western geographic regions. Of course these results must be qualified by the fact that the Southern and Western regions were relatively weak in data from high quality institutions. Until the results are known of further subsample tests that control for the influence of other demographic variables, the geographic effect cannot be held solely responsible for the differences in levels of authoritarianism. The results for the control subsamples will be examined later in this chapter.

Hypothesis three A: Authoritarianism norms for the Eastern institutions subsample will show a negative trend for the time period studied.

The regression analysis of the Eastern sample authoritarianism norms provided a regression line of $Y = 248.8 - .948 X$, $r = -.24$ (r crit at 5% level of significance for $n = 46$ is $-.293$). The slope

of the trend is negative as predicted and the correlation coefficient is negative as predicted, but the correlation coefficient is not significantly different from zero at the 5% level of significance (although it approached significance). Thus Hypothesis three A is not confirmed even though the results are in the predicted direction.

It is possible that subsample tests of the Eastern data, which control for the influence of other demographic variables, may show different results. These subsample tests will be examined later in this chapter. It is also possible that the levels of authoritarianism for Eastern schools may have been sufficiently low for the entire time period studied to preclude the observation of a significant negative trend. For example, a neutral response on the dogmatism scale is given a weight of 4 and 40 items X_4 gives a mean score of 160. The relatively low Eastern mean of 144 indicates an average item response of 3.6, which falls between "disagree a little" (weight = 3) and neutral. All responses at "disagree a little" would give a mean score of $40 \times 3 = 120$, which is considered to be a quite low score on the scale. Since the intervals in the scale items apparently became unequal near the extreme points, the Eastern sample has a very narrow range within which to show a trend and still avoid the extreme low end of the scale. This potential narrow range for the Eastern samples is also suggested by the small regression coefficient in the Eastern sample regression line.

Hypothesis three B: Authoritarianism norms for the Midwestern institutions subsample will show a negative trend for the time period studied.

The regression analysis for the Midwestern sample provides a regression line of $Y = 387.5 - 2.21X$, with $r = -.496$, (p less than .01). The slope of the line is negative as predicted and the correlation coefficient is negative as predicted. The correlation coefficient is significantly different from zero at the 1% level of significance (r crit for 1% level of significance, $n = 85$, is $-.283$). The analysis of variance for simple linear regression yields an "F" ratio of 27.15, which is also significant at the 1% level of significance (F crit. for 1% significance is 6.96). Thus Hypothesis three B is confirmed, there is a significant decline in the levels of authoritarianism found among Midwestern institutions for the time period studied.

Hypothesis three C: Authoritarianism norms for the Southern institutions subsample will show a negative trend for the time period studied.

The regression analysis for the Southern sample provides a regression line of $Y = 133 + .172X$, $r = + .0495$. This regression line does not have a negative slope and in fact has a slightly positive slope. The correlation coefficient is positive but is not

significant. The theoretical line of best fit for the Southern data over the time period studied indicates that there is no significant relationship between the variable "Time" and levels of authoritarianism. Hypothesis three C is not confirmed. Simple inspection of the data for the Southern samples indicates that levels of authoritarianism remained much the same over the time period studied and this impression is confirmed by the relatively narrow variance for the Southern data. The Southern mean of 152 is significantly higher than both the Eastern and Midwestern samples and the distribution of the Southern data is relatively narrow.¹

The absence of high quality institutions in the Southern sample should be noted once again. Further subsample tests of the Southern data may yield different results and these will be examined later in this chapter.

Hypothesis three D: Authoritarianism norms for the Western institutions subsample will show a negative trend for the time period studied.

Regression analysis for the Western sample provides a regression line of $Y = 330.17 - 1.65 X$, $r = -.37$ (p less than .01). The slope is negative as predicted and the correlation coefficient is negative as

¹The s.d. for the Southern sample was 7.8, compared to 13.4 for the Midwest.

predicted. The correlation coefficient is significantly different from zero at the 1% level of significance (r crit. for 1% level of significance, $n = 49$, is $-.363$). The analysis of variance for simple linear regression yielded an "F" ratio of 7.63, which is also significant at the 1% level of significance (F crit., 1% level of significance is 7.17). Thus Hypothesis three D is confirmed, even though the Western sample was weak in high quality schools. The mean for the Western sample was substantially the same as the Southern sample (Western mean = 151.6, Southern mean = 151.9) but the variance in the distribution of the Western sample was greater. The greater variance in the Western sample probably reflects the change in the samples over the time period while the relative homogeneity of the Southern sample probably reflects the absence of change over time.

To summarize the results for Hypothesis three, negative trends were found in the levels of authoritarianism for all geographic regions except the South. Hypothesis one was confirmed in its prediction of a negative slope even though the Southern sample failed to show any change. This means that the negative slopes of the other geographic regions must have been sufficiently strong to overshadow the lack of change from the South. Figures showing the observed and predicted dogmatism norms for each of the geographic subsamples are shown in appendices F, G, H, I.

Hypothesis four: Sample means from academically prominent and

selective institutions will show lower levels of authoritarianism among the student bodies than will be shown by sample means from less selective institutions. The results of the tests on the three quality samples are presented in Table 7.

TABLE 7
COMPARISON OF DOGMATISM NORMS
BETWEEN QUALITY OF INSTITUTIONS

<u>Quality Level</u>	<u>Mean of Dogmatism Scores</u>	<u>s.d.</u>
High Quality (n = 40)	137.58	9.7
Middle Quality (n = 107)	149.06	10.1
Low Quality (n = 62)	152.46	11.6

"t" tests

High v Middle = "t" = -6.4 (p less than .01)
 High v Low = "t" = -7.5 (p less than .01)
 Middle v Low = "t" = -1.92 (p less than .05)

(Note: t crit. for 5% significance in a one-way test is 1.645).

The null hypothesis is not confirmed, there are clear differences in the average levels of authoritarianism found among the different quality subsamples. The subsample of High Quality schools has a mean of dogmatism norms that is significantly lower than both the Middle Quality schools and the Low Quality schools. In turn, the Middle Quality schools also have a mean of dogmatism norms that is lower than the Low Quality schools, although the magnitude of difference is less. Thus the mean of dogmatism norms for Middle Quality schools is much closer to the mean for the Low Quality sample than to the

mean for the High Quality sample.

The finding of a relationship where dogmatism means vary inversely to the quality of the institutions was to be expected from the previous theoretical discussion on the influence of institution quality on authoritarianism. These results are obtained without having to control for the possible influence of geographical region or student division level. Subsample analysis will be conducted later in this chapter to control for such possible demographic variable influence.

Hypothesis five A: Authoritarianism norms from institutions classified as being High Quality will show a negative trend for the time period studied.

Regression analysis performed on the data for the High Quality sample provided this regression line: $Y = 256.64 - 1.08 X$, $r = -.335$ (p less than .05). The slope of the line is negative as predicted and the correlation coefficient is negative as predicted. The correlation coefficient is significant at the 5% level of confidence. The analysis of variance for simple linear regression yielded an F ratio of 4.93 which is also significant of the 5% level of confidence. Thus Hypothesis five A is confirmed although the data from the High Quality sample probably suffers from the same problems as the data from the Eastern sample: by having a low mean over all for dogmatism norms, there is a very narrow range available for a negative trend to occur

over the time period.

Hypothesis five B: Authoritarianism norms from institutions classified as being Middle Quality will show a negative trend for the time period studied.

Regression analysis performed on the data for the Middle Quality institutions provided this regression line: $Y = 295.7 - 1.35X$, $r = -.333$ (p less than .01). The slope is negative as predicted and the correlation coefficient is negative as predicted. The correlation coefficient is significantly different from zero at the 1% level of significance. The analysis of variance for simple linear regression yielded an F ratio of 13.15 which is also significant at the 1% level of confidence. Thus Hypothesis five B is confirmed.

Hypothesis five C: Authoritarianism norms from institutions classified as being Low Quality will show a negative trend for the time period studied.

Regression analysis performed on the data from the Low Quality sample provided this regression line:
 $Y = 331.3 - 1.65X$, $r = -.364$ (p less than .01). The slope of the regression line is negative as predicted and the correlation coefficient is significantly different from zero at the 1% level of

significance. The analysis of variance for simple linear regression yielded an "F" ratio of 9.04 which is also significant at the 1% level of significance. Therefore, Hypothesis five C is confirmed.

The confirmation of Hypotheses five A, five B, and five C, indicates that the long range trend toward lower levels of authoritarianism among college student populations has occurred in colleges of all quality levels. The trend toward lower levels of authoritarianism is not solely the preserve of the higher quality institutions as might have been suspected from reading the literature on student activism. The fact that the overall level of authoritarianism is different at the three quality levels, as demonstrated for Hypothesis four, does not seem to have had any deterrent effect on the downward trends for the different quality levels. Figures showing observed and predicted dogmatism norms for each of the quality subsamples will be shown in appendices J,K and L.

Hypothesis six: Sample authoritarianism norms for lower division students (freshmen and sophomores) will show higher levels of authoritarianism, regardless of region or quality of school, than will be shown by sample norms from upper division students (juniors and seniors).

The results for the two student division subsamples are given in Table 8.

TABLE 8
COMPARISON OF DOGMATISM NORMS BETWEEN
SAMPLES OF UPPER AND LOWER DIVISION STUDENTS

<u>Division</u>	<u>Mean of Dogmatism Norms</u>	<u>s.d.</u>
Upper (n = 108)	142.57	8.9
Lower (n = 101)	154.06	11.2

"t" tests

Upper v Lower "t" = -9.57 (p less than .01)

Authoritarianism norms from the upper division sample (juniors and seniors) are clearly lower than the authoritarianism norms for the lower division sample (freshmen and sophomores). The difference is significant at better than the 1% level of significance. Therefore Hypothesis six is confirmed. This result is consistent with many other studies which have shown that the levels of authoritarianism decline with increases in college experience and maturity. The experience/maturity effect on levels of authoritarianism is also clearly seen to be a possible influence factor in studies of changes in authoritarianism levels.

Hypothesis seven A: Authoritarianism norms for the subsample composed of upper division students will show a negative trend for the time period studied.

Regression analysis performed on the data for the upper division provided this regression line:

$Y = 237 - .866X$, $r = -.26$ (p less than .01). The slope of the regression line is negative as predicted and the correlation coefficient is negative as predicted. The correlation coefficient is significantly different from zero at the 1% level of significance. The analysis of variance for simple linear regression yielded an "F" ratio of 7.65 which is also significant at the 1% level of significance. Therefore, Hypothesis seven A is confirmed even though the regression coefficient is very small. This suggests that the data for the upper division sample also suffers from the same narrow range limitation previously discussed for the Eastern sample and the High Quality sample.

Hypothesis seven B: Authoritarianism norms for the subsample composed of lower division students will show a negative trend for the time period studied.

Regression analysis performed on the data for the Lower Division sample provided this regression line: $Y = 367.18 - 1.96X$, $r = -.46$ (p less than .01). The slope of the line is negative as predicted and the correlation coefficient is negative as predicted. The correlation coefficient is easily significant at the 1% level of significance (r crit. 1% level, $n = 100$, is $-.254$). The analysis of variance for simple linear regression yielded an "F" ratio of 27.5 which is also significant at better than the 1% level of significance. Thus Hypothesis seven B is also confirmed. Despite the difference in the means of

authoritarianism scores for the Upper Division sample and Lower Division sample, both divisions show a significant negative trend in the levels of authoritarianism.

In summary, the negative trend in levels of authoritarianism for the time period studied was conclusively demonstrated in all the tests done on the available data with the exception of the Southern sample. The Eastern sample showed a negative trend but the correlation coefficient was not significant from zero for the size n of the sample. The confirmation of Hypothesis one was not challenged by any of the subsample tests which sought to control for the influence factors of geography, quality, and student division level (again with the exception of the Southern sample). It is still possible that an interactive effect may take place between the various influence factors which might obscure a trend in authoritarianism for a sample. However, this interactive effect is not anticipated because the results were so clear for the major hypotheses. If no significant negative trends had been observed in the previous hypotheses tests, then it would have been necessary to carefully examine all possible subsample divisions to eliminate possible suppression of a trend.

The results for the various subsamples which attempt to control for the interactive effects of demographic variables will be discussed in the next section of this chapter.

C. Tests of Geographic Subsamples

TABLE 9

RESULTS OF TESTS OF ALL SUBSAMPLES OF EASTERN DATA

A	Eastern Data	N	Mean	Regression Line	r
A-1	All data	46	145	$Y = 248 -.95X,$	-.24 n.s.
A-2	High Quality	12	140	$Y = 246 -.97X,$	-.416 n.s.
A-3	Mid Quality	17	148	$Y = 228 -.73X,$	-.133 n.s.
A-4	Low Quality	17	146	$Y = 208 -.57X,$	-.150 n.s.
A-5	Upper Division	30	143	$Y = 225 -.75X,$	-.235 n.s.
A-6	Lower Division	16	148	$Y = 375 -.206X,$	-.378 n.s.
A-7	Top Quality Upper Division	9	140	$Y = 248 -.98X,$	-.37 n.s.
A-8	Top Quality Lower Division	3	137	Insufficient data*	
A-9	Mid Quality Upper Division	10	144	$Y = 308 -.1.5X,$	-.367 n.s.
A-10	Mid Quality Lower Division	7	150	Insufficient data*	
A-11	Low Quality Upper Division	11	148	$Y = 119 +.26X,$	+.075 n.s.
A-12	Low Quality Lower Division	6	141	$Y = 401 -.2.36X,$	-.415 n.s.

(Note: data can be insufficient because not enough norms were available for testing or because there was not enough time spread between the available norms.)

These are eleven possible subsamples of the Eastern sample of data to control for contamination but two of the subsamples lack sufficient data to be tested. All of the subsamples show negative slopes except for the upper division samples from Low Quality Eastern schools. The quality differences among the Eastern samples are consistent with the hypotheses on quality differences, except that the mean of authoritarianism norms for Middle Quality Schools is slightly higher than the mean for Low Quality Schools. There is nothing in the subsample

data for Eastern schools to threaten the results of Hypothesis three A nor is there anything to suggest that one segment of the Eastern data might have been responsible for the overall observed trend for the Eastern data.

TABLE 10

RESULTS OF TESTS OF ALL SUBSAMPLES OF MIDWESTERN DATA

B	Midwestern Data	N	Mean	Regression Line r
B-1	All Midwestern Data	85	147	$Y = 387 - 2.21X, -.496^{**}$
B-2	High Quality	23	135	$Y = 227 - .84X, -.24$ n.s. 5%
B-3	Middle Quality	47	149	$Y = 311 - 1.50X, -.407^{**}$
B-4	Low Quality	15	157	$Y = 528 - 3.40X, -.641^{**}$
B-5	Upper Division	45	140	$Y = 227 - .80X, -.283^{*}$
B-6	Lower Division	40	154	$Y = 492 - 3.10X, -.653^{**}$
B-7	Top Quality, Upper Division	18	133	$Y = 195 - .55X, -.208$ n.s.
B-8	Top Quality, Lower Division	5	138	Insufficient data
B-9	Mid Quality, Upper Division	20	142	$Y = 186 - .40X, -.166$ n.s.
B-10	Mid Quality, Lower Division	27	153	$Y = 496 - 3.20X, -.775^{**}$
B-11	Low Quality, Upper Division	7	147	$Y = 342 - 1.78X, -.51$ n.s.
B-12	Low Quality, Lower Division	8	164	$Y = 531 - 3.40X, -.75^{*}$

(Note: * indicates p less than .05; ** indicates p less than .01)

The Midwestern data had the strongest negative trend of all the geographic regions tested and this is confirmed by the trends in the

subsamples of the Midwestern data. The High Quality schools in the Midwest have a very shallow negative slope but the Middle Quality and Low Quality schools have very strong negative slopes. Once again, the High Quality schools, due to their low overall levels of authoritarianism, probably have a much narrower range available for the trend to lower levels of authoritarianism. Both Upper Division and Lower Division student samples in the Midwest show significant negative trends and the Lower Division students contribute most to the negative trends of the Middle Quality and Low Quality Midwestern schools. The inverse relationship between school quality and levels of dogmatism is maintained in the Midwestern sample and the difference in levels of authoritarianism between Upper Division students and Lower Division students is also maintained. Thus there is nothing in the results for the subsample tests of the Midwestern data to threaten the results of Hypothesis three B.

TABLE 11

RESULTS OF TESTS OF ALL SUBSAMPLES OF SOUTHERN DATA

C	Southern Data	N	Mean	Regression Line	r
C-1	All Southern data	29	152	$Y = 133 + .172X$	+.049 n.s.
C-2	High Quality	1	142	Insufficient data	
C-3	Mid Quality	23	152	$Y = 154 - .02X$	-.005 n.s.
C-4	Low Quality	5	154	$Y = 315 - 1.45X$	-.39 n.s.
C-5	Upper Division	12	147	$Y = 125 + .2X$	+.07 n.s.
C-6	Lower Division	17	156	$Y = 107 + .81X$	+.145 n.s.

Table 11 Continued:

C-7	High Quality, Upper Division	0	0	Insufficient data
C-8	High Quality, Lower Division	1	142	Insufficient data
C-9	Mid Quality, Upper Division	11	147	$Y = 125 + .2X, +.07 \text{ n.s.}$
C-10	Mid Quality, Lower Division	12	156	$Y = 210 - .5X, -.15 \text{ n.s.}$
C-11	Low Quality, Upper Division	1	142	Insufficient data
C-12	Low Quality, Lower Division	4	157	Insufficient data

The Southern sample was the only one not to show a negative trend and Hypothesis three C was the only one neither proven nor supported. None of the subsample tests within the Southern sample indicate any presence of a significant negative trend that might have been suppressed. A slight negative trend is observed for Middle Quality Southern schools and most of this trend is accounted for by the lower division of the Middle Quality schools. Neither of these slight negative trends even begins to approach any level of significance. The negative trend for the Low Quality Southern schools is based on a sample size of 5 which is too small to be of any significance. None of the Southern subsamples seem to have a strongly positive trend in the levels of authoritarianism either that might have thrown the Southern data into its slightly positive trend. In general, it seems as though no changes are taking place in the levels of

authoritarianism for the Southern schools, at least as far as can be tested by the available data. The fact that the levels of authoritarianism among the Southern samples are not following the national trend seems to be consistent with the stereotype view of the South's traditional conservatism.

TABLE 12

RESULTS OF TESTS OF ALL SUBSAMPLES OF THE WESTERN DATA

D	Western Data	N	Mean	Regression Line	r
D-1	All data	49	152	$Y = 330 - 1.65X$	$-.37^{**}$
D-2	High Quality	4	146	Insufficient data	
D-3	Middle Quality	20	150	$Y = 346 - 1.80X$	$-.414$ ($5\% = .44$)
D-4	Low Quality	25	153	$Y = 317 - 1.50X$	$-.34$ ($5\% = .39$)
D-5	Upper Division	21	145	$Y = 332 - 1.70X$	$-.38$ n.s.
D-6	Lower Division	28	157	$Y = 259 - .94X$	$-.31$ n.s.
D-7	High Quality, Upper Division	3	146	Insufficient data	
D-8	High Quality, Lower Division	1	146	Insufficient data	
D-9	Mid Quality, Upper Division	8	144	$Y = 261 - 1.08X$	$-.27$ n.s.
D-10	Mid Quality, Lower Division	12	157	$Y = 360 - 1.86X$	$-.75^{**}$
D-11	Low Quality, Upper Division	10	144	$Y = 501 - 3.30X$	$-.68^{*}$
D-12	Low Quality, Lower Division	15	158	$Y = 206 - .45X$	$-.13$ n.s.

(Note: * indicates p less than .05; ** indicates p less than .01)

The Western sample showed a significantly negative trend in its authoritarianism norms and this trend is supported by every one of the subsamples of the Western data (except for the Western High Quality subsample which had insufficient data to be tested). The inverse relationship between quality of schools and levels of authoritarianism is maintained for the Western sample and so is the difference in authoritarianism levels between student divisions. The weakest negative trend is shown by Lower Division students at Low Quality schools, but this is counteracted by a strong negative trend among Upper Division students at Low Quality schools. Perhaps the college experience effects on authoritarianism do not take place as strongly in Low Quality schools until students progress to the Upper Division. In Middle Quality schools, it is the Lower Division students who show the strongest negative trend in levels of authoritarianism. Even with the absence of a testable sample of High Quality schools in the Western data, there is nothing in the subsample results to challenge the results for Hypothesis three D.

D. Tests of Quality Subsamples

TABLE 13

RESULTS OF TESTS OF ALL SUBSAMPLES
OF THE HIGH QUALITY SCHOOLS DATA

E	High Quality Schools	N	Mean	Regression Line r
E-1	All High Quality data	40	138	$Y = 256 - 1.08X$, $-.335^*$
E-2	Upper Division	30	137	$Y = 252 - 1.05X$, $-.337$ n.s. (r crit 5% = .361)
E-3	Lower Division	10	139	$Y = 302 - 1.46X$, $-.408$ n.s.
E-4	East	12	140	$Y = 246 - .97X$, $-.416$ n.s.
E-5	Midwest	23	135	$Y = 222 - .84X$, $-.407^{**}$
E-6	South	1	142	Insufficient data
E-7	West	4	146	Insufficient data
E-8	Eastern Upper Division	9	140	$Y = 248 - .98X$, $-.37$ n.s.
E-9	Eastern Lower Division	3	137	Insufficient data
E-10	Midwestern Upper Division	18	133	$Y = 195 - .55X$, $-.208$ n.s.
E-11	Midwestern Lower Division	5	138	Insufficient data
E-12	Southern Upper Division	0	0	Insufficient data
E-13	Southern Lower Division	1	142	Insufficient data
E-14	Western Upper Division	3	146	Insufficient data
E-15	Western Lower Division	1	146	Insufficient data

(Note: * indicates p less than .05; ** indicates p less than .01)

The High Quality subsample had a significantly negative trend and this is demonstrated by all the subsamples within the High Quality sample. The majority of the High Quality data is from Eastern or Midwestern schools and the Midwestern schools' subsample

shows a significant negative trend. The differences between Upper Division and Lower Division students are maintained although the difference is very slight. The data for the High Quality sample also relies heavily on authoritarianism norms from Upper Division students in the two major geographic regions. Despite the narrow range available for a negative trend to develop among high quality - upper division students from the East and the Midwest, the overall negative trend for the High Quality sample is supported by all the subsamples.

TABLE 14

RESULTS OF TESTS OF ALL SUBSAMPLES
OF MIDDLE QUALITY SCHOOLS DATA

F	Middle Quality Schools	N	Mean	Regression Line	r
F-1	All data	107	149	$Y = 296 - 1.35X$	-.333**
F-2	Upper Division	49	143	$Y = 205 - .56X$	-.206 n.s.
F-3	Lower Division	58	159	$Y = 344 - 1.74X$	-.625**
F-4	East	17	146	$Y = 228 - .73X$	-.133 n.s.
F-5	Midwest	47	149	$Y = 311 - 1.50X$	-.407**
F-6	South	23	152	$Y = 154 - .02X$	-.005 n.s.
F-7	West	20	150	$Y = 345 - 1.80X$	-.414
F-8	Eastern Upper Division	10	144	$Y = 308 - 1.50X$	-.367
F-9	Eastern Lower Division	7	150	Insufficient data	
F-10	Midwest Upper Division	20	142	$Y = 186 - .40X$	-.166 n.s.
F-11	Midwest Lower Division	27	153	$Y = 496 - 3.20X$	-.775**
F-12	South Upper Division	11	147	$Y = 125 + .20X$	+.07 n.s.
F-13	South Lower Division	12	156	$Y = 211 - .50X$	-.15 n.s.

Table 14 continued

F-14	West Upper Division	8	144	$Y = 261 - 1.08X, -.27 \text{ n.s.}$
F-15	West Lower Division	12	157	$Y = 360 - 1.86X, -.75^{**}$

(Note: * indicates p less than .05; ** indicates p less than .01)

The Middle Quality sample had a significantly negative trend in the levels of authoritarianism and this was largely supported by all subsamples excepting the data from the Southern middle quality schools. This finding for the Southern subsample is consistent with the previous findings on levels of authoritarianism among Southern data. The distinctions between student levels are maintained in the Middle Quality schools and so are the geographical distinctions. The Midwestern middle quality schools outnumber the other geographical regions and have a significant negative trend, which means that the Midwestern sample probably contributes a great deal to the negative slope observed for the overall Middle Quality data. The subsample tests of the Middle Quality schools data do not appear to threaten the results of Hypothesis five B.

TABLE 15

RESULTS OF TESTS OF ALL SUBSAMPLES
OF LOW QUALITY SCHOOLS DATA

G	Low Quality Schools	N	Mean	Regression Line	r
G-1	All data	62	153	$Y = 331 - 1.65X$,	-.364**
G-2	Upper Division	29	147	$Y = 253 - .98X$,	-.243 n.s.
G-3	Lower Division	33	156	$Y = 383 - 2.09X$,	-.46 **
G-4	East	17	146	$Y = 208 - .57X$,	-.150 n.s.
G-5	Midwest	15	157	$Y = 492 - 3.10X$,	-.653**
G-6	South	5	154	$Y = 315 - 1.45X$,	-.39 n.s.
G-7	West	25	153	$Y = 317 - 1.50X$,	-.34 n.s.
G-8	East Upper Division	11	148	$Y = 119 + .26X$,	+.075 n.s.
G-9	East Lower Division	6	141	$Y = 401 - 2.40X$,	-.415 n.s.
G-10	Midwest Upper Division	7	147	$Y = 342 - 1.78X$,	-.51 n.s.
G-11	Midwest Lower Division	8	164	$Y = 531 - 3.40X$,	-.75 n.s.
G-12	South Upper Division	1	142	Insufficient data	
G-13	South Lower Division	4	157	Insufficient data	
G-14	West Upper Division	10	144	$Y = 501 - 3.30X$,	-.68*
G-15	West Lower Division	15	158	$Y = 206 - .45X$,	-.13

(Note: * indicates p less than .05; ** indicates p less than .01)

The data for the Low Quality sample show a significant negative trend and this trend is largely supported by the subsample

tests of the Low Quality data. The difference in levels of authoritarianism between Upper Division and Lower Division students is maintained although the Lower Division has a much stronger negative trend. The Low Quality Midwestern schools have the most significant negative trend among the geographic regions while the Low Quality Eastern samples show a very weak negative trend. In fact the regression line in the Upper Division subsample of the Low Quality Eastern schools, being non-significantly positive, has almost no trend at all. This means that whatever negative slope was observed for the Low Quality Eastern sample must have been largely caused by changes in the Lower Division samples of Low Quality Eastern schools. Unfortunately there was insufficient data in the Lower Division sample of Low Quality Eastern schools to have much confidence in the regression analysis of the data, even though it showed a negative slope. This is one of the cases where the size of the subsample of some set of data is just too small for a proper analysis of the data. With the exception of the Upper Division sample of Low Quality Eastern schools, there is nothing in the subsample results for the Low Quality institutions to threaten the results for Hypothesis five C.

E. Tests of Student Division Subsamples

TABLE 16

RESULTS OF TESTS OF ALL SUBSAMPLES
OF UPPER DIVISION STUDENTS DATA

H	Upper Division	N	Mean	Regression Line	r
H-1	All data	108	143	$Y = 237 - .87X$	-.26 **
H-2	East	30	143	$Y = 225 - .75X$	-.235 n.s.
H-3	Midwest	45	140	$Y = 227 - .80X$	-.283*
H-4	South	12	147	$Y = 125 + .20X$	+.07 n.s.
H-5	West	21	145	$Y = 332 - 1.70X$	-.38 n.s.
H-6	High Quality	30	137	$Y = 252 - 1.05X$	-.337 n.s.
H-7	Middle Quality	49	143	$Y = 205 - .56X$	-.206 n.s.
H-8	Low Quality	29	147	$Y = 253 - .98X$	-.243 n.s.
H-9	East High Quality	9	140	$Y = 248 - .98X$	-.37 n.s.
H-10	East Middle Quality	10	144	$Y = 308 - 1.50X$	-.367 n.s.
H-11	East Low Quality	11	148	$Y = 119 + .26X$	+.075 n.s.
H-12	Midwest High Quality	18	133	$Y = 195 - .55X$	-.208 n.s.
H-13	Midwest Mid Quality	20	142	$Y = 186 - .40X$	-.166 n.s.
H-14	Midwest Low Quality	7	147	$Y = 342 - 1.78X$	-.51 n.s.
H-15	South High Quality	0	0	Insufficient data	
H-16	South Mid Quality	11	147	$Y = 125 + .20X$	+.07 n.s.
H-17	South Low Quality	1	142	Insufficient data	
H-18	West High Quality	3	146	Insufficient data	

Table 16 continued

H-19	West Mid Quality	8	144	$Y = 261 - 1.08X, -.27$	n.s.
H-20	West Low Quality	10	144	$Y = 501 - 3.30X, -.68$	*

(Note: * indicates p less than .05; ** indicates p less than .01)

The overall trend for the Upper Division sample of authoritarianism norms was significantly negative. This trend was supported by all the subsamples of the Upper Division data with the exception of the Southern subsamples. The Upper Division Midwestern samples had a significantly negative trend and actually had a lower mean of authoritarianism norms than did the Eastern subsample. The inverse relationship between quality and levels of authoritarianism was maintained for all of the upper division sample. In general, none of the subsample results appeared to present any threat to the results previously achieved for Hypothesis seven A.

TABLE 17

RESULTS OF TESTS OF ALL SUBSAMPLES
OF LOWER DIVISION STUDENTS DATA

I	Lower Division	N	Mean	Regression Line	r
I-1	All data	101	154	$Y = 367 - 1.96X$	-.46 **
I-2	East	16	147	$Y = 375 - 2.06X$	-.378
I-3	Midwest	40	154	$Y = 492 - 3.10X$	-.653
I-4	South	17	156	$Y = 107 + .81X$	+.145 n.s.
I-5	West	28	157	$Y = 259 - .94X$	-.31 n.s.
I-6	High Quality	10	139	$Y = 302 - 1.46X$	-.408 n.s.
I-7	Middle Quality	58	157	$Y = 344 - 1.74X$	-.625**
I-8	Low Quality	33	156	$Y = 383 - 2.09X$	-.46 **
I-9	East High Quality	3	137	Insufficient data	
I-10	East Mid Quality	7	150	Insufficient data	
I-11	East Low Quality	6	141	$Y = 401 - 2.36X$	-.415 n.s.
I-12	Midwest High Quality	5	138	Insufficient data	
I-13	Midwest Mid Quality	27	153	$Y = 496 - 3.2 X$	-.775**
I-14	Midwest Low Quality	8	164	$Y = 531 - 3.4 X$	-.75 *
I-15	South High Quality	1	142	Insufficient data	

Table 17 continued

I-16	South Mid Quality	12	156	$Y = 211 - .50X, -.15$ n.s.
I-17	South Low Quality	4	157	Insufficient data
I-18	West High Quality	1	~~156~~	Insufficient data
I-19	West Mid Quality	12	157	$Y = 360 - 1.86X, -.75$ **
I-20	West Low Quality	15	158	$Y = 206 - .45X, -.13$ n.s.

(Note: * indicates p less than .05; ** indicates p less than .01)

The overall trend for all of the Lower Division sample was significantly negative. All of the testable subsample results support this negative trend, with the exception again of the Southern data. The Midwestern subsample is the largest of the geographic regions and it has a significantly negative slope, which means it probably contributes a great deal to the overall trend observed for the Lower Division sample. The quality distinctions are not as clear cut in the Lower Division sample as previous samples except that Lower Division samples from high quality schools were much lower in dogmatism than samples from middle or low quality schools. None of the data from the subsample tests appears to threaten the results for Hypothesis seven B.

The results are fairly consistent for all of the subsets of data tested and there do not appear to be any trends in the data subsets which would challenge the results found for the hypotheses. The next chapter concludes this study with a discussion of some conclusions arising from the overall results of the study, as well as some implications for further research.

CHAPTER V

CONCLUSIONS

A. Summary of Results

In Chapter I, the general hypothesis was suggested that a significant change had occurred in the levels of authoritarianism among college student populations from the 1950's to the 1960's.

The known characteristics of people high in the cluster of attitudes and values called "authoritarianism" appeared to be similar to the characteristics of students in general in the 1950's. By the mid 1960's, many students seemed to exhibit characteristics that were similar to known characteristics of people low in authoritarianism. The suggested change in levels of authoritarianism, therefore, was that a trend to lower levels of authoritarianism would be found to occur among the college student population as they passed from being called the "silent" generation to being called the "activist" generation. It was further suggested that this change would be observed in all regions of the country and that it would not be confined to academically prominent and selective institutions. The general hypothesis was tested by a series of statistical tests and a negative trend in levels of authoritarianism was found to exist in all tests, with the single exception of data from schools in the Southern geographical region. There appeared to be no measurable

change in the available authoritarianism norms from the South at all for the time period studied. Other tests were carried out to measure changes in authoritarianism norms while controlling for demographic variables of geographical region, quality of institution, and experience/maturity of students, all of which have some effect on levels of authoritarianism, and still the general hypothesis was confirmed.

In summary, the results from the tests of all the various hypotheses have confirmed the expectations derived from the reviews of the literature and the discussions of the probable trends in levels of authoritarianism among college student populations. There is a significant negative decline in the levels of authoritarianism, as measured by the dogmatism scale, for all areas of the country except the South. The trend to lower levels of authoritarianism is discernible at all levels of college quality and within the divisions of student experience at college. The origin of the trend is influenced by geographical region because authoritarianism norms from Eastern and Midwestern regions tend to be generally lower than authoritarianism norms from Western and Southern regions. The origin of the trend is also influenced by college quality because authoritarianism norms vary inversely with the level of college quality. Lastly, the origin of the trend is influenced by the level of student experience and maturity because authoritarianism norms from upper division students tend to be lower than authoritarianism

norms from lower division students. However, the main conclusion still stands: there has been a significant decline in the levels of authoritarianism measured among college students from the silent generation of the 1950's to the active generation of the late 1960's.

With the exception of norms from the Southern universities, this trend has been confirmed by all subsample tests designed to control for demographic influences on changes in the levels of authoritarianism.

B. Conclusions on the Data

As previously stated, the mean of all the 209 dogmatism norms from 1955 to 1968 was 148.215 and the standard deviations ranged from 28 to 15 with the average being 22.5. In an earlier study on some norms for the dogmatism scale, Alter and White calculated an overall mean of dogmatism norms for the period 1960-65. They reported an overall mean for some 12,977 scores (which included some non-student samples) of 159.21 with a construct standard deviation of 31.38.¹ Their mean is considerably higher than the overall mean of 148.215 for the period 1955-68. Conceivably, this lower mean could be interpreted as showing the influence of the lower scores available from the period past 1965. A narrowing of the variance of the norms also seems to have occurred as well as a lowering of the norms.

The potential danger of historical data being inadequate for a simulated longitudinal study was not realized for most of the major hypothesis tests except for the Southern geographical region.

Because of the limited historical data from the Southern geographical region, it is difficult to draw many firm conclusions about the results from the South. The Southern data was the smallest subsample of all the data gathered and was almost devoid of higher quality institutions. The absence of higher quality institutions is not

¹ Richard D. Alter and Jack B. White "Some Norms for the Dogmatism Scale", Psychological Reports, 1966, Vol.19, pp.967-9

a fault of the South per se, but is due to the absence of many published dogmatism norms from higher quality institutions in the South. On the other hand, middle quality institutions in the South were not under-represented in the total sample. They constituted 22.4 percent of all the middle quality schools and showed almost a virtual absence of change for the time period studied. Perhaps the overall absence of change in the Southern norms was a function of the available data for the South or perhaps the data does reflect something close to the true situation in the South. If the latter is accepted then either the socio-cultural changes that have caused lower levels of authoritarianism to be found elsewhere are missing in the South, or the effects of the socio-cultural changes have yet to be reflected in authoritarianism norms in the South. The South is not immune to television nor is it immune to socio-political changes, and it is not likely to be immune to changes in family-rearing patterns. But these influences may have started later in the South or they may have more counter-influences to overcome in the South than elsewhere.

In summary then, it can be concluded that a sufficient amount of historical data was gathered to simulate a longitudinal study and conduct the appropriate statistical analyses of the data.

C. Conclusions on the Instrument

In The Open and Closed Mind, Rokeach gave explicit directions for the administration of the dogmatism scale which helped a great deal in standardizing the reporting of dogmatism norms in the literature. In the 300+ studies surveyed to gather norms, very few researchers modified Rokeach's administrative procedures for the scale. This uniformity of administration lends added confidence to the reliance on this scale for the necessary historical data.

However, even with this confidence in the scale, some examination should be given to another possible interpretation of the results of the hypotheses tests. Instead of the significant negative slopes in authoritarianism norms being interpreted as reflecting actual personality changes, one might alternatively surmise that the negative slopes are really due to a change in response-set. That is, students in the 1950's might have had a tendency to suffer from acquiescence response-set and now have changed to a slightly negative response-set.

When the dogmatism scale was originally developed in the 1950's, it was felt that a positive response-set was probably a correlate of the personality dimensions the scale was trying to measure. In other words, the fact that a person has a tendency to agree with any assertive statement put before him should have some relationship to the nature of his personality. Therefore, the possibility of some response-set being present in the scale was not

viewed as a serious fault. Also, Rokeach reported that it was very difficult to construct a scale with both positive and negative items that had any reliability.²

In using the scale, the recommended method of administration is to deliberately mix the forty items among other scale items (preferably negative) to camouflage the dogmatism items so that a person would be encouraged to consider the item content and would find it difficult to use a simple response-set. Since most of the researchers reported using Rokeach's directions for administering the scale, there seems to have been adequate measures taken to guard against too much contamination from acquiescence response-set.

It should also be mentioned that in the development of the dogmatism scale, validation studies were done that required a person to disagree with the items on one scale (The Gough-Sanford Rigidity Scale) and agree with the items on the dogmatism scale in order to get a high score on both. Since dogmatism was found to correlate significantly with rigidity, persons scoring highly on both must have been responding more to item content than to response-set.³ Lastly, Rokeach and others found that many distinct behavioral differences existed between persons scoring high or low on the scale.

² Milton Rokeach, The Open and Closed Mind, (New York, Basic Books, 1960), p. 405

³ Ibid., p. 406

Because of these behavioral manifestations of differences in dogmatism scores, and because of the recommended administration of the scale, it is felt that persons' dogmatism scores are still determined more by their individual responses to item content than by simple response-set. In summary, the response-set argument for the interpretation of the negative trends in the dogmatism norms cannot be accepted as a preferred explanation of the results of the hypotheses tests. Confidence in the instrument's ability to reflect a longitudinal trend in attitude changes among college student populations is still retained.

D. Conclusions on the Hypotheses

The confirmation of the general hypothesis of the study is consistent with the general trend of the previously discussed studies on student activists. The fact that a population change (college students) is occurring, rather than a subsample change (student activists), confirms the feeling that the highly publicized student activists are more the tip of an iceberg than an isolated minority. This conclusion suggests a further question: to what extent are college students representative of youth as a whole in America? Are college students an isolated minority, or are they the tip of another larger iceberg?

Since the hypotheses in this study were concerned only with college students, the results for the hypotheses cannot directly answer these latter questions. At best, the hypotheses results can only offer suggestions for assessing the general trend for all youth. However, the hypotheses for college students were partly derived from an examination of previously mentioned societal trends which were felt to be contributory toward the development of lower levels of authoritarianism. While these societal trends may have had a more pronounced effect on the developmental background of today's college students (or their parents), there is no reason to assume that the effect would be limited only to the latent college students. Therefore, youth as a whole may be another iceberg moving in the same direction as the college students but in a less newsworthy or

less activist manner.

The McLuhan theory for the causes of a gap emerging between generations was one of the societal trends discussed previously as a possible reason for expecting lower levels of authoritarianism to be found among contemporary students. By and large, the results of this study confirm the expectations derived from his theory. Persons with lower levels of authoritarianism tend to have many of the same characteristics he ascribes to youth who have developed under the television-circuitry environment. For example, McLuhan differentiates communications media in terms of their being either "hot" or "cool" and maintains that television is a cool medium. Hot media are those with a high definition of information, where one can be relatively passive in receiving the message because it is unambiguous and requires little interpretation. Little involvement is required by hot media. Cool media, such as television, are those with a low definition of information and where one cannot be passive in receiving the information. One must become involved in order to get the message from cool media and such involvement is part of the unintentional message of the media.⁴ Modern youth, as well as being likely to exhibit the characteristics of low authoritarianism, seem to greatly prefer the involvement of cool media because of their developmental conditioning in a communications environment

⁴ Marshall McLuhan, Understanding Media, (New York, McGraw Hill, 1965) pp. 22-23.

dominated by the cool medium of television. Because the television environment is so pervasive in contemporary society, the various effects it has on the development of young people are not likely to be confined solely to potential college students.

With McLuhan's categorizations of media in mind, a behavioral manifestation of differences in levels of dogmatism among persons should be examined. Rokeach found that persons scoring high in the dogmatism scale (closed-minded) tended to reject new belief systems unless "parts of the new system are presented all at once on a silver platter".⁵ Such a presentation apparently eliminates the need for synthesis or integration of the new information with the closed-minded person's existing system of beliefs. In other words, persons high in dogmatism prefer information that is high in definition, that requires no involvement, and allows them to be passive.⁶ Persons low in dogmatism (open-minded) typically prefer to integrate new information into their existing belief-systems whether the new information is handed to them on a platter or not.⁷ This preference among low dogmatism persons for the integration process requires

⁵ Rokeach, op. cit., p. 287

⁶ This preference for high-definition "silver platter" information also protects their existing belief-system from any threat arising from information that might challenge their prejudices, etc. This unique capability of high dogmatics to retain intact parts of their belief-system in the face of challenging information would also seem to allow them to retain logical inconsistencies.

⁷ Rokeach, op. cit., p. 288

involvement and such a preference would seem to be consistent with a preference for the low definition of cool media. At the very least, persons low in dogmatism, such as contemporary students, are much better suited to living with a low definition environment than previous generations of students.

The finding that a trend toward low authoritarianism exists also seems to confirm the theories that both the changing socio-political environment and the changing attitudes toward child-rearing will have a significant (though lagged) effect on the nature of the personalities and behavior of youth in general and college students in particular. The trends discussed in child-raising practices suggested that lower levels of authoritarianism and better emotional development would result over time and this has been confirmed by the present study. To the extent that the change in child-rearing practices had penetrated all levels of society in the 1940's and early 1950's, the phenomenon of a shift toward low authoritarianism should be a generalized trend and not limited solely to college students.

Youthful involvement, and particularly college student involvement, in contemporary social issues has caused a lot of concern to be expressed by tradition-oriented people about the behavior of present day youth. To some extent the feeling has been expressed that the youth phenomenon is a function of contemporary social issues alone and that if the issues were to dissolve

the youth phenomenon would also dissolve. While the inclination toward activism among contemporary youth has undoubtedly been fueled by recent trends in the socio-political environment, it is felt on the basis of the results of this study, that even without the crisis issues of the current times, the difference between the psychological natures of the silent generation and the active generation would not have gone unnoticed. Social crises may exaggerate the differences between generations (which may be a social crisis in itself) but it seems unrealistic to assume that if the social issues somehow became muted, then contemporary student youth would too somehow become mute.

The prospect of a population shift in attitudes, particularly a trend toward less authoritarianism, seems to be viewed with alarm by some and welcomed by others. Many persons in positions of authority or those more traditionally-oriented see the change in attitudes toward authority as being evidence of immaturity among contemporary youth. On the other hand, the incidence of low authoritarianism among student activists can be interpreted as being evidence that the level of emotional maturity is improving among college student populations. Instead of viewing student activism and challenges to authority as being a sign of neurotic behavior arising from backgrounds of excessive permissiveness, Bay, for example, felt that behavioral and personality characteristics of

activists were more indicative of relatively high levels of emotional maturity.⁸ His criteria for emotional maturity are similar to those of Jahoda⁹ and he argues against the conventional notions that equate maturity and social responsibility with conformity and socially "proper" behavior.¹⁰ Similarly, a study by Berkowitz & Lutterman looked at the relationship between student behavior and high scores on conventional Social Responsibility scales and found the scales had the implied relationship: social-responsibility = propriety.¹¹ Therefore, persons who are seriously concerned with society's problems and who go so far as to step out of the bounds of propriety to try to change society, would be interpreted by many to be emotionally immature and socially irresponsible. Bay argues for the converse interpretation, that

⁸ Christian Bay, "Political and Apolitical Students: Factor in Search of a Theory", Journal of Social Issues, 1967, 23(3), pp. 88-90.

⁹ Marie Jahoda, Current Concepts of Positive Mental Health, (New York, Basic Books Inc., 1958), Chapter Five

¹⁰ The conventional notions of maturity = propriety are demonstrated by Ross' interpretation of her findings on attitude changes in M.S.U. freshmen. See the discussion on Ross in Chapter One.

¹¹ For example "high scorers on the present social responsibility scales can be regarded as conservative; being unalienated and highly involved in American society, they will have accepted many of the traditional values of society" (p. 172)

Among college students "high scorers on this scale are the ones who are most inclined to follow situational signs of what is proper and desirable behavior" (p. 184)

L. Berkowitz, and K.G. Lutterman, "The Traditional Socially Responsible Personality", Public Opinion Quarterly, Summer 1968

"more conservative views, among students or adults generally, are likely to be less rationally, less independently motivated, compared to more radical-liberal views",¹² and further "every new human being is potentially a liberal animal and a rebel: yet every social organization he will be up against, from the family to the state, is likely to seek to socialize him into a conveniently pliant conformist".¹³

Actually, Bay's reasoning is very consistent with the results of this study. The typical family backgrounds that produce people generally low in authoritarianism seem to be the same types of family background most conducive to healthy emotional development. The finding that significantly lower levels of authoritarianism are present among contemporary college student populations is entirely consistent with the notion that higher levels of emotional maturity are present among contemporary college students. Therefore the trend to lower levels of authoritarianism seems to be complementary to the development of a greater sense of social responsibility and a willingness to be active in trying to express one's concern for society. Unfortunately, this willingness to be active in trying to express one's concern for society will continue to be viewed as immature behavior as long as the maturity/propriety convention remains implicit.

¹² Bay, op.cit., p. 88.

¹³ Ibid., p. 90.

A population shift in attitudes has further implications. It means that a generation "gap" can and does exist between many adults and students because the traditional pattern of youth aspiring to a role modelled after their parents has been broken, at least temporarily. This does not mean that youth will not eventually adopt a role similar to their parents, it simply means that many youth no longer aspire to adopt those roles. The traditional aspiration of youth to adopt their parents' role-model provided a bond of communication between generations. When the traditional aspiration no longer exists, an essential bond of communications is lost which thus contributes to the "gap" between parents and youth. In effect, the gap phenomenon is evidence of the existence of two largely separate cultures in one society, each with its own mores, aspirations and language.

Traditionally, as members of the youth culture became older, they would pass from the adolescent apprenticeship role to the adult role and adopt adult behavior patterns to perpetuate the adult culture. Due to the distinctiveness of this contemporary youth culture, a different type of transition may take place causing the formation of new adult roles. Members of the low authoritarian culture will eventually begin to form the majority of the population because they do not aspire to adopt the conventional adult culture. Instead a modified adult culture will likely develop from a combination of low

authoritarianism and the pressure of meeting societal responsibilities. The older, more conventional, more authoritarian, more traditional generation will constitute a smaller and smaller proportion of the population as their numbers decline from attrition. This transition is not expected to take place smoothly, quickly or without resistance, and it could probably be retarded greatly by severe social crises. Nonetheless, the trend toward lower levels of authoritarianism is strongly in evidence now and ceteris paribus, this will be the wave of the future.

In terms of implications for research in organization theory, the conclusions from the hypothesis are somewhat more tentative. The hierarchy of relationships in most organizations has traditionally been based on an inequality of authority and the various rights and privileges of the differentiations of authority. In addition to providing a challenge to such traditional inequalities, the hypotheses results suggest that new forms of organizations will develop, based either on legitimate authority differentials or equalitarian relationships. An organization based on legitimate authority differentials may be quite viable but an organization based on equalitarian relationships and committed to the participative ideal may be less viable. That is, such an organization may not be able to grow very large in scale of operations, nor be able to concentrate all resources in an intensive effort such as an emergency. We may see a pendulum

type of organization which strives toward an equalitarian participative model under favorable conditions but swings back into more conventional relationships under pressure in a manner similar to that described by Likert.¹⁴

If an organization must regress in this fashion whenever pressures arise then one might conclude that movement toward an equalitarian-participative model is a futile objective. If a model of organization relationships is to be a viable model, then the new system of relationships should be able to be maintained under all contingencies. Or should it? Perhaps it is a mistake to assume that an organization must maintain the same system of relationships under all situations. It seems likely that an organization would be much more effective if it were able to adopt different systems of relationships when the environmental demands differed, rather than maintaining an inappropriate system of relationships. Of course what many organizations now do is regress under pressure and then stay there, or regress in a destructive fashion that sacrifices investment in human assets in favor of short term cost savings.

We now seem to be witnessing the struggle of organizations to move away from traditional authoritarian relationships and as yet have few opportunities to observe organizations based entirely on a new system of relationships. This struggle causes an important

¹⁴Rensis Likert, The Human Organization (New York, McGraw-Hill, 1967) Chapter 5.

problem in organization research because one can only study empirically those organizations which already exist or have existed. Unless one builds an experimental model of an organization it is difficult to assess how an organization based on a different system of relationships would perform under varied conditions. Organizations which are theoretically based on a system of equalitarian relationships, such as an academic faculty, very soon seem to adopt a system of inequalities and rarely extend the equalitarian relationship to other members of the organization. However, it would be a mistake to assume that because empirical investigation does not reveal many viable equalitarian-participative organizations to be in existence, then it must follow that equalitarian-participative organizations are not possible. Such an assumption would be analogous to assuming in 1968 that flights to the moon are not possible because none had been observed to that time. Instead, the trend toward a population characterized by low authoritarianism and equalitarian values should be interpreted as a challenge to organization research to experiment with and develop new models of organization relationships.

Of course the field has already been working at this challenge for some time, particularly those researchers concerned with the problems of organization renewal and organization development. The assumptions of traditional authority in organization are no longer taken for granted and role definition within many organizations is

now an open question, subject to negotiation rather than fiat. The results of this study therefore, do not create the need for research into new models of organization relationships, rather the results add impetus to the on-going research.

In summary, whether the cause was new practices in child rearing or the impact of information circuitry, or both, or any number of other environmental influences, the present day college student population appears to be psychologically distinct from the college student population of only ten years ago. Secondly, this distinctiveness seems to be appearing in most parts of the country and at all qualities of colleges. However, it is still an elitist change unless the college student distinctiveness is really the tip of an iceberg of youth in general. Lastly, there is strong evidence for the feeling that the change has been a positive one in the direction of greater emotional maturity and social consciousness. This is perhaps the most significant conclusion and it can only be reached if one reassesses the conventional notion that emotional maturity = social propriety. Once this reassessment is made then the new wave of attitudes and values can be perceived as a powerful potential for social change and hopefully, improvements, in society. Since this "new wave" college student population is the chief source of supply for the managerial manpower needs of contemporary organizations, it is likely that the impact of this new quality of manpower will

very soon be felt by organizations, particularly those organizations which are traditional or authoritarian in orientation.

E. The Implications for Organizations

In the introductory part of this study, the possibility of a significant change among college student populations toward lower levels of authoritarianism was discussed in terms of the implications for organizations expecting to hire college students. The significant change toward lower levels of authoritarianism among college student populations has now been confirmed by this study. College graduates generally have lower levels of authoritarianism than undergraduates, but now it has been demonstrated that the student population as a whole has lower levels of authoritarianism. Therefore, college graduates, the chief source of supply of managerial manpower for organizations, should have even lower levels of authoritarianism than before and for a longer time period prior to graduation and employment. Since hierarchical relationships in most organizations are based on a system of unequal authority, a significant change among many persons' predisposition toward accepting authority will have several implications for the future operations of such organizations.

My study has focussed attention on changes in attitudes toward authority, but of course these changes in authoritarianism are only part of larger changes that are occurring in attitudes and values of students and the implications for organization theory should be considered in the context of this broader change. Today's students

are unusually sensitive to world events, current political and social problems, and have a growing sense of urgency about correcting some of the perceived evils.¹⁵ In part, this sensitivity is a product of the availability of news and information, as in McLuhan's "global village" concept, and in part it is due to their developmental backgrounds. In addition to this social sensitivity, there is an equal amount of concern for problems of identity, self-expression, and self-actualization. The combination of social sensitivity and a desire for self-actualization (with the implied desires for autonomy, freedom of expression, participation in decision-making etc.) is likely to produce demands for occupational employment that is both worthwhile socially and intrinsically satisfying to the individual. As McLuhan has said, young people will be demanding "roles" not "jobs".¹⁶ Jobs are high definition tasks that do not require involvement, roles are low definition and require a great deal of involvement. The same trend is predicted by Keniston.

In the coming generation there will be more and more students who will come from the upper-middle class, highly educated, politically liberal professional background from which protestors are selectively recruited... We can expect that a significant and perhaps growing proportion of these families will

¹⁵ Kenneth Keniston, "The Sources of Student Dissent", Journal of Social Issues, 1967, 23(3), p. 130

¹⁶ Marshall McLuhan, and Quentin Fiore, The Medium is the Message, (New York, Bantam Books, 1967), p. 20

have the universalistic, humanitarian, equalitarian, and individualistic values found in the families of protestors. Finally, the expressive, permissive, democratic, and autonomy-promoting atmosphere of these families seems to be the emerging trend of middle-class America: older patterns of 'entrepreneurial-authoritarian' control are slowly giving way...¹⁷

In the previous discussion of Holland's research on vocational choice among college students, it was pointed out that people tended to seek and remain in organizational environments that were compatible with their own attitudes and values. The emerging pattern of attitudes and values among students is clear, the question for organizations now is whether conventional, tradition-oriented, or authoritarian organizations will be able to provide employment environments and opportunities that are conducive to satisfying the needs and values of contemporary students. Can the new college graduates satisfy their desire for both social responsibility and self-actualization while employed in contemporary organizations and particularly business organizations? As Keniston has further stated, "many will undoubtedly turn to question the value of monetary familistic and careerist goals, looking instead toward expressive, romantic, experiential, humanitarian, and self-actualizing pursuits to give their lives meaning."¹⁸ If they perceive that employment in conventional organizations will not satisfy these new goals and values,

¹⁷ Keniston, op.cit., p. 131

¹⁸ Ibid., p. 133

nor provide a satisfactory low authoritarian work environment, then it seems obvious that they will increasingly turn to other career patterns.

The possibility of a major shift in career patterns among this source of potential managers can present a major problem to those organizations which are perceived by students as providing unsatisfactory work environments. On the other hand, dynamic and innovative organizations, those which are low in formality and high in tolerance, are more likely to be perceived as being attractive by low authoritarian college graduates. Those organizations which also pursue goals perceived by college graduates to be socially desirable might also be more attractive to low authoritarian college graduates. In the meantime, it is the organizations with conventional, traditional, or authoritarian environments which are likely to suffer most from these changes in college graduates.

There is already a great deal of evidence that many contemporary students are turning away from conventional organizational careers and are attempting to explore other career patterns. Employment in large organizations is perceived in the following manner:

...big organizations attract manipulative, power-ridden people... While the professional derives satisfaction predominantly from his work, the administrator derives satisfaction from the control of people within the organizational apparatus. In short, he is a politician, but an

authoritarian one... He manifests many of the characteristics of the authoritarian personality... He is conventional and unquestioning... He down-grades emotions, which he views as a sign of softness, and believes at all cost in being 'tough'.¹⁹

Such an environment is simply not attractive to a person low in authoritarianism and who is seeking a career that allows expression of his humanitarian and individualistic goals and values. Business and other careers that can offer only material rewards as a motive for entering those occupations will simply find less and less students adopting such careers and this will be "particularly true of the brighter and livelier students".²⁰ Business careers particularly seem to suffer from this stigma of offering only empty rewards and values. For example:

The buoyancy of youth is fed by the conviction of a full life to come, one in which all great things are theoretically attainable. But one cannot believe in the good life to come when the goal is suburbia. One cannot realize one's values by climbing the ladder in the business community...²¹

¹⁹ C. George Benello, "Wasteland Culture", in Gerald F. McGuigan, (Ed.), Student Protest, (Toronto, Methuen Publications, 1968) p. 199

²⁰ Mervin B. Freedman, "Roots of Student Discontent", in Christopher G. Katope, and Paul G. Zolbrod, (Eds.), Beyond Berkeley, (Cleveland, World Publishing Co., 1966), p. 246

²¹ Bruno Bettelheim, "The Problem of Generations", in Erik Erikson, (Ed.), The Challenge of Youth, (New York, Anchor Books, 1965), p. 94

The adult world into which they are headed is seen as a cold, mechanical, abstract, specialized, and emotionally meaningless place in which one simply goes through the motions, but without conviction that the motions are worthy, humane, dignified, relevant, or exciting. 22

The evidence seems to be pretty clear then, that the change in career interests is likely to be a significant trend and not just a temporary phase. There is a real danger that many organizations will suffer from a lack of available high talent manpower from the college campuses. College graduates will simply choose to pursue other careers. Those who do enter into organizational careers will most likely be highly mobile and with a strong orientation toward professional values rather than corporate values. They will be the mobile managers such as described by Jennings.²³

Mobile managers, in addition to having limited loyalty to the organization, are also not likely to be passive and acquiescent when working in any organization. Thus, if a conventional organization does manage to hire some contemporary college graduates, it would be unrealistic to expect the hirees to behave in the traditional manner, submissive to authority. Organizations which could not adapt their managerial style to provide a low authoritarian environment for the mobile managers would most likely suffer from high turnover, particularly among the brighter and more valuable college graduates.

²² Kenneth Keniston, "Social Change and Youth in America", in Erikson, E. (Ed.), op. cit., p. 203

²³ Eugene Jennings, The Mobile Managers, (Ann Arbor, Michigan, Bureau of Industrial Relations, University of Michigan, 1967)

Many organizations have already begun to try to adapt their internal environments to appear more attractive to contemporary college graduates. Some other organizations, particularly business organizations, have decided to attack the problem by trying to change the perceived image of corporate careers. The business journals are full of articles stressing how important it is for business to make known "both sides of the story". Many blame college professors for indoctrinating students with a distorted picture of corporate life and business values, and feel that the problems would be solved if business could only make the "truth" known to students.

This strategy of attacking the image and blaming others for distorting the truth is symptomatic of the real problems facing many organizations. Perhaps the students do have a clearer perception of the reality of organization life than do many of the people who are trying to convince students to join the organization way of life. Perhaps if the reality of organization employment were modified, or adapted to modern and emerging value systems, there would not be an "image" problem. As long ago as 1956, Whyte in the Organization Man pointed out that a slow but definite change was occurring in the social philosophies of employment in North America. The Protestant Ethic was declining and a Social Ethic seemed to be taking its place. It is possible that Whyte's Social Ethic was a transitional phase before

the emergence of a social service ethic such as envisioned by

Freedman:

The Puritan or Calvinist Ethic of hard work and success in competitive struggle is on the wane, and to some extent the ethic of social service, which nourishes the hunger to be part of a community, is replacing it. The ethic of social service is a response as well to an era of automation and an economy of affluence. ²⁴

It is quite likely that many organizations are still dominated by people with roots in the old ethics and the environment within these organizations simply has not kept pace with the changes occurring in society. The existence of the generation gap itself almost guarantees a low probability of the environments or organizations headed by older persons being consistent with the values and goals of younger persons.

Therefore, relying on a change of image alone is not likely to be an adequate response by organizations to meet the demands for change emanating from the potential managers. A more adequate response would be to attempt to modify both the value system and the structure within the organization, or attempt to create an organization environment that would be more suitable for, or acceptable to the low authoritarian contemporary college graduates. It should be possible to get some idea of the type of organization environment that would be suitable, and changing the structure or nature of the

²⁴ Freedman, op. cit., p. 241

organization's operations may be entirely possible, once the direction of the necessary changes is discovered.

An organization with the combination of low authoritarian values and procedures and socially desirable goals would be much more successful in attracting people to its environment than one which tried only image or piecemeal changes. Of course, changing the goals of an organization, or defining them in a way that will appeal to college graduates may be a much more difficult problem for some organizations. Cynical organizations that tried to create an illusion of change by concentrating on their "image" would seem likely to only create further alienation.

It is not possible in this study to fully explore all the possible organizational environments that might appeal to college graduates but a brief look at the types of organizations now run by students themselves might give some clues. Katz has suggested the same idea, "we could learn much from a study of the activist modes of political organization, of decision making, and of translating ideas into action."²⁵ Some descriptions have been given of the inner workings of student groups by Keniston in Young Radicals²⁶ and by Burck²⁷

²⁵ Joseph Katz, The Student Activists: Rights, Needs and Powers of Undergraduates, (Stanford, California, Institute for the Study of Human Problems, Stanford University, 1967), p. 24.

²⁶ Kenneth Keniston, Young Radicals, (New York, Harcourt, Brace and World, 1968), Chapter 5

²⁷ Charles Burck, "Student Activists: Free Form Revolutionaries", Fortune, January, 1969, pp. 108-111, 134-138

in the January 1969 issue of Fortune which was devoted to studies on modern youth. Student-run organizations, such as the S.D.S. seem to be characterized by two main features: lack of a well-defined structure, and a great deal of participation in decision-making. The visible leaders of such organizations are usually little more than chairmen of discussions and spokesmen for the groups. Decision-making is accompanied by seemingly endless discussion among all interested members. Formal votes are rarely necessary as a gradual consensus is developed through the discussion. Occasionally some subgroups disassociate themselves into factions if they don't like the eventual decision. Projects are almost always tackled by groups where everyone tries to contribute their particular abilities. The groups too are loosely structured and membership can ebb and flow. In general, the overall effect of working in such organizations is a great sense of participation, achievement, commitment and solidarity.²⁸ The idea of working in free groups connected by bonds of ideology and commitment is essential to the values of the students. Whatever control exists in the organizations must come from participation and involvement because "where participation and involvement is not enlisted, the structure must be authoritarian"²⁹ in order to achieve control.

²⁸ Keniston, Young Radicals, op. cit., pp. 159-160

²⁹ Benello, op. cit., p. 203

Thus it is possible to get a rough picture of the sort of organization "structure" that the vanguard students seem to prefer: shared ideology, commitment to goals, participation in decision-making (and goal setting), flexible task groups, temporary structures that change as the nature of the task changes, and equality of power within the organization. Ironically, very similar characteristics of organizations are advocated by Bennis as being the most suitable type of organization for maximum adaptability and utilization of human resources in the future. He feels that large and inevitable socio-cultural changes are occurring that will require organizations to abandon their traditional - bureaucratic structures and move toward a more democratic-participative type of structure if they wish to survive. These new types of organizations will be "organic-adaptive" structures characterized by the following features:

adaptive, rapidly changing temporary systems... organized around problems to be solved...groups of relative strangers who represent a set of diverse professional skills...they (the groups) will evolve in response to the problems...the function of the 'executive' thus becomes co-ordinator, or 'linking-pin' between various project groups... People will be differentiated not vertically according to rank and role but flexibly according to skill and professional training. 30

A similar type of new organization structure is advocated by Likert in his "System Four" participative - group type of management.³¹

³⁰ Warren G. Bennis, Changing Organizations, (New York, McGraw-Hill, 1966), p. 12

³¹ Likert, op. cit., p. 76

The irony referred to earlier is that such authors as Bennis and Likert have to go to great efforts to try to convince managers of organizations that the new styles of organization management are desirable, while students who are avoiding conventional organizational careers are in turn running their own organizations along the lines recommended by Bennis and Likert. It would appear then, that a major obstacle facing organizations in their recruiting efforts among college graduates, is their own conservatism, hesitation, or failure to adapt to modern organization structures.

A further irony is that modern organizations attempting to be adaptable and flexible need manpower that is also adaptable and flexible or not resistant to change. The present generation of low authoritarian college students seem to be just the sort of potential manpower to satisfy the needs of modern organizations. For example, a study by Kamenske³² indicated that low authoritarian persons were much more successful in adapting to changes in an organization than high authoritarian persons. Therefore, the supply of manpower provided by the present generation of low authoritarian students would seem to match the demand for manpower required by modern organizations, yet the two parties apparently do not perceive sufficient commonality of interest to strike a bargain.

³² Gloria C. Kamenske, "Some Personality Factors in Attitude toward Technological Change in a Medium Sized Insurance Company", (Unpublished PhD Thesis, Michigan State University, 1965).

Modifying organizations in a direction such as recommended by Bennis and Likert might be a significant step toward providing an organization environment compatible with needs and values of contemporary students. Some of the changes that could occur are described by Benello in the following passage:

Where the present organizational style creates a mass of personnel fixed in specialized pigeon-holes, and a status hierarchy with an elite in control at the top, the alternate style would create groups which communicate both vertically and horizontally through a system of delegates whose power is limited by the groups they represent. Structure and function interrelate, and thus the values that flow from such a structure would be in accord with it; since decisions, control, and power are distributed throughout the organization, the dichotomy between the professional, job-oriented, and the status, administration-oriented will disappear, since authority will not be dissociated from function. Economic reward, now tied to a system of status hierarchy so as to reinforce it, will give way to a more egalitarian system of rewards. With power distributed throughout the organization, there will be no scrambling for status positions, where the power (now) is. 33

Of course, modifying the structures of organizations is not the complete answer to the college graduate manpower problem and a cautionary note is added by Benello:

The trouble with management theorists is that they do not go far enough. They argue for all the right things (in structure)...but fail to mention what stockholders would do if those involved wanted to work for something besides profits. ...One cannot dissociate overall

³³ Benello, op. cit., p. 209

structure from internal function. To argue as some of the managerialists and Fortune people do, that one can exhort managers to concern themselves with the social good is to ignore what happens when this comes into conflict with profits. ³⁴

In other words one cannot forget the value commitment to social service goals among contemporary students. It is doubtful whether many college graduates would continue to work in an otherwise compatible environment if they strongly disagreed with the goals of the organization, whereas they might tolerate a poor organizational environment if they were strongly in favour of the goals of the organization. In the long run, the problem of the divergence in goals between students and the large organization will probably be more important than problems of structure in the organization. In the short run, organizations perceived as offering an authoritarian employment environment will continue to have difficulty attracting or retaining low authoritarian college graduates.

³⁴ Ibid, p. 207

F. Further Topics for Research

The results obtained in this study on dogmatism norms are suggestive of further topics for research. For example, the question of stability in the low authoritarianism norms could be examined. If one environment (the university) can have the effect of reducing the level of authoritarianism to some degree, could another environment (business organization) raise the level of authoritarianism to some degree? That is, does the level of dogmatism remain relatively constant over time after the graduates have left college, or would the level of norms start to rise again as the graduates get older and further away from the university environment? A related question would be whether persons employed in different organization environments would show different patterns of dogmatism change over time. Persons employed in a low authoritarian environment might be much more stable in low dogmatism levels than persons who continued to work in high authoritarian environments. A further question for study would be to see whether the goals of an organization would take precedence over the internal environment of the organization in the employment choices of low authoritarian students. For example, would students prefer to work in a bureaucratic government organization that was attempting to pursue desirable goals, or would they prefer to work in a low authoritarian business organization pursuing self-interest goals? Most likely they would be frustrated in both

situations and would soon take advantage of their relative mobility .

Further research could be done on dogmatism levels among the student activists as a group, particularly among the radical activists. For example, the extremely alienated anarchistic activists appear to be very different from the "committed" activists, and are often called "fascists of the left". If the anarchists would cooperate in study, they might be found to have extremely low scores on the dogmatism scale which would demonstrate the curvilinearity apparently in the scale.

In another area, further norms should be taken from Southern sources to see if there is any indication that colleges in the South are beginning to follow the national trend, or to see if Southern high quality schools are in line with high quality schools in other areas. Also, it might be useful to continue to survey the general trend of dogmatism norms among students to see if the trend begins to level out. As was mentioned before, the norms for the scale cannot go much below a mean of 120 without people beginning to show signs of some-things similar to a disagreement response-set. If the measured norms did start to go much below 120, the trend might begin to indicate either a profound sense of negative alienation occurring among college students or that the scale itself was somehow losing its validity as a measure of authoritarianism among college students. One would hope for the latter interpretation if a strongly negative

trend continued to be observed in the future.

While many people are unhappy with this pressure for change arising from students, it should be remembered that a positive side exists too. All too many people feel that a major function of college is only to prepare people for managerial or professional jobs in society and seem to forget that a major function of college is to educate people as well.

It is also true that society is frequently in need of revision and change in the light of new ideals and knowledge. Therefore, one of the most important things a student can bring to society is not conformity to its values, but an open, free, critical, thinking mind, dedicated to the truth. If the college can act as a mediator for the introduction of the free spirit of enquiry into the community, through both its own values and the values of its students, then society can look forward to seeing an enriched, humanistic perspective brought to it. 35

Educated people should have a duty and a responsibility to try to contribute to their society's improvement as a correlate of their generally privileged position in society. The fact that so many contemporary students, whether activists or not, have lower levels of authoritarianism, a strong sense of humanitarian values, and a strong sense of their responsibility to society should be a cause for optimism about society's progress rather than pessimism.

³⁵ Clark Kerr, The Uses of the University, (Cambridge, Harvard University Press, 1963), as quoted in James W. Trent and Judith L. Craise, "Commitment and Conformity in the American College", Journal of Social Issues, 1967, 23(3) p. 49

APPENDIX A

Eastern Quality Subsamples (Gourman ratings in parentheses)

1. Eastern Schools - Upper Quality (600 +)
 - Cornell University (755)
 - New York University (618)
 - Princeton University (789)
 - University of Rochester (600)
2. Eastern Schools - Middle Quality (450 - 600)
 - Boston University (512)
 - City College New York (570)
 - Georgetown University (506)
 - George Washington University (477)
 - Pennsylvania State University (523)
 - Rensselaer Polytechnic Institute (542)
 - Smith College (520)
 - Syracuse University (532)
 - Temple University (493)
 - University of Connecticut (469)
 - University of Delaware (491)
 - Yeshiva University (529)
3. Eastern Schools - Low Quality (-450)
 - Adelphi University (400)
 - De La Salle College (unrated)

Appendix A Continued

Fairfield University	(379)
Fairleigh Dickinson University	(365)
Geneva College	(361)
New York State Vetrinary College	(400)
Northeastern University	(393)
State University of New York, Albany	(407)
State University of New York, Oswego	(405)

APPENDIX B

Midwestern Quality Subsamples

1. Midwestern Schools - Upper Quality

Northwestern University	(644)
University of Illinois	(635)
University of Michigan	(770)
University of Notre Dame	(740)
University of Wisconsin	(675)

2. Midwestern Schools - Middle Quality

Indiana University	(534)
Kansas State University	(490)
Kent State University	(439)
Lawrence College	(467)
Loyola University	(440)
Michigan State University	(485)
Ohio State University	(585)
Purdue University	(516)
University of Akron	(443)
University of Cincinnati	(482)
University of Iowa	(535)
Washington University, Mo.	(524)

3. Midwestern Schools - Lower Quality

Bowling Green University	(424)
Cedarville College	(322)

Appendix B Continued

Indiana University	(380)
Mundelein College	(408)
Owosso College	(360)
Rooseveltdt University	(421)
University of Toledo	(412)
Xavier University	(400)
Wisconsin State University	(395)

APPENDIX C

Southern Quality Subsamples

1. Southern Schools - Upper Quality

University of North Carolina (612)

2. Southern Schools - Middle Quality

College of William and Mary (492)

Louisiana State University (533)

Oklahoma State University (498)

University of Florida (519)

University of Georgia (481)

University of Houston (524)

University of Oklahoma (414)

University of Texas (536)

University of Virginia (524)

3. Southern Schools - Lower Quality

Eastern Kentucky University (386)

George Peabody College (382)

Florida State University (447)

University of Arkansas (421)

University of Richmond (408)

University of Tulsa (434)

Wofford College (367)

APPENDIX D

Western Quality Subsamples

1. Western Schools - Upper Quality

Stanford University	(746)
University of California, Los Angeles	(710)
University of Washington	(614)

2. Western Schools - Middle Quality

San Francisco State University	(489)
University of Arizona	(509)
University of Colorado	(494)
University of Denver	(529)
University of New Mexico	(505)
University of Santa Clara	(486)
University of Utah	(490)
University of Wyoming	(487)

3. Western Schools - Lower Quality

Arizona State University	(403)
Brigham Young University	(387)
Colorado State College	(415)
Highline College	(unrated)
New Mexico Highlands University	(385)
San Jose City College	(350)

Appendix D Continued

San Jose Junior College	(300)
San Jose State University	(431)
Southern State College of South Dakota	(390)
University of South Dakota	(393)

APPENDIX E

THE UNIVERSITY OF MICHIGAN SCHOOL OF BUSINESS ADMINISTRATION
SURVEY OF STUDENT ATTITUDES III

1. Sample Description

- a. Name of institution_____. b. Date of test_____
- c. Number of men____, Women____. d. Age range of sample____ to_____
- e. Mean or median age of sample_____.
- f. Composition of sample: freshmen %____, soph %____, junior %____, senior %____, grad %____, other (describe)_____
- g. If the test was given in class time, what type of class was it? (e.g.: Introductory Psychology, etc.)_____
- h. Was the sample generally representative of the student body?_____, or was it more representative of a specific discipline?_____. If so, which discipline?_____.

2. Sample Score Data

- a. Whole sample mean____, s.d.____. range of scores____ to_____.
- b. High dogmatism group mean____, s.d.____. Low dogmatism group mean____, s.d.____.
- c. Male mean____, s.d.____, female mean____, s.d._____

3. Subsample Data (if any) or other Dogmatism scores from the sample described above (e.g., before and after scores), or scores from samples very similar to the one described above. (Note: if repeated tests are given to the same class, be sure to give the dates of the different test scores).

Subsample description:

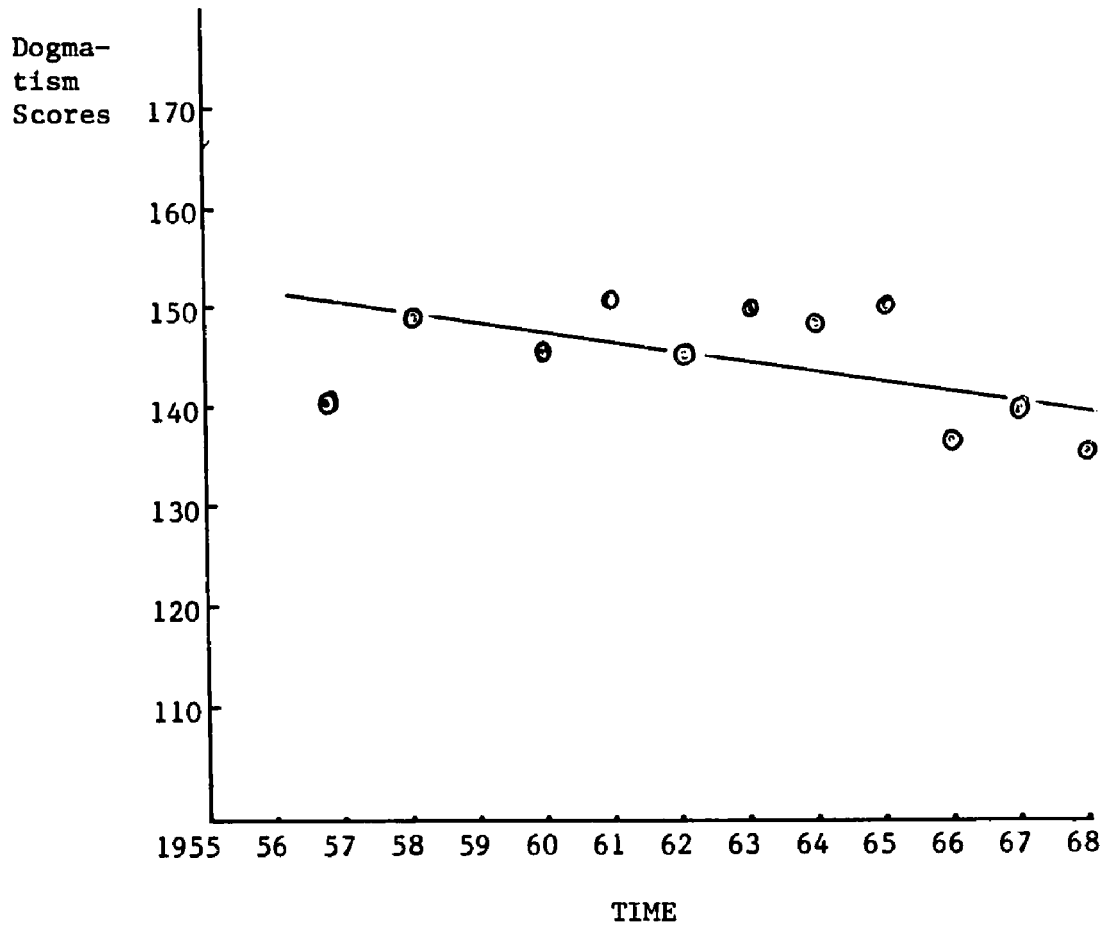
- a. _____ mean____ s.d.____.
- b. _____ mean____ s.d.____.
- c. _____ mean____ s.d.____.

4. If you had used any variations in the 40 item scale or in the marking of the scale, could you please note them in this section so that we can assess the comparability of your norms with others. If you happened to notice any peculiarities in the distribution of the scores, perhaps you could also describe them in this same space.

Thank you very much for contributing to this project.

APPENDIX F : EASTERN SAMPLE:

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



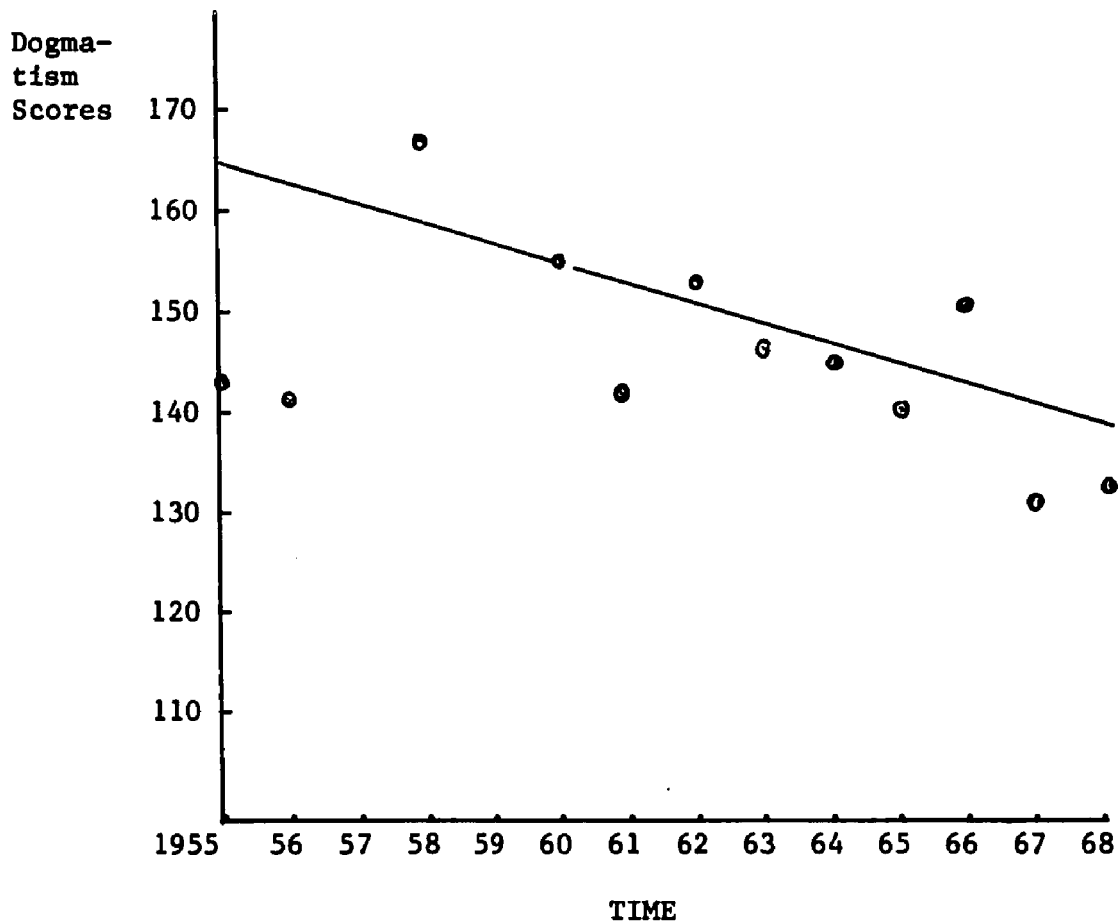
Total Observations, $n = 46$

$Y = 248.8 - .948 X$, $r = -.24$, (p crit at 5% = $-.293$)

F ratio = 2.64 n.s.

APPENDIX G : MIDWESTERN SAMPLE:

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



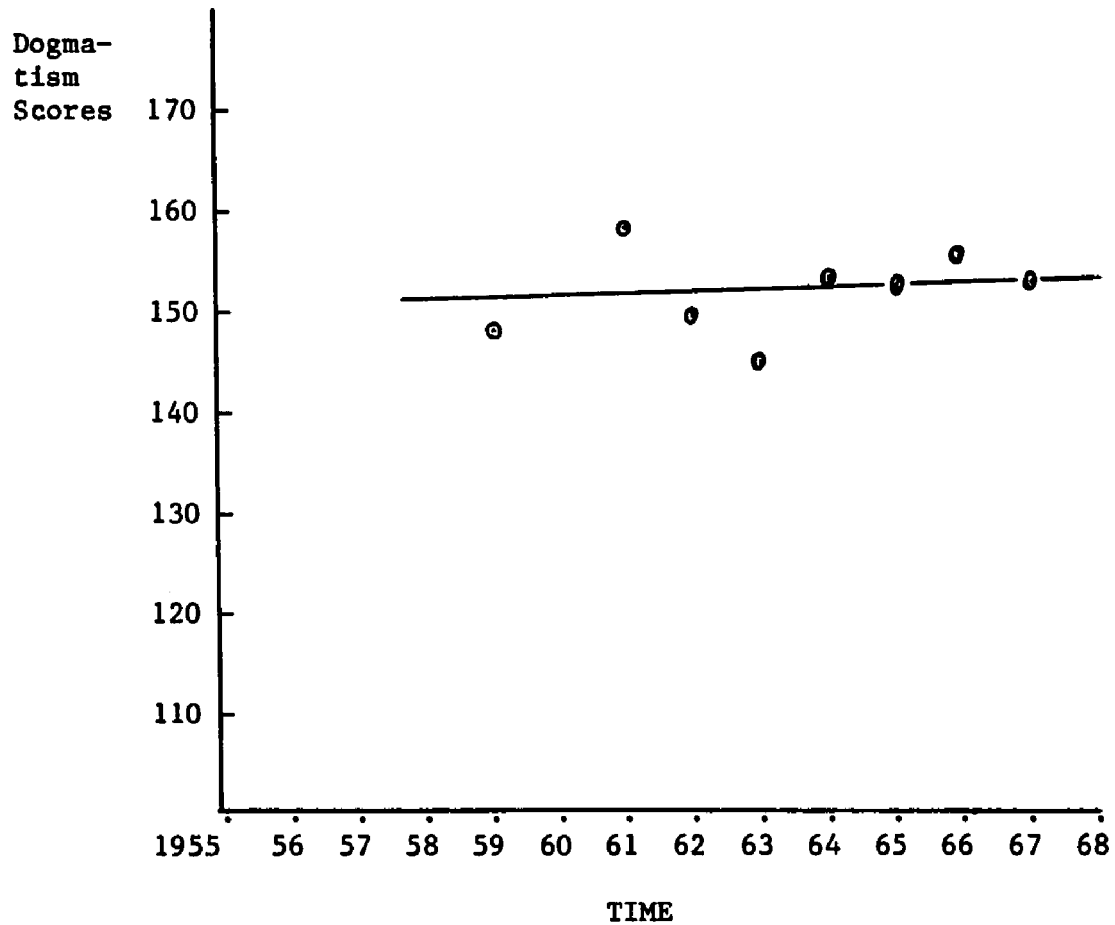
Total Observations, $n = 85$

$Y = 387.5 - 2.21 x$, $r = -.496$, (p less than .01).

F ratio = 27.15, (p less than .01).

APPENDIX H : SOUTHERN SAMPLE:

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



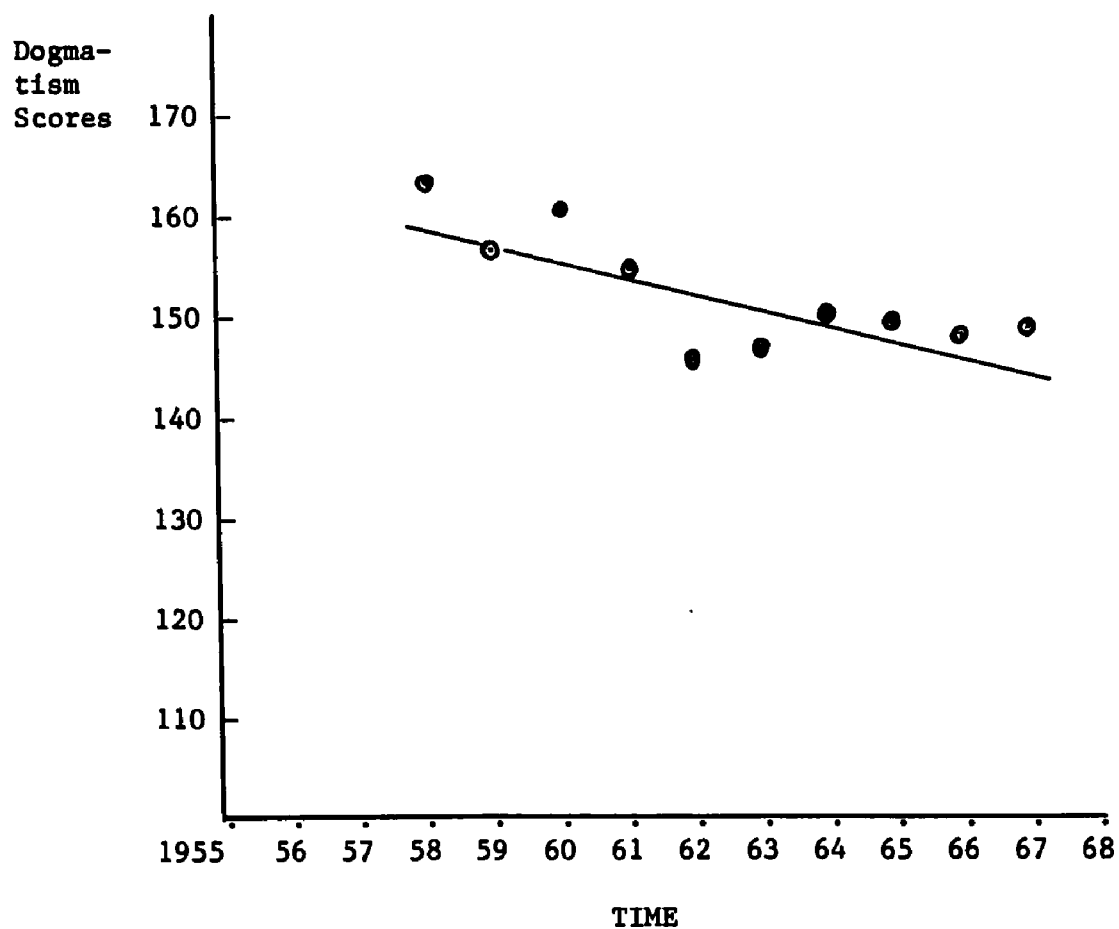
Total Observations, $n = 29$

$Y = 133 + .172 x$, $r = + .0495$, n.s.

F ratio = .066, n.s.

APPENDIX I : WESTERN SAMPLE:

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



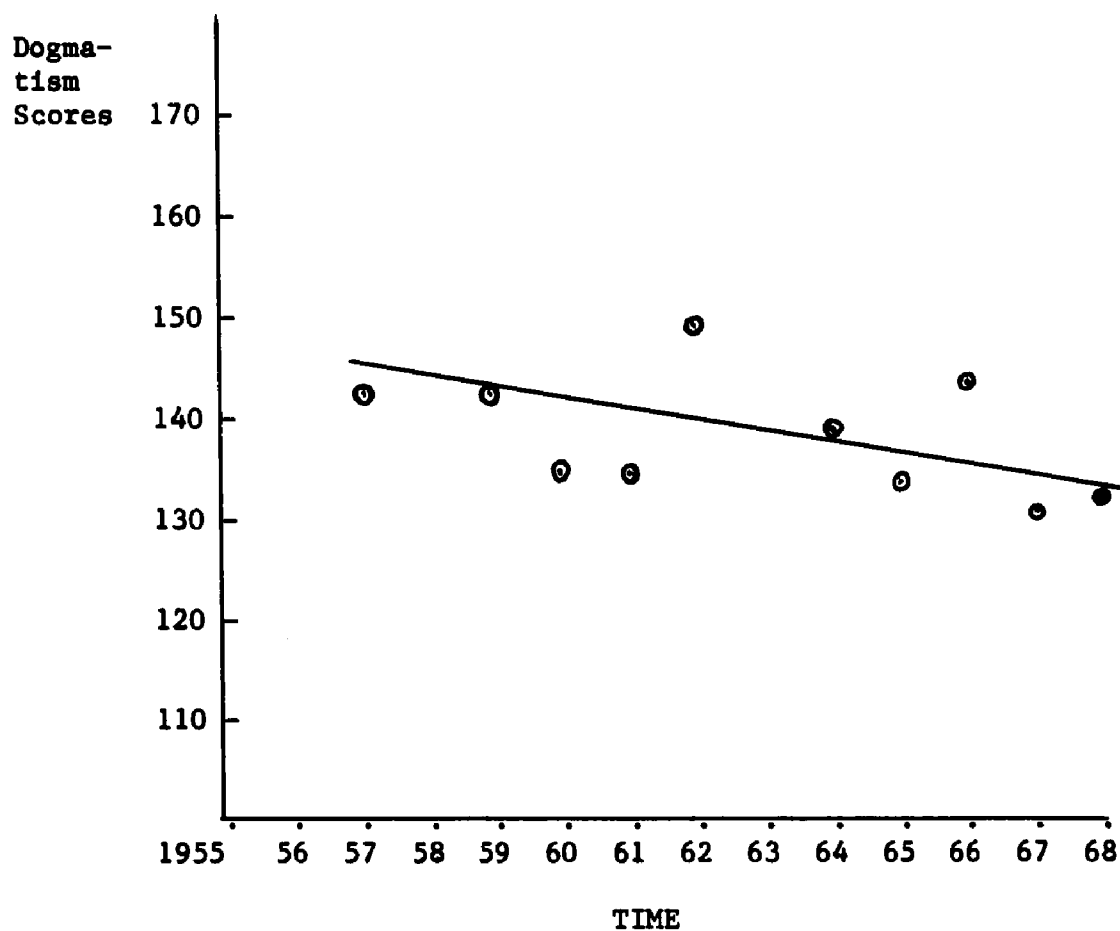
Total Observations, $n = 49$

$Y = 330.17 - 1.65 x$, $r = -.37$, (p less than .01).

F ratio = 7.63, (p less than .01).

APPENDIX J : HIGH QUALITY SAMPLE

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



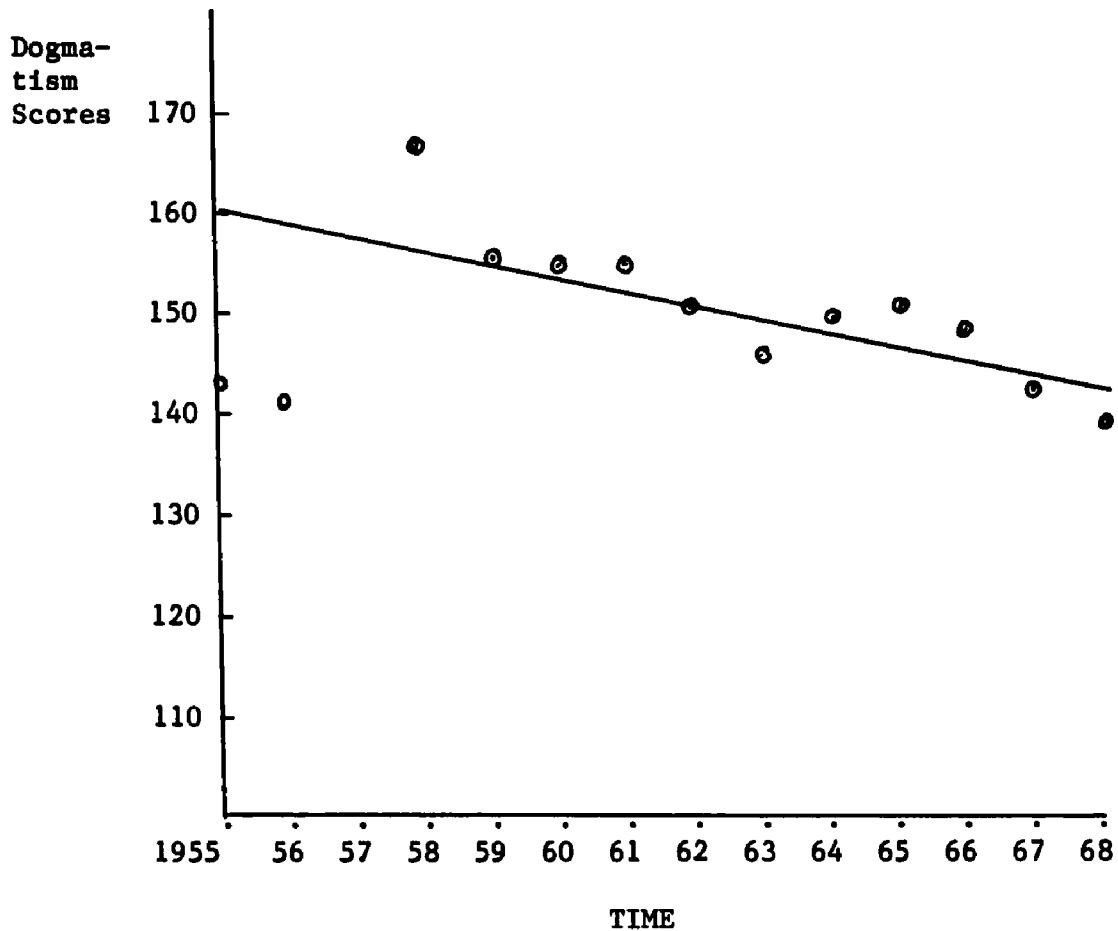
Total Observations, $n = 40$

$Y = 256.64 - 1.08 x$, $r = -.335$ (p less than .05).

F ratio = 4.93 (p less than .05).

APPENDIX K : MIDDLE QUALITY SAMPLE

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



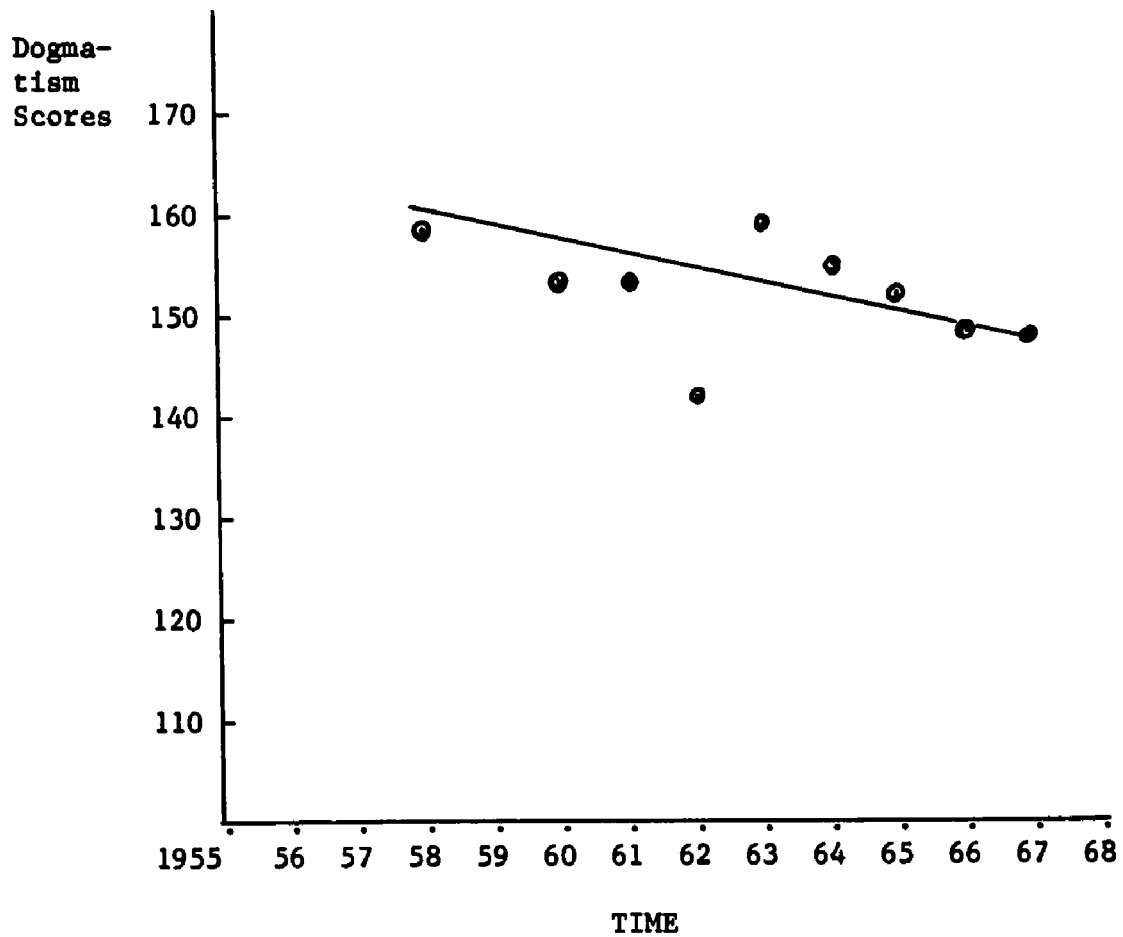
Total Observations, $n = 107$

$Y = 295.7 - 1.35 x$, $r = -.333$ (p less than .01).

F ratio = 13.15 (p less than .01)

APPENDIX L : LOW QUALITY SAMPLE:

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



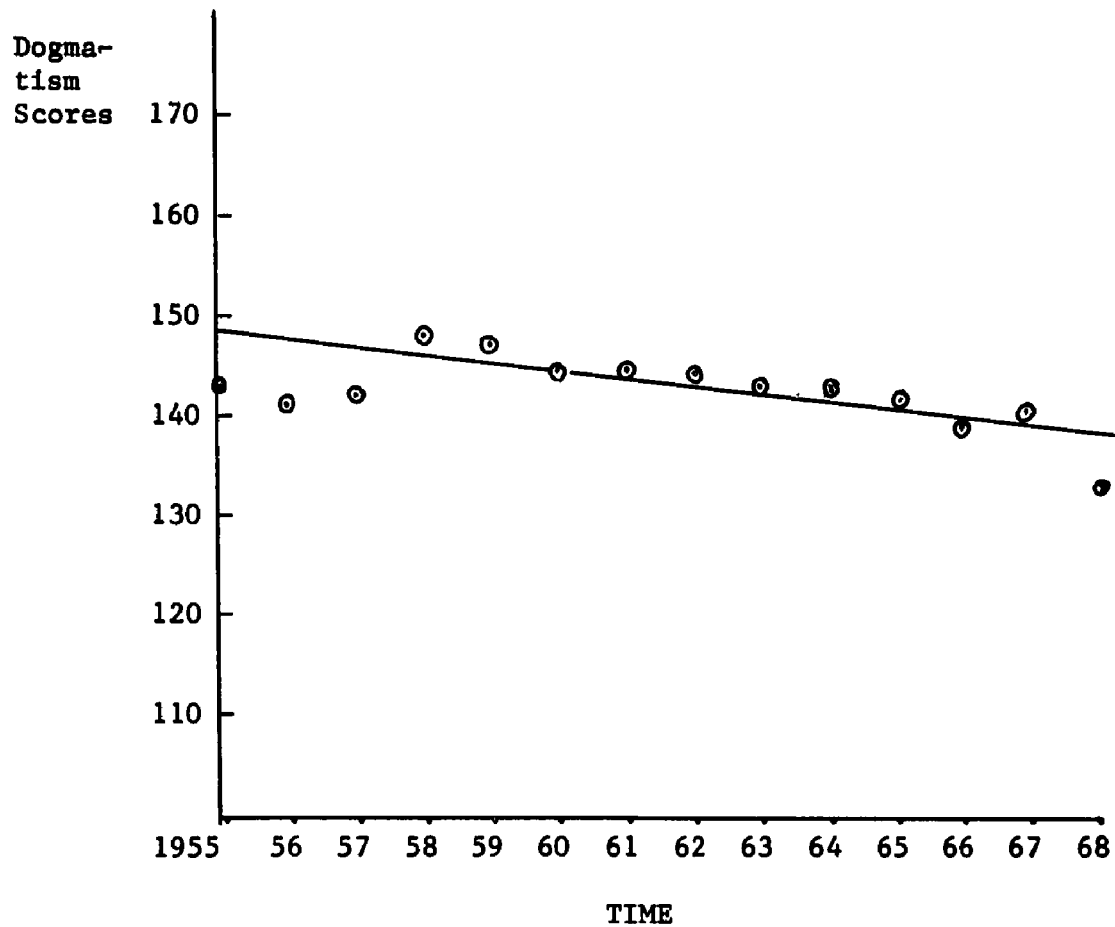
Total Observations, $n = 62$

$Y = 331.3 - 1.65 x$, $r = -.364$ (p less than .01)

F ratio = 9.04 (p less than .01)

APPENDIX M : UPPER DIVISION SAMPLE:

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



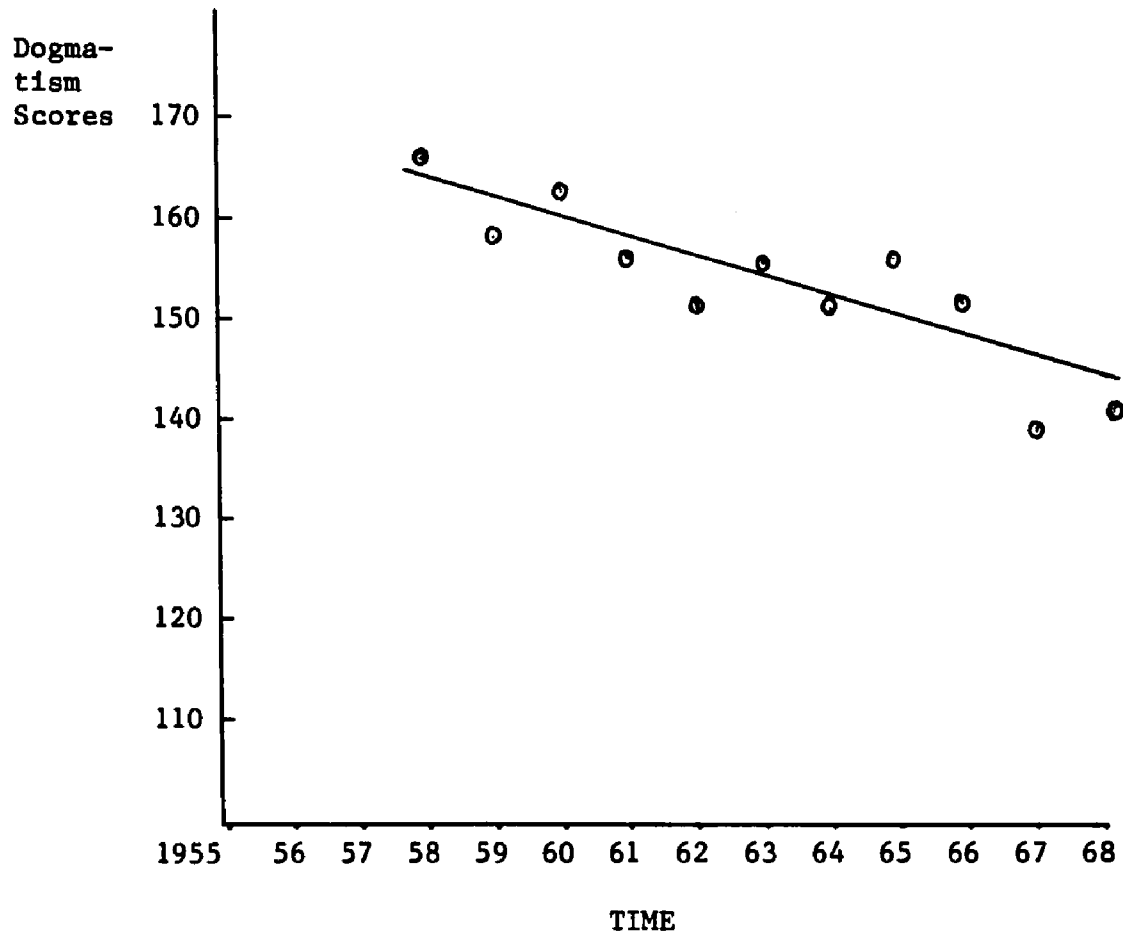
Total Observations, $n = 108$

$Y = 237 -.866 x$, $r = -.26$ (p less than .01)

F ratio = 7.65 (p less than .01)

APPENDIX N : LOWER DIVISION SAMPLE

Observed Dogmatism Norms, Averaged per Year
with Regression Line of the Sample Data



Total Observations, $n = 101$

$Y = 367.18 - 1.96 x$, $r = -.46$ (p less than .01)

F ratio = 27.5 (p less than .01)

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