An Analysis of Some Personal and Executive Characteristics of Participants in a University Program of Executive Development for Federal Personnel

Frank X. Steggert

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AN ANALYSIS OF SOME PERSONAL AND EXECUTIVE CHARACTERISTICS OF PARTICIPANTS
IN A UNIVERSITY PROGRAM OF EXECUTIVE DEVELOPMENT
FOR FEDERAL PERSONNEL

by

Frank X. Steggert

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Education

February
1962
PREFACE

This study began with a general interest in executive development activities during my employment at the United States Railroad Retirement Board. Its particular focus was the result of my most rewarding years of association with the Staff of the University of Chicago's Center for Programs in Government Administration.

Since the field of executive development is still relatively new, I have made a special effort to document as fully as possible each major facet of the dissertation's concerns.

I am grateful to many individuals, at Loyola University, at the University of Chicago, and in Chicago-area federal agencies, for their advice, assistance, or cooperation. I am particularly indebted to Dr. Sidney Mailick of New York University and Dr. Harold Guetzkow of Northwestern University for their initial encouragement. During the actual course of the study, I was assisted in many ways by Dr. Bernard J. James, Dr. Garlie A. Forehand and other friends and associates at the University of Chicago. I owe very special thanks to Dr. Magda B. Arnold of Loyola's Department of Psychology for her kind and helpfulness and guidance.
Frank X. Steggerd was born in Evanston, Illinois, February 11, 1925.

He was graduated from Loyola Academy, Chicago, Illinois, June, 1942, and from Loyola University, Chicago, February, 1948, with the degree of Bachelor of Science in the Social Sciences. From 1948 to 1950 he studied American History at Northwestern University, receiving the degree of Master of Arts, June, 1949.

During 1949, 1950 and 1951 the author was Lecturer in the Department of History, Loyola University, Chicago. From 1951 to 1955 he taught history courses at Fenwick High School, Oak Park, Illinois. He began his graduate studies in education at Loyola University in September, 1950. The author entered the Federal Civil Service in June, 1955, as a management intern with the United States Railroad Retirement Board. From January, 1956 to August, 1959 he was Employee Development Officer for that agency.

In 1958 the author became associated with the University of Chicago's Center for Programs in Government Administration. While still employed at the United States Railroad Retirement Board, he was Research Associate in the Center's Executive Judgment Research Study, instructor in the Center's evening seminar series for federal executives, and Resident Counselor for the Center's 1959 Summer Institute in Executive Development for Federal Administrators. He accepted a full-time administrative appointment as Associate Director, Center for Programs in Government Administration, University of Chicago, in September, 1959. In April, 1961 the author was appointed Director of Management Development Programs, New York State Department of Civil Service. He continued to serve as Consultant to the University of Chicago's Center for Programs in Government Administration, and as Training Evaluator for the American Society for Public Administration.

A preliminary version of the author's dissertation has been reproduced, under the same title, by the Center for Programs in Government Administration, University of Chicago. During his early graduate studies at Loyola University, the author published an article on the junior college movement: "Terminal and University Parallel Curricula in the Illinois Junior Colleges, 1951-1952," College and University, XXVIII (January 1953), 201-209.
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CHAPTER I

CONTINUING EDUCATION FOR PRIVATE AND PUBLIC
EXECUTIVES: AN INTRODUCTORY SURVEY

This dissertation is concerned primarily with some personal characteristics of a group of federal executives and with their motivations in participating in a university program of executive development. It is concerned in a secondary way with the overall subject of formal executive education — with the movement of executive development programming as it has affected American and, in particular, American federal executives.

Thus, while most of the dissertation and all of its empirical research deal with the primary focus, this introductory chapter and part of the next will be contextual and will discuss certain aspects of executive education. In effect, these sections will review executive development programs, education for federal executives, and a particular university program as a detailed prelude to the analysis of a specific group of program participants.

Executive Development and Program Growth

Although no common definition of the term has been arrived at, the recent literature of both business and public administration has strongly emphasized the subject of executive development. There has, in fact, been widespread agreement among both professional educators and practitioners that executives should be "developed" — that those already in executive positions should be educated for greater effectiveness, that those with genuine potential should be groomed
for greater responsibility, and that competent people at the sub-executive level should be readied for possible promotion to the executive level. The result has been a rapidly developing and still growing interest in executive development programs.¹

Considered, as it usually is, as a phenomenon of the post-World War II years, executive development as a conscious process has resulted from a number of divergent and convergent forces. The concept that organizations should work deliberately toward the development of their upper-level human resources has grown out of the size and complexity of modern enterprise, the challenges of international competition, the casualties of twentieth century warfare, the ecological shifts within our population and the growing sophistication of American management.² The concept of development is not restricted, of course, to the executive level since virtually all employees have been affected by the social and technological changes of our "era of mass performance."³ This being the case, the executive or manager becomes even more important since he must be trained and developed to fulfill his appropriate leadership role in a continually shifting environment.⁴

As a process, executive development can take place within the organization as well as outside of the work milieu; it can involve a wide variety of different mechanisms and a broad array of means and ends. In a sense, executive development can be conceived of as a state of mind rather than as any set of procedures. With this view, the particular system employed is secondary and the underlying philosophy is the crucial determinant.⁵

One recent commentator has elaborated two competing theories which influence the particular form and direction of an organization's executive development.
perspective. One — the life-process theory — sees executives as "the product of many years of systematic guidance." The other — the skill-insight theory — "equates executive development with a special kind of character building." The degree to which a particular theory is adhered to by an organization's policy-makers will usually determine the specific nature of its executive training activities. The organization accepting the life-process theory should tend to emphasize the long-term career planning approach and processes of individual appraisal and guided experience. The organization believing in the skill-insight theory should be more amenable to formal educational attempts to develop its executives.

The extent of current interest in executive development can be seen when one reviews the manner in which American industry has utilized formal educational programs. A Time survey published in January of 1958 estimated that, in the preceding year, industry sent 300,000 executives back to school "in hopes that they would learn to be better bosses." Describing in its uniquely flavored style what it termed "industry's rush to answer the school bell's call," the magazine pointed out that this "fever sweeping industry" has taken two main channels — company-run management training schools that are often as large as small colleges, and specialized college and university programs designed to "improve executive minds in more academic surroundings."

Interest in these formal programs has not, however, remained completely static. A more recent New York Times survey indicated that a number of shifts and reevaluations were taking place. Quoting Lawrence Appley's higher estimate of 500,000 business executives in training schools during 1957, it further estimated that about thirty percent of these executives obtained their executive
education through their companies' own in-service courses; that another thirty percent attended university programs; and that the remaining forty percent were "educated by" professional societies.\textsuperscript{12}

Focusing primarily on high-level executive training conducted by colleges and universities, this report estimated that some one thousand American companies were spending more than two million dollars annually to send their more promising executives to university training programs. From 1948 until 1958, enrollment trends in such programs rose steadily and rapidly. Though an enrollment decline occurred in the latter year, 1958, there were no indications that the major trend had ended.\textsuperscript{13}

In terms of historical development, there seems to be general agreement that the impressive growth of university management development programs has stemmed from three basic factors: 1) business realization of educational opportunities as avenues whereby insight into the complexities of management can be obtained; 2) the crucial shortage of competent management personnel; and 3) the prestige value attached to joint industry -- university cooperation.\textsuperscript{14} The Time survey described this third factor somewhat more rudely as "a long-delayed reaction to the idea that the average businessman is just an uncultured boob."\textsuperscript{15}

Riegel's more exhaustive 1952 study of executive development experiences in fifty American corporations presented a lengthy list of reasons underlying industrial use of university training facilities. In general, he found that the corporations he visited were impressed by the values their executives attributed to program attendance — their experience with the information, ideas, approaches, concepts, suggestions, "mental disciplining," stimulations, interests, attitudes, and changed perspectives provided.\textsuperscript{16} While the limitations of university
programs were recognized, Riegel concluded that business and industry would increase their use of university executive programs to maintain continuous liaison with the technical resources of the university, to inform their executives on a current basis, and, in general, to develop their executive talent in an appropriate environment.

The optimism expressed by Riegel turned out to be quite justified. At the time of his investigation, relatively few university programs were in existence. Before 1948, only Harvard and the Massachusetts Institute of Technology had management development programs. The University of Pittsburgh and the University of Pennsylvania's Wharton School of Finance and Commerce established programs in 1949. Other institutions inaugurated programs during subsequent years. During the high-point year of 1955, eight universities added management courses.

This great interest in management training has not been restricted to large-scale business and industrial corporations. Working in cooperation with the Small Business Administration, many institutions have co-sponsored management courses for small business enterprises. While the SBA does not subsidize these courses, its management development division advises sponsoring colleges and universities, provides publications and assists with faculty and general promotion. The institutions conducting the programs do so in conjunction with a local advisory group and enrollees pay their own tuitions and fees. According to a recent analysis, this program has involved, since its origin in 1954, some six hundred courses at both the general survey and advanced levels. More than two hundred educational institutions were supporting the program in 1960. From 1954 to 1960, over 20,000 owners and managers of small businesses attended SBA
There is no complete agreement as to the exact number of colleges and universities engaged in executive education. The *New York Times* in its 1959 survey concluded that thirty or more institutions were teaching a wide range of courses. In his somewhat earlier investigation, Bunker reported knowing of at least forty-two institutions of higher learning that were offering "broad-coverage" executive development programs. The latter figure is undoubtedly nearer to a correct estimate. Stewart's recent study — one restricted to collegiate schools of business — identified thirty-seven executive development programs and the program analyses of Andrews are based on forty-two university management programs.

Some Characteristics of Executive Development Programs

The problem is often one of definition. The American Management Association, for example, estimated that in 1958 there were more than one hundred and seventy courses offered by universities, professional associations and consultants for executives from business and industry. These, however, included specialized courses and seminars covering specific areas such as operations research, quality control, sales management and industrial engineering. While such courses undoubtedly contribute something to the development of executives, most analysts do not consider them to be executive development programs. Riegel's study specifically excluded institutes focusing upon single problem areas, conferences devoted to a specific field of inquiry, and regular evening programs in technical fields and in business administration, as tangential to executive education.

Within the field of university adult education, executive development
programs are more frequently seen as broader educational efforts designed "to provide a significant learning experience and a broadened managerial perspective to experienced executives in mid-career." While such programs may be long or short in duration, they are usually interdisciplinary or, at least, eclectic in subject matter. In identifying programs for study, Bunker restricted his inquiry to university programs "covering in one course a wide range of business subjects and emphasizing coordinated management techniques, decision-making, human relations, the formulation of policies and a philosophy of management."

Bunker found that the thirty-four university programs he studied — the number providing detailed information to him — could be divided into three categories: seminars and meetings; short courses; and integrated executive development programs. He also found that these programs "created for the business community" were "almost invariably offered as part of a non-credit curriculum" and were "usually administered apart from an institution's regular extension division." While the shorter time element and fewer areas of concentration distinguished the first two types, Bunker described the executive development course as "an integrated but broad educational program usually lasting more than two weeks on a concentrated, full-time daily basis or alternately, as a series of sessions spread over a longer period of time."

According to his survey, twenty-six of the institutions in the sample scheduled their programs on a full-time basis over periods of time ranging from two weeks to one year. Four weeks, however, was the most usual length. Five schools reported programs on a part-time basis and three used modifications of full and part-time programs. In generalizing from his data, Bunker also distinguished the following common elements:
1. Most institutions did not require any educational prerequisites. (The University of Chicago, the Massachusetts Institute of Technology, and the University of California at Los Angeles recommended, however, that the student hold a bachelor's degree.);

2. most institutions selected participants on the basis of nominations from employers. (Applicants, however, were usually screened by some kind of an admissions committee to guarantee broad experiential and organizational representation in the class group.);

3. most programs were geared to the middle management level. (Some few institutions provided exceptions in designing their programs specifically for the highest management levels.);

4. the age of participants ranged from program averages of thirty-four to forty-six;

5. human relations, business policy, and management theory were among the most frequent areas of concentration; and

6. broadening of the participant's understanding of management problems was the most common program objective.30

Liberal Education for Executives

While general surveys of programs of executive education are informative and revealing, they cannot really get at the sponsoring institution's fundamental rationale, its explicit or implicit value position or learning theory, or at the more discrete aspects of the program's organization and techniques.31 To get at these in even a preliminary way, one must analyze in some detail the catalogs, brochures or announcements of the individual programs.32 One must search extensively to find much in the literature which treats adequately of these concerns.33

There is, of course, at least one major exception to the generalization that executive development programs fail to make explicit their rationales. This exception is the group which fall into the category of liberal education programs.34 In this instance, the particular philosophy underlying executive education has been described in considerable detail. While many ramifications are involved, the introduction to one of the latest liberal-education-for-executives "position papers" presents three fundamental propositions as under-
lying this school of thought. These prepositions may be summarized, in somewhat abridged and edited form, as follows:

1. Only men with "big" minds can grasp, let alone deal with, the immense social and economic problems of the present and the near future.

2. In terms of educating executives for this requisite "bigness," the best way is through the liberal studies — "those areas of knowledge which enlarge the understanding and deepen the insights of men with regard both to men themselves and men in their social relationships, and which at their highest levels, assist them to develop the capacity successfully to deal with these abstract ideas that illuminate and allow them more wisely to control the world in which they live;" and

3. Since such needs for understanding and insight are never wholly met, liberal education should be continuous through life. 35

Within this general context, a significant number of programs have been organized — under university and non-university auspices — during the past decade. All have operated on the premise that the humanities, and to some lesser extent, the social sciences, can contribute best to the development of executives — that they can help develop the executive's understanding of his role in society, his life goals, and the influence of the organization he directs.

Exposing executives to liberal education in a systematic way first began under non-university sponsorship — at Aspen, Colorado in 1948 under the aegis of the now famous Aspen Institute for Humanistic Studies. 36 Since that time, however, the great majority of liberal education programs have been conducted by colleges and universities. 37 Of these, the best known are those developed for the Bell Telephone system's executives by the University of Pennsylvania and other institutions. 38

The original and most intensive Bell program was established in 1953 at the University of Pennsylvania, when the Institute of Humanistic Studies for Executives was organized for the company's middle management group. The
program was built around units such as Practical Logic, Economic History and Thought, History and Aesthetics of Music and Art, Comparative Literature, Social Science, Philosophy and Ethics, History and Meaning of Science, International Relations, City Planning, and American Civilization. The program required ten months of full-time work in residence, and executives attended while on full salaried leave from their organizations. Although the general objectives and philosophy remained the same, somewhat different approaches were employed as the company established subsequent programs at Swarthmore, Dartmouth, Williams and Northwestern. Sparked by the Bell system's leadership, at least seven other colleges and universities have adopted their own independent liberal education approaches to the development of executives.

Siegle explains the mushrooming of liberal programs as a third phase of in-service education for executives. He identifies the early provisions for specific technical training as the first phase, and the broadened form of management education typified by the Harvard programs as the second. Viewed from this perspective, liberal programs are representative of a third stage approach. It is by no means, however, the predominating approach. While its influence has been and still is significant, the management training curriculum is most widespread.

Some General Reactions to Formal Programs

Since the executive development movement has been so widespread, so influential and so diversified in recent years, it is not surprising that criticisms of university programs have been voiced. Excluding the kind of comment having to do with the difficulties inherent in selecting and enrolling executives, the principal concern of most organizations has been the inability
to measure, with any degree of exactitude, the effects of program participation. As a result of their experience with university programs, many companies are re-evaluating the whole question of enrolling their executives.

There are still, however, very many proponents of university programs. Some are willing to accept the beneficial effects of such education on faith, feeling that its contributions must be sensed rather than seen. Others are more articulate and argue for the "face validity" of release from the daily routine, the enlargement of the executive's viewpoints, analytical ability and personal values, and the opportunity for introspection. As Jennings points out, this last factor is becoming more relevant as both organizations and executives come to see university programs as opportunities for mental revitalizing rather than as sources of specific learnings.

A degree of critical comment has come from professional educators. While the specifics of their criticisms vary widely, most have had to do with either the psychological aspects of typical programs or their curriculum emphases. Two commentaries which have aroused considerable interest are those by Katzell and Dimock.

Although he was reacting to a number of specific programs, Katzell suggested that their modal characteristics might be relevant to the general range of executive development programs. On this basis, he concluded that: 1) programs were insufficiently integrated into the organization's total plan for the individual executive; 2) emotional barriers to effective action were subordinated to the barrier of inadequate knowledge; and 3) administrative technique was overemphasized as against program knowledge. He argued that executive development programs may be "bad" under any of the following conditions:
1. When the program's developmental objectives do not correspond to the executive's needs;
2. When the actual program is inadequate for the objectives;
3. When the program is out of step with organizational climate; and
4. When the program is directed to problems which lie outside of the control of participating executives.⁴⁶

Dimock's somewhat earlier critique also contended that programs must be integrated with the organization's total attempt to develop the executive. He then analyzed executive training programs in terms of their curriculum emphases, methods and perspectives.⁴⁷ As a result, he argued for more preparation for policy-making — rather than the existing emphases upon administrative techniques — for training methods appropriate to the consideration of policy problems, for more emphasis on the individual, and, most importantly, for programs sufficiently long to influence the attitude of the executive and to affect the way he thinks.⁴⁸

Although Dimock's view is the personal view of an eminent political scientist, he provided in his essay an interesting answer to the question of whether or not executive development programs will continue. He wrote as follows:

When a movement grows so fast, one wonders whether it is not merely a passing fashion, whether many of the programs freshly launched will not prove short-lived, and whether there is not the danger of over-selling the idea. The answer, I suppose, is that since the need for executive development is great, the demand for training will continue, and that if present formulas and procedures are found wanting, they will be improved.⁴⁹

Government Interest in Executive Education

Executive development has clearly been one of the major accelerating training trends of recent decades.⁵⁰ It is only natural, therefore, that interest in this area should now be almost as widespread in government as it is in industry. As many educators in the field of public administration have come to
conceive of their study as based, at least in part, on the concept of administration as management. Executive development programs have to be viewed as a natural and necessary form of public post-entry training.

This interest has become general throughout all levels of the public service. Many government organizations have come to see the heart of their personnel problem as an insufficient supply of managers to direct program activities. Government at all levels has been seen to be suffering from a short supply of competent management, and the present lack, and the projection of even greater shortages in the future, have resulted in an increasing emphasis upon the preparation of public employees for administrative careers. While this preparation is normally seen in the total career context — the agency environment, recruitment, planned development, etc. — formal training for executives has received a major emphasis.

Within the area of formal training, colleges and universities are recognized as being able to play a major role. As one recent analysis summarized this role, higher education can assist governmental employers in executive development programming in a variety of ways — through program advice and research assistance, through provision of formal course work on a full or part-time basis, through conferences and seminars within the individual organization's program, through cooperative training efforts with professional societies, and through their own training courses and management institutes for upper-level administrators. All of these things have been done and are now being done with increasing frequency.

During the past few years professional associations and societies — most notably the International City Managers Association, the American Society for
Public Administration, and the Society for Personnel Administration — have been concerned with executive training. They have sponsored or conducted conferences and institutes for practicing executives and educators and other professionals interested in the field. At the local governmental level, the International City Managers Association initiated during 1959 a national management training institute for its members. At the federal level, the Society for Personnel Administration has sponsored annual executive development conferences built around special themes. At the intergovernmental level, the American Society for Public Administration has conducted and is currently conducting an extensive series of management institutes for government executives. To a great degree, these programs and other programs of a similar nature have been organized and presented in cooperation with colleges and universities.\(^54\)

It should be noted, of course, that those who are concerned with the development of public executives generally recognize the different character of the government executive's role. Although he is a manager and a generalist administrator in the same way as his executive counterpart in business and industry, he is also a public official. As such, he is bound to more specific values — to the general public interest and to the program of his particular organization — and he exercises his administrative responsibility as part of a democratic political process.\(^55\) Thus, he requires training or education of a somewhat different character. To some extent, formal executive development programs are meeting this requirement.

While governmental executive development is accepted as necessary on a broad basis,\(^56\) the need for some specific kinds of management training for different levels of government is also recognized.\(^57\) The general trend of
public executive training also presents an uneven picture in terms of activity at the municipal, state and federal levels. While the literature of training and development indicates some interesting activity at the local level, the survey by Graves suggests that state and municipal programs are much less frequent and less well developed than those at the federal level. In reviewing the situation, Graves concluded that training at the local level was "so spotty and uneven that it is difficult to make many valid generalizations."

The federal government, however, presents a large area for inquiry into executive development and executive education in government. It includes a sufficient number of agencies of a size and scope great enough to make possible some generalizations. For this reason but, more importantly, because this general research effort is concerned with the training of federal executives, the remainder of this introductory review deals with education for federal administrators.

Program Growth within the Federal Service

Although there is considerable activity among federal departments and agencies as far as executive and management training is concerned, much of this activity is of very recent origin. This is particularly true in comparison with business and industrial organizations. As has already been pointed out, the latter's activity began immediately after World War II and was in full force by the early fifties. In contrast, general executive development activity in the federal service evolved more gradually. It reached a crucial turning point in 1958 with the passage of the Government Employees Training Act — the first attempt to institute a comprehensive and uniform training
policy for federal civilian employees throughout the nation — and since that
time it has increased very rapidly. It has by no means reached full momentum
however, and the current decade should witness many changes, developments and
innovations in federal executive development philosophy, theory, and practice.

This time lag was, of course, an integral part of the general employee
training lag within the federal government. As Kallen has shown in his
historical survey, even routine in-service training was almost totally absent
until the late nineteenth century and then, when it did appear, it was confined
to apprentice technical programs. Van Riper's definitive study of the
federal service presents twentieth century developments in employee training —
and the early lack of it — as partly the result of the very size of the
federal government and as a "democratic reluctance to emphasize what were still
to many managerial frills." 62

It was not until private industry's "personnel age" was well underway that
the federal training situation began to change. Van Riper's exhaustive
analysis of each succeeding stage of twentieth century civil service history
provides a complex picture of gradual developments toward what he terms the
transition period of 1953-1958. 64 During this crucial five-year span,
President Eisenhower's issuance (on January 11, 1955) of a federal training
policy statement, the U. S. Civil Service Commission's leadership in initiating
a series of career development activities, and the efforts of private
organizations interested in training and development combined to give civilian
employee training a tremendous impetus. 65 Drawing on Van Riper as well as on
other sources, Kallen cites the complex functions required in New Deal agencies,
the positive recommendations of various investigative commissions, the
exigencies of World War II, shifts in Comptroller-General decisions, congressional consideration, and stronger executive leadership as the major factors underlying a gradually increasing emphasis on employee training.66

The tendency to look toward external sources for training federal executives has also been an evolutionary process.67 Among the important factors responsible for such heightened interest, the first Hoover Commission's general findings regarding the need for executives in the civil service were very significant.68 The investigations of subsequent private and public study groups reinforced the growing conviction that career development planning for practicing and potential executives was necessary and, in fact, vital if federal organizations were to meet successfully the challenges of the fifties.69

As Pollock pointed out, the attempt to meet the need for executives in the federal service took three major forms, an intensified effort to recruit top-caliber potential executives, the establishment of training programs for middle-management levels, and the establishment of development programs for higher executive positions.70 Within the federal departments and agencies executive development programs were gradually established. Although all agencies have had external training authority since 1958, they have varied considerably in the way in which they have used college and university resources.

Federal Programs and Internal Programming

As in business and industry, a number of developmental and educational approaches have been used in the training of federal executives. A review of training activities within federal departments and agencies indicated that many organizations have developed comprehensive, long-range and generally systematic
programs. These executive development approaches — for those beyond the intern level — may involve most or all of the following: an inventory of resources for upper-level management positions together with estimates of future needs; the systematic planned development of employees to staff such positions; selection, appraisal, and counseling plans for those to be developed; and individualized long-range plans for each participant within the particular agency's program.⁷¹

Such programs are, of course, reflections of the formally planned development objectives of the agency and it cannot be said at this point how successfully they are being carried out. While a number of agency spokesmen have testified in the literature to the effectiveness of their own procedures, there has been little, if any, objective validation of such programs.⁷² Not all agencies have broad systematized plans of this sort but those which do not are being encouraged by the U.S. Civil Service Commission to develop individualized programs to meet their own unique needs.⁷³

Both types of federal organizations — those with and those without comprehensive plans — utilize a number of formal educational approaches which relate, at least partially, to executive development. In-service courses or seminars, circulation of reading materials, and assignment of employees to agency, inter-agency and external courses are employed to varying degrees.⁷⁴ A very large number of departments and agencies — from the great departments down to the small agencies — have reported that they conduct formal supervisory training programs.⁷⁵ In some instances, these programs carry into the executive levels.

The kind of comprehensive executive development program which is deemed
desirable for a federal agency may be inferred from the survey's listing of common features which are "probably essential to success." These include, as somewhat of a first condition, direction and active personal participation by top line officials. Other desirable factors in an informal and individualized development program are methodological. They have to do with extensive use of rotational assignment, understudy assignment, participation in the activities of professional groups, seminars and, where legislation permits, "detail to 'outside' training especially for short courses in management fields." These features are, of course, applicable to executive development programs within both government and industry. A careful review of this publication and of others issued in recent years by the U. S. Civil Service Commission gives the impression, however, that there is a greater emphasis upon individualized and internal techniques — in theory at least — within the federal government. Training offered by non-government organizations is conceived of as supplementary. At the same time, there has been and still is a considerable emphasis upon formal programs of continuing education for executives.

Formal executive training courses within individual agencies are of two general kinds — those conducted locally for agency executives in the area (ordinarily at the headquarters site, national or regional) and those conducted nationally or regionally for national or regional groups. These might include activities such as regional conferences in administrative management for executives within an area, national administrative problems workshops at a central training site, and recurring, regularly scheduled administration courses for different executive groups at an established school within the agency.
Many federal departments and agencies have for years operated their own central schools designed to provide continuing off-the-job group training. In most cases the curricula have been highly specialized and have dealt with problems unique to the agencies' technical and work problems. These training institutions have included schools, institutes, and staff colleges of civilian departments and agencies and schools of the military establishments, most of which have been open to selected civilian employees. There are now some indications that these specialized schools are moving toward a broader emphasis upon administrative training and executive education. In some instances this is being accomplished through the addition of more general administration courses and, in other situations, the whole character of the institution seems to be changing.

An example of this change may be seen in the case of the U.S. Army Management School at Fort Belvoir, Virginia. Originating in 1954 as the U.S. Army Command Management School, the institution continued under this designation through the early part of 1958. At that time its name was changed to the U.S. Army Management School, since the school's objectives were seen as "much broader than that of solely providing technical instruction" in the army command management system. Although this general trend within federal schools has not yet been studied — or, for that matter, even validated as a major trend — it would seem to be an interesting development which may prove significant.

Another recognizable trend within the area of federal executive education is that of training on an interagency basis. The Government Employees Training Act encouraged interagency training of employees and the U.S. Civil Service
Commission has since promoted this kind of sharing of resources. While agencies in the past have permitted some participation in their programs by executives from other organizations, the practice is now increasing. The Commission's fall 1960 listing of interagency opportunities cited seventeen "general management programs" conducted by individual agencies but open, under certain conditions, to employees from other organizations. Of these, ten or eleven might be liberally construed as general management training programs. The remainder are oriented to more technical management areas. Of the former group, however, some five may be properly identified as executive education programs; that is, as broad-gauged management courses.

This is, therefore, still a very limited area as far as federal executive education is concerned. To the degree that they exist, inter-agency efforts are confined to Washington and to a very few other locales. While there may be some sharing of in-service programs in some local situations, there is no indication that the practice is widespread.

External Opportunities for the Federal Executive

When federal agencies look to non-governmental organizations for formal training of their executives, they may do a number of things. They may encourage their executives and managers in various ways to attend local universities or association programs and courses; they may contract or make other arrangements with such organizations to provide an executive training program for their employees; or they may assign individual employees to general programs organized for executives or, more specifically, for government (or even federal) executives.

In the first instance the encouragement will ordinarily be of a rather
general nature. Since a section of the Government Employees Training Act strongly advocates the self-education, self-improvement, and self-training of employees, most federal organizations have embodied this concept in their employee training and development policy statements and in their internal personnel procedures manuals. Although regular college and university courses are routinely available throughout the country, the opportunities for self-improvement have been maximized in the Washington vicinity through the efforts of departments and agencies to bring the schools to their employees — to provide degree and non-degree programs at the work site on an after-hours basis. Examples of this approach may be seen at the Pentagon where the Department of Defense, the Military District of Washington, and the George Washington, American and Maryland Universities have all been involved in the creation of what amounts to a university center for Department of Defense personnel.

The specific arrangements which an individual agency may make with an external training institution for the education of its executives can, of course, vary considerably. Although it is not possible to go into all of the ramifications that may be involved, a number of typical arrangements can be mentioned. In one situation, an agency will enroll large groups of administrators as a total, self-contained unit within a regular university administration curriculum and thus "constitute for itself" an agency executive program. In another situation, the agency will contract with a professional society for a given number of spaces for its executives in the society's continuing management program for government administrators. In still another situation, an agency will retain the services of management consultant firms to provide planning and instructional assistance in the conduct of its
own programs. In a final instance, an agency will support a university in arranging a special program for its management staff.

Although it is implicit in much of what has already been said, it should be made quite clear that all of the executive education efforts discussed involve varying degrees of cooperation between federal agencies and their staff members and external institutions and their representatives. Agencies utilize non-governmental personnel — primarily university personnel — in their in-service courses and in their agency school programs as instructors, consultants or coordinators. College and university staff members are usually involved in interagency efforts and they are, of course, primarily concerned in those institutions which have organized special programs for government executives.

At present the most significant way in which colleges and universities (and other external groups) are involved with federal executive education is through their general or special development programs. In evaluating such programs, it is necessary to consider the following: whether the program is general in the sense that it is open to executives from both government and industry or whether it is specially designed for federal (or governmental) personnel; whether it is a local or a national program; and whether executives attend in their individual capacities or under agency sponsorship.

An overview of such formal programs for federal executives may be obtained from two 1958 publications of the U.S. Civil Service Commission. The first, Federal Executive Development, is a guide to relevant programs, objectives, resources and methods. The second provides a more specific reference to college courses and programs "designed to meet the needs of the federal executive." While the guides overlap to some degree, they provide together a
generally satisfactory reference to available programs of interest to the
federal executive. The first guide is eclectic and considers both specific and
general programs of agencies, colleges and universities, professional societies
and management groups. It includes a few descriptions of broad developmental
plans along with summaries of formalized training and education programs.

When analyzed somewhat critically, Federal Executive Development really
describes fifteen programs (of ten organizations) which can be classified as
educational programs for federal executives. Six of the programs are conducted
through the academic year. The remainder are shorter, more concentrated
programs which are scheduled periodically. Only two are credit programs.
About half the programs are clearly designed for middle and/or top executives;
the remaining half are open to all executive levels or are aimed at middle
managers. Seven of the ten sponsoring organizations are universities.93

To extend the analysis further, the Commission's second guide supplements
the first in mentioning other relevant college programs. These vary consider-
ably in that some are exclusively for federal personnel while others are open
to all government employees and, in some instances, to the general public. Some
have been designed for specific agencies; others are operated on an inter-
agency participation basis. The programs are also different in their relation
to supervisory or executive levels. While some programs are operative on a
more or less continuous basis, others have been scheduled during the past two
years and there is no assurance that they will all be continued.94

So many variables complicate the picture that it is extremely difficult to
generalize about the group of programs classified by the Civil Service
Commission as either "federal executive development programs" or "programs
designed to meet the needs of the federal executive." Assuming that these programs will continue — where there is no evidence to the contrary — the following tentative categorization of external programs may be made.95

One obvious inference which might be drawn from these figures — approximate as they may be — is that federal executive education is as yet quite limited. As Raksasataya concluded, there are only a few programs which are concerned directly and exclusively with federal officials at the upper executive level.96 In terms of his extended analysis of the need for training of top-level federal executives and of replacements for this group, he suggests that these formal training programs could be greatly expanded.97 Excellent as the individual agency programs and general government training activities might be, there would seem to be need for more focused programs of a nature appropriate to the activities of the federal executive. Recognition of this need is undoubtedly one of the factors underlying the continuing support by many of the federal staff college concept.98

Looking at the three categories of programs in reverse order, it is evident that most of the general government programs are university sponsored activities for mixed participant levels. The majority are programs of the extension centers or governmental bureaus of state universities. In the former instance, the programs are usually conducted as part of the institution’s evening extension curriculum and credit is available for those who wish to attend on that basis. A typical example is the Certificate Program in Public Administration of the University of California’s northern area extension service. The program includes both degree credit and non-credit courses and is so organized that government employees may select eight courses from a
### TABLE I

**TYPES OF EXTERNAL PROGRAMS FOR FEDERAL EXECUTIVES**

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<thead>
<tr>
<th>Type of Program*</th>
<th>Criteria**</th>
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<td>1. General Federal Programs</td>
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<td>periodic-specific schedule</td>
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<td>non-credit programs</td>
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<tr>
<td>academic credit programs</td>
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<td>2. Programs for Federal Agency</td>
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<td>academic credit programs</td>
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*Type 1 are programs exclusively for personnel from any federal organization. Type 2 are programs for a specific federal organization. Type 3 are programs for government employees in general and those interested in government.

**Levels are given in terms of programs' stated categories. Programs for which credit is optional and programs described in terms of credit hours are grouped under academic credit programs.*
designated curriculum to obtain a certificate. The programs directed by university bureaus of government are normally periodically scheduled, more concentrated programs which may be offered on a residential basis. Three programs which are focused upon upper-level executives are concentrated residential programs of this type. They are the Management Institutes of the American Society for Public Administration, the University of Pittsburgh's programs for senior executive officials of federal, state and local governments, and Syracuse University's summer seminar for public executives.

The six programs for specific federal agencies are all university sponsored; most are scheduled on a periodic basis and all but one are non-credit in nature. Beyond this it is difficult to generalize since, as one might expect, each program has been organized to meet the more specific requirements of an individual federal organization. There are, for example, in this group a one hundred and eighty hour course of executive development in industrial engineering (Columbia University for the New York Naval Shipyard), one-week management seminars (the University of Texas and the Dallas region of the Post Office Department; Emory University and the Public Health Service's Communicable Disease Center in Atlanta), a fifty-nine credit hour advanced management program (The George Washington University and the U.S. Air Force), eight-day management institutes (the University of California at Santa Barbara and the Internal Revenue Service), and a three-week session devoted to orientation of new employees (California State Polytechnic College and the Soil Conservation Service).

These programs are, of course, only representative. There are numerous other instances where colleges and universities either have conducted or are
currently conducting executive training programs for specific federal agencies. There are also many instances in which individual agencies or local groups of installations within an agency have worked with universities in establishing a program to meet an immediate need. In these instances, the resulting executive training programs may or may not become continuing in nature.

Since the first group of programs — general executive training programs for a broader population of federal managers — is the most relevant to a view of continuing education for federal executives, it will be discussed separately and in somewhat greater detail.

Educational Programs for Federal Executives

Of the ten programs designed exclusively for federal personnel, seven are generally confined to participants within a given metropolitan area (Boston, Chicago, Cleveland, Detroit and Philadelphia); two are primarily Washington area programs; and one program is for federal executives throughout the country. The seven non-Washington area programs are all conducted on an after-hours evening basis throughout the academic year. They are all university sponsored, and, with one partial exception, they are non-credit programs. Two are generally open to a range of grade levels (programs for federal personnel), two are identified as middle management programs, and three are executive development programs which, in practice, may enroll mixed (upper and middle) levels of executives. Five universities sponsor the seven programs involved, since two institutions have established programs for different levels.

In each instance these local programs were established in conjunction with the federal personnel councils of the metropolitan areas involved. Beginning with the 1953 Detroit program at Wayne State University, programs were
established during 1954, 1955 and 1956 — before the 1958 passage of the Government Employees Training Act and, in Van Riper's terms, during the transition period of 1953-58. It seems clear that the establishment of the Detroit area program directly influenced the organization of a similar program in Chicago, and it may be that other area programs were similarly influenced. It is also likely that federal agencies concentrated in other areas will attempt to organize similar university programs for their management groups.

To date there has been no study published covering the effect of the Government Employees Training Act upon the participation of federal executives in these local university programs. The experience of one program, however, indicates that the legislation has had a pronounced effect upon program participation in that fewer employees are attending on a private enrollment basis. Agency sponsorship has become the general rule although there is reason to believe that, for the most part, the nature of the participating executive group has remained the same.

There are both similarities and differences in the curricula of the local federal education programs. The programs for federal employees generally, and those for middle managers, have included skill courses — i.e. conference leadership, practical training methods, organization methods and skills — technical courses — i.e. federal salary and wage administration, budget and finance, introductory accounting, elements of electronic data processing, methods and time study, purchasing, property management, personnel administration — and public administration courses — i.e. government accounting procedures, administration of government contracts, federal administrative process. Superimposed upon these various special courses are those which are more frequently
associated with management training — courses variously described as effective
first line supervision, middle management, management and human relations,
human relations in supervision, modern views of management theory and
principles, the applications of psychology in management, and, in some fewer
instances, courses dealing with more specific aspects of managerial or supervi-
sory responsibility. The curricula of these programs do not, of course,
remain static as courses are added or eliminated over a period of time.

Of the three local programs which may more properly be termed executive,
one began experimentally in 1958-59 (at Temple University) when a single
seminar for federal executives was added to the existing public management
curriculum. In a sense, therefore, only two institutions have fully developed
executive curricula. The University of Chicago program, based on a five
seminar sequence, and the Wayne State University program offering eight
seminars or courses, have been described as follows:

1. Administration and the Governmental Structure
2. The Anatomy of Administration: Organization
3. Administrative Decision-Making
4. Communications and the Executive Process
5. Human Relations

1. Modern Organization and Management
2. The Administrator and the Community
3. Communications and Organization Behavior
4. The Dynamics of Personnel and Employee Relations
5. Organization Goals: Formulation and Achievement
6. Identification and Assimilation of the Individual with the
   Organization
7. The Executive and the Budgetary Process
8. Creative Thinking in Management

In both of these instances a rationale underlying the curriculum has been
stated and, to some extent, the courses within the sequence have been main-
tained to relate to a given framework. The program at the University of
Chicago was reorganized after its first two years of operation with a new focus on decision-making. The set of resulting seminars represented "two basic categories — the first dealing with various conceptions of administration both as a field of study and as an activity, the second dealing with various skills of administration, centering around decision-making as the heart of the process."

The Wayne program has been described as one which involves "technique plus morality." While it has been concerned with a technical groundwork involving the functions of the executive and the skills needed for effective performance, it has had the second focus of encouraging the executive to re-assess his image of himself as he behaves within his organization. The admittedly limited goal of this kind of a program might then be to get the individual participant to understand both the technical and personal elements involved in his role as an executive.

Differing approaches to formal education for the federal executive are accentuated even further when one considers the three nationally known programs which are clearly intended for the upper-level federal administrator — the Brookings Institution's Executive Conference Program, the University of Chicago's Summer Institute in Executive Development for Federal Administrators, and the Department of Agriculture Graduate School's Management Development Program for Federal Executives.

According to the original directors of the Brookings' program, this conference series was established to provide federal executives with "a stimulating and broadening intellectual experience that would qualify them for wider responsibilities in government." In addition, the program was intended
to generate more interest and to experiment more fully in the area of executive
development.113 Designed primarily for the top four grades of the federal
classified service (GS-15 through GS-18 or their classification equivalents),
the program began during the summer of 1957. The basic methodology was clearly
that of the conference -- informal talks or formal addresses by resource people
from government, universities or other public affairs organizations, panel
discussions, participant discussions, participant-resource person discussions
and, to a degree, case discussions.114 More importantly for comparison
purposes, most conferences have been built around four main topics within the
general theme of "exploring executive responsibilities." These have been: the
job of the career executive; working in an institutional setting; management in
the federal government; and problems of national policy in the interaction
between government and society.115

The University of Chicago also established its Summer Institute in
Executive Development for Federal Administrators in 1957. According to its
founding director, the program was designed to make the resources of the
University available to non-Chicago federal executives and to overcome some of
the pedagogical problems of the institution's extended evening executive
program.116 Organized primarily for top-level federal administrators
(GS-13 through GS-18), the Summer Institute utilized the same decision-making
framework as the University's federal evening program in organizing two and
four-week seminar units around organization theory, decision-making theory,
administrative communications and human relations. To these were added two
additional seminar units dealing with social science and administration and
ethics and administrative behavior.117 Although the subject matter seminar
directed by a member of the special inter-university summer faculty constituted the core of each program, teaching techniques were varied as seminars, lectures and special workshops have been used. During 1959 and 1960 the Summer Institute directors introduced an agency simulation technique, group testing and individual and group analysis sessions, and other special project activities.

The newest of these three upper-level programs, the Agriculture Graduate School's management program, was initiated in 1959. It differed from the Brookings and Chicago ventures in that it was intended for federal executives who had been involved with specialized technical work and who were either recent or soon-to-be administrators. It too, however, was designed primarily for higher level personnel (GS-13 and above. Although the program's directors stated the general purpose of the first program in conventional terms — as introducing managerially inexperienced executives "to the field of management as an area requiring skill of a professional character" — they added to this the concept of launching their participants into a systematic program of self-development to facilitate their adjustment as managers.

This aspect of the program involved the scheduling of a one-day pre-program problem identification session and a follow-up meeting six months after the actual program sessions. This was possible, of course, because participating executives were all from the Washington area. The basic two-week program minimized the lecture approach and strongly emphasized group task efforts and individualized programming for job performance.

While it seems quite likely that all three programs will continue, it would not be correct to assume that all or even most federal executives who
receive external development training will attend these programs. Excluding new programs which may be organized, it is likely that federal agencies will continue to send many of their executives to management courses designed primarily for business executives\(^{124}\) (in particular, to the Harvard, Cornell and American Management Association programs) and to general government executive courses (in particular, to the University of Pittsburgh and ASPA programs).

The Brookings, Chicago and Graduate School programs clearly differ in terms of both content and method. In general terms, the Brookings' program might be characterized as a conference program centering around the major problem areas of federal administration; the Chicago Summer Institute might be described as a seminar program built primarily around the social and behavioral sciences as they relate to administrative theory and practice; and, lastly, the Graduate School program might be identified as a workshop activity designed to translate management concepts into individual job effectiveness. If business executive courses may be crudely described as focusing upon traditional management principles, skills and tools, then the contrast with the major federal executive programs becomes quite clear.\(^{125}\)

It should be mentioned in conclusion that federal organizations may also place more emphasis in the future upon the establishment of their own executive education institutions. More may be expected to follow the lead of the Department of State, the Federal Aviation Agency and other agencies in creating their own executive schools.\(^{126}\) It seems likely also that they will call upon the U.S. Civil Service Commission to provide more broad-gauged programs. During 1960 the Commission sponsored a number of programs for specific groups
of federal executives — for example, an Institute for Career Science Executives. During January of 1961, the Commission presented its first general program, a week-long Executive Leadership Institute.127 These activities are logical preludes to initial experimentation with a federal civilian executive staff college. The manner in which this staff college might develop would provide one of the most interesting aspects of federal executive education during the current decade.

Summary and Conclusions

While it has not been possible to define executive development in terms of any single meaning, it implies the concepts of deliberately preparing individuals for executive responsibility and of further training practicing executives. Arising as it has from a number of causations, the executive development movement has involved both formal techniques within the organization and educational programs in organization training centers and at universities and other external sites. During the past decade business and industry and, to a much lesser degree, government have utilized the large number of formal executive development programs sponsored by colleges and universities and by private management associations. Although varying considerably in duration and in program mechanics, most have emphasized the technical and human elements in business policy and business management. The values inherent in these programs — most of which are aimed at the middle management level — are frequently assumed and accepted. There are many indications, however, that both organizations and individuals are becoming more critical of the university or association executive development program.

The group of liberal education programs initiated during this same period
has aroused considerable interest. Starting with the Aspen program in 1948 and the Bell program at the University of Pennsylvania in 1953, a number of somewhat different programs have been organized around the central concept of liberal education. This particular area of executive development programming is distinguished in the sense that numerous spokesmen have contributed to a very explicit and well articulated philosophy of executive education.

The interest of government in executive education has also become very significant. As a result, colleges and universities and professional societies have organized development programs for local, state and federal administrators. Although such programming has been erratic and not at all comprehensive at the municipal and state levels, there has been an increasingly apparent activity among departments and agencies of the federal government. For a variety of reasons, activity at the federal level lagged beyond comparable activity in business and industry, but the changing situation of the fifties finally resulted in a climate favorable to executive development activities. While federal organizations may have concentrated more upon internal programming, they too began to look toward external training sources. As they continued to build up their own in-service programs, they also sought to utilize interagency programs and to identify appropriate college-level courses and programs.

Local area programs seen as suitable for federal employees include those for government employees generally, those for a specific federal agency, and those designed exclusively for a range of federal organizations. The relatively few programs in this third category are usually evening non-credit programs sponsored by a university in cooperation with its local federal personnel council. They differ, however, in other respects as do the three
major educational programs for upper-level federal executives.

The programs of the Brookings Institution, the University of Chicago, and the Department of Agriculture's Graduate School are unique and they differ considerably from the many business executive development programs which are also increasingly available to federal agencies. It is likely that federal departments and agencies will continue to use both the federal and the business programs and will welcome with critical interest new programs which may be presented to them. New programs will likely include those organized by the U.S. Civil Service Commission — programs which could provide some real beginnings toward the establishment of a federal civilian staff college.
Notes

1. Many terms have been used to describe the process of obtaining the quantity and/or quality of executives needed by an organization, or needed on a broader social basis. Although attempts have been made to distinguish these terms, the tendency has been to use executive development, executive training, executive education, management development, management training, career development and other similar terms more or less synonymously. The terms supervisory development and supervisory training are normally used to describe programs or processes for lower-than-executive levels but they too have been used occasionally to cover employees at the executive level. For purposes of this dissertation, the terms training and employee development will be used interchangeably to describe practices or programs involving all levels within an organization. The term executive development will be used for any activity having to do with the preparation of employees for potential entry into executive positions, the "improvement" of practicing executives or their preparation for greater responsibility. Executive education will refer to any formalized training or educational activity dealing with executives in an organized fashion and concerning instructional or learning objectives of a general managerial or administrative nature. In this sense, of course, a particular kind of executive development activity can be executive education. On this basis, most terms should be meaningful in context. For a comprehensive vocabulary of training and development terms, see Earl G. Plany and J. Thomas Freeston, Developing Management Ability: 600 Questions and Answers (New York, 1954).


3. Arnold E. Schneider, "The Function of Education in a Growing Organization," Journal of the American Society of Training Directors XIV (February 1960), 7-8. The trend has also probably been influenced by the tendency of many schools of business to emphasize the managerial function rather than technical specialization. See, for example, Richard L. Koselka, "Education for Business Administration," Education for the Professions, ed. Lloyd E. Blauch (Washington, 1955), p. 46, pp. 51-52. For a full account of the effort being made by American industry to train its employees, see Harold F. Clark and Harold S. Sloan, Classrooms in the Factories; An Account of Educational Activities Conducted by American Industry (Rutherford, N. J., 1958).

4. Schneider, pp. 8-11.
5. Randall, p. 3.


7. Ibid., p. 370.

8. For a good description of this approach and some of the mechanisms used, see Virgil K. Rowland, Improving Managerial Performance (New York, 1958).


10. Ibid. The article also describes the General Electric Management Course, the programs of the American Management Association and the management course of the Harvard Business School as representative of two major channels.


13. Ibid.


17. Riegel, pp. 325-326.

19. Ibid. The acceleration of management development activities has also been measured in other ways. Drawing upon data of the National Industrial Conference Board and the American Management Association, Pollock reported that the estimated percentage of corporations with management development programs rose from five percent in 1946 to fifty-four percent in 1955. See Ross Pollick, Present Tendencies in the Post-Entry Training of Higher-Grade Civil Servants (Washington, n.d.), pp. 2-3. The report was issued by the Career Development Section of the U.S. Civil Service Commission.


25. Ibid.

26. Riegel, p. 3.

27. Stewart, p. 2. Apart from this common purpose element, Stewart points out that business school programs vary considerably in length, content, the number and needs of the persons served, relationship to the institution's degree programs, costs, and provisions for payment and facilities.


29. Idem.
30. Ibid., pp. 3-5.

31. Executive development programs and, by implication at least, their administrators have been criticized for the existing ambiguities in these areas. Professor Nathan D. Grundstein of the University of Pittsburgh's Graduate School of Public and International Affairs has studied the design of executive development programs and the variations in their conceptual bases. His analysis should shed considerable light on a subject about which relatively little has been written. The need for a fundamental rationale within an organization is stressed in Willard F. Bennett, Management Selection, Education and Training (New York, 1959).

32. It is not, of course, a purpose of this introductory survey to deal extensively with such matters. Subsequent sections concerned with programs for federal executives and certain sections of Chapter II will deal, however, somewhat more directly with these concerns.

33. In addition to Jennings and Andrews, see the section devoted to programming for businessmen, professionals and technicians in Peter E. Siegle and James B. Whipple, New Directions in Programming for University Adult Education (Chicago, 1957), pp. 27-48. Their report is one of the series published by the Center for the Study of Liberal Education for Adults.

34. For a readable general treatment of such programs, see Julius E. Fitington, "Liberal Learning for Enlightened Leadership," Personnel Administration XXI (July-August 1958), 8-19.

35. Robert A. Goldwin and Charles A. Nelson, Toward the Liberally Educated Executive (White Plains, N. Y., 1959), pp. vii-viii. The statements cited are taken from the introduction by C. Scott Fletcher, the president of the Fund for Adult Education. The remainder of the volume consists of essays by industrial leaders who support the concept of liberal education for executives. For a brief overview description of the relationship between the liberal arts and business training, see the reprint issued by the Center for the Study of Liberal Education for Adults; Abbott Kaplan, Liberal Education in a Business Civilization (Chicago, n.d.), pp. 1-4.

36. Fitington, pp. 11-12. See these pages and the one following for a general description of the Aspen program. See also Peter E. Siegle, New Directions in Liberal Education for Executives (Chicago, 1958), pp. 49-52. This too is a publication of the Center for the Study of Liberal Education for Adults.

37. Another very interesting example of a non-university liberal education program is The Executive Seminar of the American Foundation for Continuing Education. The seminar is described in a brochure issued by the foundation's national headquarters at 19 South LaSalle, Chicago 3, Illinois.
42. For a description of the first of these programs, see E. Digby Baltzell, "Bell Telephone's Experiment in Education," Harper's Magazine CCX (March 1955), 73-77. The program and an evaluation of its immediate results is also discussed in Morris S. Vitale, "Human Relations and the Humanities in the Education of Business Leaders: Evaluation of a Program of Humanistic Studies for Executives," Personnel Psychology (Spring 1959), 1-28.


40. For descriptions of these variations on the original theme, see Siegle, pp. 13-36.

41. For descriptions of these other independent approaches, see Siegle, pp. 29-44, pp. 53-66.

42. Ibid., pp. 1-2.

43. Huneyager, pp. 40-42.

44. Jennings, p. 372.


46. Ibid., pp. 3-6.


48. Ibid., pp. 96-97.

49. Ibid., p. 91.


52. For an excellent analysis of the total context for developing public executives, see John W. Macy, Jr., "Administrative Careers in the Public Service," Selected Papers, eds. Bowen and Pealey, pp. 40-49.

53. Thomas J. Davy and Henry Reining, Jr., "The Respective Roles of Higher Education and Government Employers in Preparing People for Professional Administrative Careers," Education, ed. Sweeney, pp. 179-181. The series of papers in this collection cover the entire range of administrative training and education at the local and state governmental levels. It also discusses the position and role of the government administrator.

54. The ICMA and ASPA programs are referred to in the next chapter. Those interested in the details of these organizations' executive development activities may obtain information from the International City Managers Association, 1313 East 60th Street, Chicago 37, Illinois; from the American Society for Public Administration, 6042 Kimbark Avenue, Chicago 37, Illinois; and from the Society for Personnel Administration, 715 G. Street, N. W., Washington 1, D.C.

55. Sayre, pp. 42-43.

56. Robert J. M. Matteson, Management Development for Public Administrators (New York, 1957), pp. 1-10. This pamphlet was issued by the Institute for Public Administration.

57. Harvey S. Perloff, The Urban Administrator: Education for Service in Metropolitan Communities (College Park, Md.), pp. 1-22. This bulletin was issued by the University of Maryland's Bureau of Government Research.


60. Ibid., p. 30.


63. Idem.

64. Ibid., pp. 331-332, 380-381, 429-432.

65. Ibid., pp. 513-514.


70. Pollock, pp. 2-3.


72. This also applies, of course, to programs within business and industrial organizations and to university and association programs. A section of chapter III will refer to some of the more interesting evaluation or validation studies being made. The author has deliberately refrained from citing any particular federal spokesmen since he has no way at this time to appraise the accuracy of such reports.

73. The Commission early in 1959 established the Office of Career Development — within the immediate purview of the agency's Executive Director — to advise, encourage and assist federal organizations in meeting their development needs on an internal and interagency basis.

74. The Training of Federal Employees, pp. 33-39. This section also includes illustrations of comprehensive approaches within particular federal organizations.

75. Ibid., pp. 21-30.
76. Ibid., p. 34. Since the publication of this source, virtually all federal organizations have received this authority. For a brief review of the likely impact of the Government Employees Training Act upon federal training see the summary of proceedings pamphlet of the Training Officers Conference of Washington, D.C.; Training Officers Conference, Management of Employee Training (Washington, 1959).


78. Ibid., p. 12.

79. Two instances of this kind of change may be seen in the cases of the Ordnance Management Engineering Training School at Rock Island, Illinois and the Department of Agriculture's Graduate School. In the case of the former, the basic management engineering program has been supplemented by the addition of general management seminars for top and middle level executives. See Ordnance Management Engineering Training Agency, Description of Courses for Fiscal Year 1960 (Rock Island, 1959), pp. 2-3. In the latter instance, the school's conventional curriculum was broadened in 1959 to include a development program for federal executives. The Graduate School's program is described in elaborate detail in Rakasataya, pp. 134-143. Descriptive pamphlets are also available through the school.


81. Most notably, the Department of the Army, in its military staff schools, its Personnel Management for Executives Program and its Ordnance Management Engineering Training Agency.


83. These estimates are, of course, the author's personal judgments.

84. A section of chapter IV discusses the manner in which one group of federal agencies promoted or encouraged the participation of their executives.

85. See Declaration of Policy, Government Employees Training Act (Public Law 85 507, Section 2).

86. The universities involved describe these programs in their general catalogs and they also issue separate announcement pamphlets. Information may be obtained from the University of Maryland's College of Special and Continuation Studies, The George Washington University's College of General Studies, and The American University's Division of General and Special Studies.

The Department of the Navy has made similar arrangements with Harvard, Northwestern and Pittsburgh universities.

The U.S. Atomic Energy Commission has recently made this kind of an arrangement with the American Society for Public Administration. See the ASPA news publication, *Public Administration News* (Chicago, Summer 1960), sec. 1, p. 1.

For example, the Internal Revenue Service employs a number of consultants — from universities and management organizations — in connection with its executive institutes and management conferences.

The Post Office Department, for example, works with different universities in the department's regions in establishing university-conducted, agency-centered programs for postmasters. During 1960-61 the Bureau of Old Age and Survivors Insurance established executive training programs at the Brookings Institution, New York University and the University of Pittsburgh.


Here again, these conclusions and those immediately following are the author's personal judgments. In the great majority of cases, however, the author has consulted the descriptive literature and announcements of the programs involved and has modified the data drawn from these Commission publications where he has personal knowledge of program omissions or program changes.

Even programs which are presumed to be continuing may terminate suddenly. For example, the American Management Association's special Management Course for Government Executives started in 1959 and was terminated during 1960.

This national in scope enumeration includes only the best known and most formalized programs in the Washington area.

Raksasataya, pp. 55-56. He mentions specifically the Brookings Institution's Executive Conference Program, the program at the University of Chicago, and the American Management Association's now defunct government executives program.

Ibid.
98. Many have discussed the need for a federal civilian staff college. See, for example, Macy, pp. 45-46 and Marshall R. Dimock, "The Administrative Staff College: Executive Development in Government and Industry," American Political Science Review 1 (March 1956), 166-176. For a detailed proposal of a few years ago, see Society for Personnel Administration, Proposal for a Federal Administrative Staff College (Washington, 1953). This is Pamphlet No. 5 of the Society's series. A very recent discussion summarizing the consensus viewpoint of federal directors of personnel may be found in a report summarizing a Williamsburg conference sponsored by the Brookings Institution and the U.S. Civil Service Commission. The report was issued by the Commission's Office of the Executive Director. See pp. 12-14.

99. For program and curriculum details, see the descriptive brochure issued by Public Administration Extension, University Extension, University of California, Berkeley 4, California.

100. As mentioned in note 54, information about the ASFA program is available from the Society. The program is also described in Rakesasataya, pp. 129-131. A description of the Pittsburgh programs may be obtained from the University's Graduate School of Public and International Affairs. The Syracuse program (The Public Executive - Political Science 390) is described in a brochure available from the University's Maxwell Graduate School. This three-week seminar program was initiated in 1957.

101. Sources of information are the two publications of the U.S. Civil Service Commission cited in notes 91 and 92.

102. See for example, Michael G. Blansfield, "Building and Evaluating a University Executive Development Program," Personnel Administration XXI (May-June 1958), 35-40. For an interesting case study in which a number of agencies were jointly involved, see Harry W. Reynolds, Jr., "Developing Middle Management," Public Personnel Review XIX (October 1958), 279-284. The same case is also described in Harry W. Reynolds, Jr., "Training Middle Management in the Field," Public Administration Review XVIII (Autumn 1958), 291-295.

103. Temple University in Philadelphia sponsors a general and an upper-level program. The University of Chicago offers both executive development and management training programs. Descriptive program literature is available from these institutions and from Wayne State University. For Temple, address the School of Business and Public Administration; for the University of Chicago, address the Center for Programs in Government Administration; and for Wayne State, address the Department of Public Administration. For the remaining programs, those at Boston University and Cleveland College of Western Reserve University, see College Courses and Programs, p. 1, p. 5.

104. The connection between these two programs is discussed in Chapter II.
105. During the past year the author has received inquiries about the Chicago program from federal groups — in Portland, Oregon, Kansas City and Honolulu — interested in establishing federal executive development programs with universities in their cities. In still other metropolitan areas (Minneapolis-St. Paul, San Francisco, New York), federal personnel councils have been supporting university management training programs for government employees in general. See *The Training of Federal Employees*, pp. 41-42.

106. This is discussed in Chapter II in connection with the University of Chicago's Program of Executive Development for Federal Personnel.

107. Sidney Mailick, "One University's Role in Executive Development," *Public Administration Review*, XVIII (Autumn 1958), 276. Professor Mailick served as the director of this program during the 1956-57 and 1957-58 academic years.


111. Since the Department of Agriculture Graduate School is not a government agency but rather a quasi-private educational institution, it is classified in this chapter as an external training source for federal executives.


116. Mailick, p. 277. The program's goal in attracting non-Chicago federal executives has been notably achieved. According to the University's records, three hundred and fifty-four of the four hundred and thirty-five executives attending from 1957 through 1960 have come from outside of the Chicago area. Of this number, one hundred and sixty have come from the Washington area and one hundred and ninety-four have come from thirty-three different states. In addition, thirteen officials from four foreign nations have attended the Summer Institute.

118. Ibid.

119. These latter program features are described in the 1959 and 1960 Summer Institute brochures available from the University's Center for Programs in Government Administration.

120. Raksasataya, p. 134. In the pages following (pp. 135-137) the first program is described in considerable detail. A number of pamphlets and summary sheets covering various phases of the program are also available from the Graduate School, Department of Agriculture, Washington 25, D.C.


122. Raksasataya, p. 135.

123. Ibid., pp. 135-137.

124. A few federal establishments which had special external training authority before the 1958 Government Employees Training Act have consistently used business executive programs. For example, the National Security Agency has enrolled staff members in the Cornell and Harvard executive development programs since 1953. See Beatrice Dinerman, Eugene P. Dvorin, and Edward F. Staniford, "Furthering Employee Education in State and Federal Governments," Personnel Administration XIII (January-February 1960), 42.

125. The government executive program established at the University of Pittsburgh also presents a marked contrast to the typical business program. See University of Pittsburgh, A Venture in Executive Development with New Dimensions (Pittsburgh, n.d.) pp. 1-3.

126. In addition to the management curriculum within its Foreign Service Institute, the Department of State has established its own program (for its civilian executives) at Front Royal, Virginia. The Federal Aviation Agency maintains The Executive School at Norman, Oklahoma.

127. Brochures describing the Institute for Career Science Executives and the Executive Leadership Institute may be obtained from Charles A. Ullmann, the Commission's Director of Management Institutes. The curriculum of the Executive Leadership Institute seems to combine the content approaches of the Brookings Institution's Executive Conference Program and the University of Chicago's Summer Institute.
CHAPTER II

A UNIVERSITY PROGRAM FOR FEDERAL EXECUTIVES:
THE PROGRAM AND ITS PEOPLE

One of the seven university evening programs for federal executives mentioned in the preceding chapter was that conducted by the University of Chicago — the Program of Executive Development for Federal Personnel. This program has been one of two such activities conducted at the University for federal employees in the Chicago metropolitan area. The other, the Program of Management Training for Federal Personnel, was also included in the first chapter's review of external educational programs designed specifically for federal employees.

This chapter seeks to delimit the general executive development context of the initial chapter by describing the particular program in which the federal executives involved in this study have participated. A description of the University of Chicago's activities in this area of continuing education for public employees, and of one of its principal programs of this type, should provide a relevant case study for both adult educators and government personnel officials. It should be of direct interest to those who may be considering the establishment of similar programs for federal executives, or for public officials in general, in other parts of the country.
The Center for Programs in Government Administration

Although the Center for Programs in Government Administration was not established as an organizational entity until the end of 1957, the executive training activities with which the Center is now concerned date back to 1954. The Center is now a special purpose organization which "functions as a developmental and administrative unit with respect to tailored, non-credit programs in executive and supervisory development for particular government audiences." It is currently involved with a large number of local and national programs of continuing education for government personnel. These include evening courses and seminars conducted during each quarter of the academic year, residential institutes for specific public administration groups, cooperative programs with professional organizations, and training courses for individual government departments and agencies. The Center also maintains a research staff which investigates problems associated with effective curriculum construction.

The Center's original training activity, the evening Program of Executive Development for Federal Personnel, began in 1954 after consultation and cooperative planning with the Federal Personnel Council of Chicago. Since then, over three hundred federal administrators have completed the series of seminars required for a certificate in executive development. Seminars and courses in this first and fundamental program have been conducted at the University's Downtown Center, the Great Lakes Naval Training Center, the Joliet Arsenal and, on occasion, at the work sites of other local federal organizations.

A companion series of courses, the Program of Management Training for Federal Personnel, was organized in 1957 by members of the Center's administrative staff and a committee of training officers from Chicago federal
agencies. This program actually started with the winter 1958 quarter and the first group of participants "graduated" in June of 1959. While the executive development program is built upon theoretical and conceptual constructs of administration, the management training program was designed "with greater emphasis on knowledge and skills more quickly applicable to the every-day work of participants. During the final quarter of 1958-59, a third course series, the Program of Professional Studies in Public Administration, extended the Center's efforts to include employees of state, county, municipal and non-profit private organizations. This program brought together both the more "theoretical" seminars of the executive development program and the more "practical" courses of the management training program.

At the conclusion of the 1959-60 academic year, over three thousand public employees had attended evening courses in the executive, management, or professional programs. While the separate identity of the three evening programs has been maintained, there has been a greater mingling of executive and supervisory levels and of federal and non-federal employees during the 1958-59 and 1959-60 academic years. A number of factors have contributed to this trend. During 1959, when enrollment in the new professional program was quite limited, non-federal administrators were permitted to enroll with federal class groups. This experiment worked so well that the practice has been continued when necessary or feasible. The tendency has also resulted from the desire of some employees in the executive development program to enroll in certain management training program courses.

The most significant factor, however, was the introduction in 1959-60 of a series of special supplementary courses open to participants in all three
programs. The curriculum of each program was reorganized during that year to provide for three basic or fundamental programs, and some of the secondary courses from each program were grouped, together with a number of new seminars of courses, into a new special series. The result was a special series of fifteen seminars, courses or workshops which could be revised in the future without affecting the basic curricula of the major programs.

Even with these reorganizations, however, the more fundamental aspects of the Center's evening activities have remained the same. The seminars and courses within the programs are still of two kinds, those addressed to knowledge and skills at the theoretical level of administrative science and those concerned more directly with the translation of management concepts into practice or technique. The inter-university instructional staff is still a feature of the Center's evening programs, as it has been since 1954.

At present, participants attend the Center's evening programs on a number of bases — either privately, as individual employees of government organizations, or more formally, as participants sponsored and supported by their agencies. Of the one hundred and fifty-seven federal employees registered for courses during the autumn 1960 quarter, one hundred and twenty-two were attending on an agency-sponsored basis and thirty-four were private enrollees. One participant attended on a combined split-tuition basis. Of the one hundred and four non-federal employees in basic program seminars or courses, eighty-seven were agency enrollees and seventeen were private enrollees.

The best known of the Center's executive education activities is its Summer Institute in Executive Development for Federal Administrators. The Summer Institute was inaugurated as a two-month multi-program activity in 1957.
and has been conducted each year since then. During its first four years the
Summer Institute attracted four hundred and thirty-five registrants — the great
majority, civilian executives at GS-13, GS-14 and GS-15 — from over forty
federal departments and agencies. While the formal subject matter of the
Summer Institute’s basic seminars is quite similar to that of the Center’s
Program of Executive Development for Federal Personnel, the former program, as a
concentrated residential activity, is more elaborately constructed. It has in­
cluded both lectures and a variety of participation activities — activities
which one commentator has described as “interesting efforts to move from the
plane of abstraction and generality to that of specificity and particular­
ization.”

The Center’s successful experience in conducting the Summer Institute
during 1957 and 1958 led it to develop a second residential program for a very
different kind of audience — the public psychiatric administrator. This
activity, the Institute in Executive Development for Psychiatric Administrators,
began experimentally during 1959 with two pilot sessions for commissioners of
state mental health systems and other public psychiatric officials. The
program was designed, however, primarily for superintendents of state mental
health institutions and the Institute’s 1960-61 program was organized for this
group. Although generally similar in design and content to the Summer
Institute, the program follows a different time schedule. As presently
conceived, the Institute in Executive Development for Psychiatric Administrators
is a four-week program subdivided into two-week fall and spring units — a
scheduling arrangement which could permit the Center to experiment with new
modes of program evaluation. While federal executives have attended the Summer
Institute — since 1959 — on an agency-sponsored basis, virtually all of the 1960-61 psychiatric administrators were participating as recipients of National Institute of Mental Health project grants.18

During 1958-59 the Center undertook its first cooperatively sponsored activity and organized a special management training program in conjunction with the American Public Works Association. Then, during 1960 and 1961, it worked with the International City Managers Association in planning, organizing and conducting national advanced management training programs for Association members. Most recently, the Center joined with the American Society for Public Administration in sponsoring that organization's 1960-61 management program series.19

The remainder of the Center's program activities have involved both informal activities and organized educational programs at the local level. The former have included experimental training workshops,20 a 1957-58 lecture series for federal executives and managers, and, since 1959-60, service as secretariat for the Chicago chapter of the American Society for Public Administration. The most significant educational programs have included lecture series for federal regional administrators and for inspection groups of the Department of the Navy, workshops for employees of the Illinois State Employment Service, office management institutes for executives of the Illinois Department of Labor's Division of Unemployment Compensation and, more recently, concentrated basic management and supervision courses for the officer corps of the Chicago police department.

This latter activity, a massive program undertaken at the request of the city's new police superintendent, began during the summer of 1960 with
experimental courses at two levels — the sergeant level and the captain-lieutenant level. During the period September, 1960 through March, 1961, over one thousand police officers attended one of two specially designed thirty-hour courses. An additional outcome of this particular training effort has been another evening activity, the Program of Studies in Law Enforcement Administration. This program, the fourth in the Center's evening series, began with the winter, 1961 quarter. Designed for law enforcement officials of the Chicago area, the program built upon the two courses developed for the Chicago police department by adding two courses from the management training program, one course from the special series, and two advanced seminars prepared specifically for police administrators. 21

Three other aspects of the special large-scale program for the Chicago police department might be mentioned because of their general relevance to the broader range of Center activities. These are the scholarship provisions involved in the program, the cooperative nature of the program's development, and the research phase of the program.

The members of the police department attending the introductory courses attended on an official duty basis with the department bearing half of the tuition costs involved. The remainder of the tuitions were covered by scholarship grants made through the Center. These grants were, in turn, drawn from a general scholarship fund awarded by the Ford Foundation in 1957 to the University. This fund permitted the Center to make limited matching scholarship awards to most public employees attending any of its evening programs and a number of its special local programs. During the 1958-59 academic year — before the Government Employees Training Act could be fully implemented —
scholarships were available to federal program participants. Since that time, however, they have been restricted to non-federal public administrators. The Ford Foundation — through its Public Affairs Division — also made special grants to the Center for its 1957 and 1958 Summer Institutes, to allow federal agencies lacking out-service authority to participate in that program.

The Chicago police program also involved considerable developmental planning. Members of the Center's staff met with consultants from the International Association of Chiefs of Police and with consultants of other organizations on temporary assignment to the Chicago department, with administrative, personnel, and training officials of the department, and with members of its regular advisory and consultant groups. There are two general groups with which Center administrators are involved on a continuing basis. These are the faculty advisory committee — faculty members representing a number of schools and departments within the University — and a consultant group of upper-level administrators from various public agencies. In addition, the Center utilizes separate national advisory committees for its two major residential Institutes.

The research project connected with the police program — a study of police attitudes and of the socialization process within the department — is a Center activity which is being carried out by a member of the University's department of political science. The Center's own staff members, however, have conducted and are currently responsible for other research programs. A first major project, the 1958-60 Executive Judgment Research Study, was financed by a separate grant from the Ford Foundation. In general terms, this investigation dealt with the subject of education for public administrators and with the Center's student population and, additionally, with the components of
administrative judgment and the effects of the Center's programs upon the participant's job performance. A second project, Education for Innovative Behavior in Executives, began in 1960 and will continue through the summer of 1962. This investigation, a contract award from the U.S. Office of Education, is concerned with the delineation of such behavior and the development of contrasting experimental seminars which teach toward such a behavioral goal.

With this general review of the Center's educational activities, we can turn to an examination of the specific program with which this dissertation is concerned, the Program of Executive Development for Federal Personnel.

The Executive Program: Its Development

As Maillick has reported, the Program of Executive Development for Federal Personnel began in 1954 after the Chicago Federal Personnel Council had investigated possibilities for establishing such a program for federal officials in the Chicago region. A Committee of the Council — the management development committee — had contacted several universities in the Chicago area and, "after correspondence, discussion, and negotiation the proposal of the University of Chicago was approved."

While there is, of course, no official history of the program, it is quite possible to reconstruct general patterns of development. Letters of information from the Federal Personnel Council to local agencies, the announcements, records and occasional news releases of the Center, and, to a lesser degree, the internal memoranda of agencies informing their employees of program developments, all provide a basis for such a reconstruction.

It is quite clear that the basic drive for initiation of the program came from within the federal agencies in the area and, more specifically, from the
Federal Personnel Council. The idea of such a program was apparently not new in 1953 since one of the management committee's announcements mentioned an unsuccessful attempt in the 1940's to launch a program in the Chicago area. The fact that the Federal Personnel Council of Detroit had established a program in 1953 at Wayne University was also cited as a relevant factor in encouraging similar action in Chicago.31

The curriculum of the original program was formulated as the result of an interagency survey conducted by the Council's management development committee. Thus, in a sense, agencies were asked to participate in a program which their top administrators had helped to develop. Agency heads had attended a series of special pre-program meetings and were invited to participate themselves in a special seminar for agency heads during the initial year of the program.

During 1954-55, the first academic year of the program, federal executives at grade twelve or above who occupied staff or supervisory positions were eligible for nomination by their agencies for program participation. The management development committee was continued and served as the screening and selection body for applicants. Once in the program, an executive completing a seminar was free to continue and to register during subsequent quarters for additional seminars. The screening process in the initial year was apparently somewhat rigorous. Agency heads had been asked to select their nominees carefully, some agencies endorsed only certain applicants, and the selection committee passed over certain GS-12 technician nominees who were not, in its opinion, supervisory or staff executives.32

The demand for program participation by both agencies and individual executives met and even exceeded the anticipated response. After two quarters of
activity, it was necessary to schedule additional sections of three basic seminars.\textsuperscript{33} This was done primarily to reduce class size since the quarterly enrollments for the academic year were, in order, one hundred and fifty-five, one hundred and seventy-nine, and one hundred and sixty-one. Two hundred and ninety-five different federal executives comprised this annual enrollment of four hundred and ninety-five. Thirty-one agencies contributed participants.\textsuperscript{34}

While slightly more than one-fourth of the first year's participant group completed more than one seminar, only about two-thirds of these particular participants continued into the 1955-56 program.\textsuperscript{35} On an overall basis, over forty percent of the 1954-55 executive participants continued as registrants during the program's second academic year.\textsuperscript{36} Some program "drop-out" may have been anticipated since the minimum eligibility requirements were lowered, after the first year, to grade eleven. The resulting volume of new applications was so great that the committee had to restrict approvals of nominations to certificate candidates -- those indicating the intention to complete the entire series of basic program seminars.\textsuperscript{37}

Total enrollment for 1955-56 was four hundred and forty-nine, with almost one hundred and fifty new participants joining the continuing group from the first year. Considering this enrollment of two hundred and seventy-two executives as a new program unit, one-half completed more than one seminar and slightly more than one-half of these continued in the program during the next year, 1956-57.\textsuperscript{38} On an overall basis once again, almost forty percent of the 1955-56 participating group enrolled in 1956-57 seminars.\textsuperscript{39} It is evident, therefore, that a somewhat greater number of second year participants were willing to experiment with the program to the extent of completing more than one
seminar. To some degree, this was due to the desire of continuing first-year participants to complete the program and to obtain their certificates. In addition to whatever motivations were affecting this group, however, it would seem that the new participants — perhaps many of those at the GS-11 level — were more highly motivated than the majority of first year participants who failed to continue into 1955-56.

The fact that the Program of Executive Development for Federal Personnel was reorganized for the 1956-57 academic year may also have encouraged a larger percentage to continue participating. The original program and its curriculum were considered as experimental by the University and by the federal agencies involved. In addition to the special seminar for agency heads, the first year's program provided for nine seminars. A number of these were basic administration courses while others were more technique oriented. During the program's second year the technique seminars — those relating to public relations, work control and budgeting — were more or less eliminated. Maillick has summarized the initial two year effort as follows:

The second year of the program represented basically a continuation of the general experimental effort of the first year. The University, in essence, was testing out general content areas and methods which would prove to be of greatest utility for this particular audience. Professors with such diverse backgrounds as humanities and the social sciences led seminars, and there was no uniformity in the conduct of the various seminars. Often such subjects as human relations and communications, taught in separate sections of the same seminar, were presented as rather different phenomena.

The Council's management development committee tended to evaluate the first two program years in the same general manner. The committee regarded the first year's program as "somewhat overly practical in nature" and the second year's program as, in part at least, "overly theoretical in its approach." Generally
speaking, its expectation was that the reconstituted curriculum would greatly improve the program's functioning.

The reorganized program utilized decision-making as a new focus in adopting the following rationale:

The program was based on the position that the executive in industry, government, education or other institutions, is the man who has to make decisions, communicate these decisions to various centers in the organization and motivate individuals both to execute the decisions and to make decisions themselves — all done within the context of an organization.

The program was divided into two distinct categories; the first concerned itself with conceptions of administration as a field of study and as a field of activity; the second dealt with various skills of administration. The special three-quarter seminar for agency heads was retained but it too was reorganized to reflect the various components of the revised curriculum.

At the time of reorganization, the program was expanded to permit more extensive participation over a longer period of time. The basic program (leading to a basic certificate) comprised five seminars (two conceptual and three skill) as follows:

1. Administration and the Political Superstructure
2. The Anatomy of Administration: Organization
3. Administrative Decision-Making
4. Communications
5. Human Relations

An advanced certificate was to be issued to participants who completed, in addition to the five required courses, the following optional seminars:

1. The American Administrative System
2. Comparative Administrative Practice
3. Scientific Method and Administration
4. Ethics and Administrative Behavior
5. Interpersonal and Group Skills.

Additional aspects of the program for 1956-57 included a four-unit lecture series and a weekend workshop conference. In order to carry out the reorganized
program, seminar time was increased from twenty to thirty hours and the quarterly tuition charge was doubled. Most significantly, admission to the program was opened to supervisors and staff employees at the grade nine level.

The result of the reorganization and of concomitant promotion was a record enrollment during the autumn quarter, and a much larger record enrollment of two hundred and seventy-seven participants during the winter quarter. The number of newly eligible participants (GS-9 and GS-10 employees) can only be estimated but it was quite large and it contributed significantly to the record enrollments. Total enrollment for 1956-57 was seven hundred and forty-five, with four hundred and twenty-four different individuals participating. Thirty-three federal agencies contributed participants.

Of the executives participating during 1956-57, one-fourth were continuing from the previous year. The three-fourths majority were either participants entering for the first time or, to a much lesser degree, first year participants resuming program activity after a year's interval. Of the former group — the prior year participants — almost seventy percent completed two or three additional seminars. Of the latter, over half attended more than one seminar. If the 1956-57 year is again considered as an entity in itself, some sixty percent participated through most or all of the three-quarter academic year.

It is apparent, therefore, that executives entering the program during 1954-55, the initial year, either dropped out of the program or continued participating during one or both of the subsequent academic years. The same would hold true, of course, for those starting during 1955-56. Of the four hundred and forty-three federal executives entering during the first two years — the approximate number which might optimally have completed the basic
certificate program by the end of the third program year — one hundred and six
had actually obtained certificates by the end of that year. While some others
from this group undoubtedly obtained a certificate at a later time, it is clear
that the great majority of the more than three hundred did not.

While most of these early "graduates" received their certificates
informally — upon their individual completions of the basic program — forty-
two participated in the program's first formal graduation exercises in June of
1957. They represented, quite clearly, a high level group of well-educated and
responsible federal executives. Of the thirty-three responding to a pre-
graduation inquiry, twelve were graduates of the special agency heads program
and the remainder were, for the most part, men and women with long and signifi-
cant federal experience. They were already a well educated group. Twenty-four
of the thirty three were college graduates and eleven of these held either
masters or higher professional degrees.

The program's fourth academic year, 1957-58, saw no major changes in the
curriculum but it introduced a very different fee structure. After considerable
discussion earlier in the year the University received a grant of one hundred
and seventy-five thousand dollars from the Ford Foundation for its "executive
development program for public and civic organization personnel." As a result,
seminar fees were raised to sixty dollars, with thirty dollar Ford Foundation
scholarships made available to participants from agencies lacking legal
authority to pay employees' attendance costs. A tuition rate of forty-five
dollars was established for participants from most agency-paying organizations.
In effect, therefore, this was the only group affected by the changed cost
structure.
Throughout the three prior years some fifteen participating agencies — somewhat less than half the annual average — had paid tuition fees for their participating executives. During the 1955-56 academic year — the second program year — agency-paying organizations contributed almost half of the program's total enrollment. While the percentage fluctuated, the tendency in subsequent years was toward an increasing proportion of agency-supported participants.

Although fourth year enrollment fell off somewhat from the previous year, it still continued at a generally high level. The fall quarter registration reached a new high of two hundred and ninety-eight participants with eighty-five attending seminars at the Great Lakes Naval Training Center. The annual enrollment of six hundred and seventy-seven included five hundred and fourteen agency-payment enrollees and only one hundred and sixty-three private-payment, scholarship enrollees. Twenty-eight agencies provided enrollments, ranging in number from one to forty-seven, during an individual quarter.

The program was also affected by the introduction of the new companion course series, the Program of Management Training for Federal Personnel. From the very beginning of its activities, the Federal Personnel Council's management development committee had discussed the introduction of a program for federal managers and supervisors below the executive level. A three-man subcommittee had finally been established during 1957 and this group developed the nucleus of the management training program for the University. With this new program, the minimum eligibility level for the executive program was raised back to grade eleven. Employees at lower levels who had been previously accepted were, however, permitted to continue in the program. The attraction of the new management
program was considerable and some executive program participants registered for
courses in this series. More importantly, many new applicants (and all at the
GS-9 and GS-10 levels) who would have normally entered the executive program,
participated instead in the management course series.57

The Center and the Federal Personnel Council jointly sponsored an Executive
Development Conference in January of 1958. Although this one-session conference
dealt with a number of matters, its primary purpose was a general review of the
Program of Executive Development for Federal Personnel. In June of 1958 the
program’s second graduation exercises were held and eighty-five additional
executives received certificates.58 Three executives in this group were the
first to be awarded advanced program certificates.59

In a sense, the program may be viewed as having completed two stages of
development by the summer of 1958. The initial two academic years (1954-55 and
1955-56) can be considered as the experimental stage, while the following two
years (1956-57 and 1957-58) may be described as the consolidated and expanded
program stage. The period since 1958 may be considered a third program stage —
one marked by a much smaller but gradually stabilizing program enrollment, by
less private participation and greater agency subsidization of participating
executives, and by a gradual movement toward a general government executive
program. The major factors contributing to these developments have been the more
limited federal executive audience, the passage of the Government Employees
Training Act, the partial reorganization of the program’s curriculum, and the
growth of the management training and professional studies programs.

Although the Government Employees Training Act gave external training
authority (in August of 1958) to those agencies without prior authority, local
organizations were not able to formulate internal procedures in time for the
1958-59 academic year. For this reason, the Center continued to offer scholarships to those participating on a private-payment basis. During this year, therefore, the program enrollment of three hundred and ninety-three comprised about one-fifth private enrollees and four-fifths agency enrollees. It seemed clear that many federal executives were waiting for their agencies to formulate internal procedures before entering or continuing in the program.

With the 1959-60 academic year, Ford Foundation scholarships were no longer available to federal executives. Private enrollment tuition rose to forty-five dollars. While the tuition rate for agencies remained the same, virtually all agencies participating had established procedures for supporting the majority of their enrollees. Under these circumstances, it is not surprising that only about six percent of the program's enrollment was of a private payment nature.

Although program enrollment declined during the fifth and sixth academic years, it had also generally stabilized. This was indicated by the program enrollments during the following consecutive quarters:

1. Autumn, 1958 — 123
2. Winter, 1959 — 134
3. Spring, 1959 — 118
4. Autumn, 1959 — 128
5. Winter, 1960 — 132
6. Spring, 1960 — 72
7. Autumn, 1960 — 104

The decline in enrollment was due to a number of factors. In the first place, the available supply of interested executives had become partially depleted, as more than one thousand had already participated in the program. As was mentioned earlier, there was also an increasing tendency for entering and continuing executives to participate in courses in other of the Center's
programs. As a result of both factors, there was a lesser demand for the educational offerings of the Program of Executive Development for Federal Personnel.

The Government Employees Training Act also marked the end of the management development committee as a program screening group. Since the agencies all had external training authority and could be expected to develop their own selection mechanisms, the committee felt that acceptance should be a University prerogative — one which, in practice, would involve direct University-agency relationships. Starting with the 1958–59 academic year, agencies have registered employees and employees have enrolled privately without the necessity of going through any nomination process. The Center’s relationships have, since then, been with agencies, with individuals, on a different and more general basis with its advisory and consultant groups, and with the Federal Personnel Council and its sub-unit, the Federal Training Council.

The relatively greater independence of the Center and the developing changes within the program resulted in another reorganization of the curriculum prior to the start of the 1959–60 academic year. The five basic program seminars were retained as constituting the Program of Executive Development for Federal Personnel. Three of the five optional seminars were dropped and the remaining two (those dealing with scientific method and with ethical behavior in administration) were placed in the newly created special series program. The management training program and the professional studies program were similarly reorganized.

Under this system, a participant (in any of the three programs) could obtain a basic certificate by completing three seminars within his program plus
two other seminars, courses or workshops in the program or in the special supplementary series. An advanced certificate could be attained through completion of five additional seminars or courses from any one of the programs or from the special series. The program has, therefore, become much more flexible, both administratively and from the viewpoint of the participating executives.

The Executive Program: Its Participants

The preceding section has made a number of references to the executives participating in the program. Since these references were both chronological, in terms of the program's development, and comparative, in terms of degree of participation and enrollment status, it may be desirable to regroup and to summarize the information. Since the program began to change in a number of major respects after 1956, the data will largely reflect participation during the first four academic years, that is through 1957-58. In some instances, program information will be given beyond that point.

The annual program enrollments as broken down into individual quarters are provided in the table which follows:

<table>
<thead>
<tr>
<th>TABLE II</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTERLY PROGRAM ENROLLMENT THROUGH 1959-60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Total</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954-55</td>
<td>495</td>
<td>155</td>
<td>179</td>
<td>161</td>
</tr>
<tr>
<td>1955-56</td>
<td>149</td>
<td>191</td>
<td>140</td>
<td>118</td>
</tr>
<tr>
<td>1956-57</td>
<td>745</td>
<td>205</td>
<td>277</td>
<td>263</td>
</tr>
<tr>
<td>1957-58</td>
<td>677</td>
<td>298</td>
<td>206</td>
<td>173</td>
</tr>
<tr>
<td>1958-59</td>
<td>379</td>
<td>123</td>
<td>134</td>
<td>118</td>
</tr>
<tr>
<td>1959-60</td>
<td>332</td>
<td>128</td>
<td>132</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3077</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As mentioned previously, the autumn quarter enrollment of the 1960-61 academic year amounted to one hundred and four. The recent enrollment stabilization has also been mentioned.

Reference was also made to agency participation. In the sense that the term has been used here, fifty-six federal agencies contributed participants during the program's first four academic years. Of these, twenty-seven, almost half, provided minimal participation of less than five executives. Ten agencies were responsible for about two thirds of the four year enrollment. The remaining nineteen organizations enrolled from five to twenty-five executives during the same four-year period.

Considering participation in terms of individuals rather than in terms of enrollment figures, federal agencies provided eight hundred and fifty-four executives for the program from 1954-55 through 1957-58. Eighteen executives from non-federal organizations also attended. The relation between "drop-out" and continuation patterns can be seen when this total is broken down as follows:

**TABLE III**

**DEGREE OF PARTICIPATION DURING FIRST FOUR PROGRAM YEARS**

<table>
<thead>
<tr>
<th>Degree of Participation</th>
<th>Number of Executives</th>
<th>Number of Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at One Seminar</td>
<td>325</td>
<td>46</td>
</tr>
<tr>
<td>Attendance at Two Seminars</td>
<td>168</td>
<td>31</td>
</tr>
<tr>
<td>Attendance at Three Seminars</td>
<td>120</td>
<td>24</td>
</tr>
<tr>
<td>Attendance at Four Seminars</td>
<td>37</td>
<td>15</td>
</tr>
<tr>
<td>Attendance at Five or More Seminars</td>
<td>206</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>854</strong></td>
<td></td>
</tr>
</tbody>
</table>

Of the individual executives involved, almost two thirds represented agencies which had external training authority prior to 1958. This does not mean, of
course, that all participants from these agencies were subsidized, but the very great majority had their tuition fees paid by their organizations. As far as degree of program participation is concerned, the payment factor might not seem to be relevant. Virtually the same proportion exists when the graduate category is isolated. Agencies with training authority also provided almost two-thirds of this group. When participation is broken down more finely, however, a somewhat different pattern emerges.

TABLE IV
FOUR YEAR PARTICIPATION BY ENROLLMENT STATUS

<table>
<thead>
<tr>
<th>Degree of Participation</th>
<th>% Agency Executives</th>
<th>% Private Enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at One Seminar</td>
<td>54.4</td>
<td>45.6</td>
</tr>
<tr>
<td>Attendance at Two Seminars</td>
<td>60.1</td>
<td>39.9</td>
</tr>
<tr>
<td>Attendance at Three Seminars</td>
<td>70.8</td>
<td>29.2</td>
</tr>
<tr>
<td>Attendance at Four Seminars</td>
<td>83.7</td>
<td>16.3</td>
</tr>
<tr>
<td>Attendance at Five or More Seminars</td>
<td>63.5</td>
<td>36.5</td>
</tr>
<tr>
<td>Attendance to Any Degree</td>
<td>62.9</td>
<td>37.1</td>
</tr>
</tbody>
</table>

While agency executives tended to continue in the program to a greater degree, it should be noted that the last two proportions are quite similar.

When the relative proportions of program participation and program graduation are compared on an individual agency basis, differences are naturally noticeable. For example, one agency with external training authority contributed two percent of program participants and two percent of program graduates. In another instance, an agency without such authority enrolled six percent and graduated less than four. In still other instances this general pattern was reversed. The differences were too slight, however, to make any inferences about the effect of an agency's training authority.
While it would be possible to treat of participant enrollment patterns somewhat more intensively, such treatment would probably not add a great deal to the inferences which can already be drawn. It is quite clear that participating executives were motivated to continue in the program to varying degrees. This differential factor was not, apparently, confined to the program's first four years. Even when circumstances surrounding the program were most confusing—at the beginning of the autumn 1958 quarter, immediately following the passage of the Government Employees Training Act—private payment enrollees were entering or continuing in the program. Of the eighty-six executives enrolled that quarter in Downtown Center seminars, fifty-six were continuing participants. Over a third of these were private enrollees who had already completed from one to five seminars. At the same time, thirty-eight of them private enrollees were beginning the program.

The same general pattern of continuation and initiation was involved throughout 1958-59. In the quarter following, the seventy-six Chicago enrollees included fifty-three continuing participants and twenty-three new enrollees. During the third and final quarter, thirty-two of forty-five were continuing executives.

While differential motivation can be identified in this way, the data cannot explain the organizational or personal factors which may have been involved. This is, of course, a major reason for this dissertation and for the Center's concern with program-related research activities.
Integration and Relation to Research Objectives

The creation and growth of the Center for Programs in Government Administration have developed in a very real sense from the initial Program of Executive Development for Federal Personnel. While the Center’s activities are now far reaching — consisting as they do of long and short-term local and national educational programs for varying government groups, research projects, and service activities — the executive program provided the occasion for growth.

The initiative of the Chicago Federal Personnel Council and the cooperative interest of the University combined to create the beginning program in 1954. The experiences of the 1954-55 and 1955-56 academic years — the experimental stage of the program — led in turn to a broadened program and to a reorganized curriculum which provided a core for the Center’s subsequent educational programs for public executives. These have included the Summer Institute in Executive Development for Federal Administrators and the Institute in Executive Development for Psychiatric Administrators.

Experience and innovation were also responsible for the Ford Foundation’s grant recognition of the University’s efforts and for the 1958 introduction of the Center’s second evening course series, the Program of Management Training for Federal Personnel. The two basic evening programs provided a nucleus for additional programming for other public groups and, as importantly, for continuous curriculum experimentation and research inquiries.

The Program of Executive Development for Federal Personnel has itself undergone a number of curricular, organizational and participation changes. The initial generalized curriculum was first reorganized to provide for a coherent
and rational approach to executive education. The more central, more effectively taught, and better accepted elements of this curriculum have been retained. The overall program, however, has been reduced to permit participants to select from a broader range of both conceptual and skill courses — a range designed to meet the needs of the different levels and different kinds of executives who are participating.

The mechanics of program entry — application, selection, nomination, and screening — have changed considerably over time, as have grade-level eligibility requirements. During the initial program year, only GS-12 executives approved by their agencies and passed upon by an interagency committee, entered the program. In subsequent years both qualifications and selection processes became much less significant. During the past two years, program entry has been either an individualized matter or a matter of internal agency procedure. Participating patterns have also altered as program attendance has become increasingly a reflection of agency support practices. The general acceptance by federal agencies of what has become a well organized continuing program has allowed the Center to devote its time and energies to the improvement of both program structure and mechanics.

Throughout the program's history, and particularly during its first four or five years, federal executives have participated to varying degrees. At the same time, of course, many of their agency counterparts have refrained from participation. The organizational and personal factors influencing program entry, the more specific characteristics of participating executives, and the motivational differences underlying degree of program participation are not known. This dissertation will be concerned with these factors. The problems identified for research, some hypotheses, and a research design are described in the next
chapter.
Notes

1. From 1954 through 1957 the only government executive training activity within the University of Chicago was the Program of Executive Development for Federal Personnel. College administrators associated with the Program were designated as directors or assistant directors of this program. The development of a second activity during 1957, the Program of Management Training for Federal Personnel, and the initiation of this program in January of 1958, resulted in the establishment of the Center as a larger administrative unit.

2. Norbert J. Hruby, "Description of Current Programs and Services at the Downtown Center of University College," (Chicago, December 19, 1958), p. 11. This is a college self-study report which is available only through the Director, University College, University of Chicago.

3. This information and the general descriptions of Center activities in the paragraphs which follow are taken primarily from an internal memorandum prepared by the staff of the Center. The Center for Programs in Government Administration, "Summary of Activities," (Chicago, August 11, 1960), pp. 1-6. Most of the information is included in the two annual announcements distributed by the Center. These are The Center for Programs in Government Administration, Institutes Seminars Courses and Special Projects in Executive Development and Management Training 1950-51 (Chicago, n.d.), pp. 1-22 and The Fourth Annual Summer Institute in Executive Development for Federal Administrators 1950 (Chicago, n.d.), pp. 1-19.

4. During the first three years of this program's existence (through 1959-60), enrollment totaled six hundred and ninety-seven. While the great majority of participants were federal employees, a number of employees from municipal, state and quasi-public organizations also participated in courses.


6. The Program of Professional Studies in Public Administration started quite slowly with minimal participation during 1958-59 and limited participation the following year. With growing interest on the part of a number of departments and bureaus in the City of Chicago government, this program now seems well established. Registration in the professional program during the autumn 1960 quarter totaled one hundred and four, in contrast to enrollments of one hundred and four in the federal executive program and forty-seven in the federal management program.
7. "Summary of Activities," p. 3. This practice is confined to courses scheduled at the University's Downtown Center. If it continues, the evening programs will become — in terms of the categories in Chapter I — programs for government employees rather than programs for federal employees. Preliminary plans for 1961-62 envisioned three evenings programs — for government executives, government managers, and law enforcement personnel — and an even larger special course series.

8. This practice has resulted in a number of federal employees who are eligible for the executive development program enrolling instead in the management training program. Some federal agencies enroll their executives in both programs. Some executive program participants have enrolled in single management training program courses and a few have begun the total management curriculum after receiving a basic or advanced certificate in the executive development program.

9. This reorganization required some minor readjustments in the criteria for certificates within each of the programs.

10. The curricula for the three programs and the current listing of courses in the special supplementary series may be found in the Center's 1960-61 announcement.

11. Katzell, Public Administration Review XIX (Winter 1959), pp. 1-3. In these pages Katzell analyzes the Center's executive development programs as part of his more general evaluation of programs for the education of executives.

12. During 1960-61 the basic instructional staff included faculty members from the City of Chicago Junior College, DePaul University, the Illinois Institute of Technology, Loyola University, Northwestern University and Roosevelt University. This was in addition to instructors drawn from the Center's own staff and from faculty of the University of Chicago. Instructors were also drawn from federal agencies, public professional associations, management consultant firms, from men in private professional practice, and from the staff of the Center for the Study of Liberal Education for Adults.

13. These data were taken directly from the Center's registration records. The same records indicated a quarterly enrollment of one hundred and fifty-nine in the executive development seminars, ninety-six in the management training courses, and seventy-eight in the special series courses.

14. See note 116 in Chapter I.

15. Katzell, p. 3.

16. A third and final pilot session for this commissioners' group was held during May-June of 1960. On an overall basis, twenty-one administrators from eighteen states attended the special pilot sessions. In addition, three other participants represented the American Psychiatric Association,
the National Institute of Mental Health and the Veterans Administration.

17. The twenty-two registrants for the 1960-61 Superintendents' Program represented fourteen state systems. Of the twenty-two, sixteen were superintendents of mental health institutions; one was an assistant superintendent and one was a clinical director. Four participants were at higher administrative levels; one was a commissioner, two were deputy commissioners, and one was a departmental administrative officer.

18. Twenty of the twenty-two participants attended on this basis.

19. See notes 54, 88, and 100 in Chapter I.


21. The curriculum for this fourth evening program is also described in the Center’s 1960-61 announcement.

22. Somewhat less than half of the two hundred and forty-eight federal administrators attending the 1957 and 1958 Summer Institutes were awarded Ford Foundation scholarships.

23. In addition to the officers of administration — Director, Associate Director in charge of residential programs, Associate Director in charge of evening programs, Assistant Director, and Assistant to the Director — the Center employs a full time Research Associate, a part time Research Consultant and a part time Research Assistant.


25. American Society for Public Administration, "Developments in Public Administration," Public Administration Review XVIII (Spring 1958), 161. This dissertation has, therefore, provided data for the first parts of the Executive Judgment Research Study.

26. A detailed summary of this research proposal is also available from the Center.

27. The terms executive development program, executive program, or program will be used from this point on to refer to the Program of Executive Development for Federal Personnel. When other Center Programs are referred to, they will be identified through more distinguishing language.

29. Ibid., pp. 275-276.

30. All three sources have been used by the author. With few exceptions, information was drawn from unpublished sources which, for the sake of convenience, will be identified in general terms and only to the degree necessary.

31. Since both Detroit and Chicago are within the same federal civil service region, it is not surprising that the Detroit experience would affect activity in Chicago. The same regional officials were directly concerned with each city's Federal Personnel Council.

32. These inferences are drawn from committee and agency correspondence. The application-screening process and its possible effects upon program participation are discussed in Chapter IV.

33. This added further to program expenses. The degree to which the University was underwriting the program can be seen in the fact that the estimated program deficit for 1954-55 was $9,000. This estimate is drawn from the Center's 1954-55 financial report.

34. The term agency as used here and elsewhere does not refer to the total departmental or agency organization in the Chicago area but to the individual federal installation considered as a separate organizational unit. For example, six agencies within the Department of the Army (Chicago Ordnance District, Chicago Quartermaster Depot, Corps of Engineers, Fort Sheridan, Headquarters Fifth Army, and the Signal Supply Agency) were represented during 1954-55. In other cases, however, a participating agency was representative of the total federal organization locally. The Atomic Energy Commission and the Railroad Retirement Board, for example, belonged in this category.

35. Those attending more than one seminar amounted to over twenty-six percent of the first year's total enrollment. Of this group over sixty-three percent continued into 1955-56. These percentages are computed from enrollment totals and participation patterns in the Center's enrollment file records.

36. This continuing group amounted to forty-two percent of the 1954-55 enrollment. The "drop-out" program participants are also considered in Chapter IV.

37. According to agency informants, this resulted in virtually all applicants identifying themselves as certificate candidates.

38. Those attending more than one seminar amounted to fifty percent of the total enrollment. Of this group, over fifty-one percent continued into 1956-57.

39. This continuing group amounted to over thirty-eight percent of the 1955-56 enrollment.
Only about thirty-seven of one hundred and twenty-four continuing participants could have completed the certificate program during 1955-56.

Mailick, p. 276.

Idem.

Idem.

These quotations and inferences are drawn from a one-page information form prepared and distributed by the committee during 1956-57.

Mailick, p. 276.


Ibid., pp. 2-4. Five of the ten seminar offerings — three in the basic series and two optional seminars — were revisions of seminars in the initial two-year program.

The original tuition of $15 a quarter was increased to $30.

Although no figures are available for the number of GS-9 and GS-10 employees entering the program in 1956-57, the proportion must have been very large. During the following year, 1957-58, this group provided thirty-five percent of the enrollment. This ranged from a high of forty percent in the autumn quarter to twenty-eight percent in the spring quarter.

Six executives from state or municipal agencies were attending, with the permission of the program director, to allow them to appraise the program for their respective organizations.

Continuing participants provided twenty-five percent and "new" participants seventy-five percent of 1956-57 enrollees.

The percentages are 69.5, 57 and 60.1.

This figure is taken from the program's June 18, 1957 graduation listing.

This information is drawn from a letter of July 25, 1958, from the federal executive who gathered personal history data for the graduation ceremony.


The percentage of the total was 47.6.
One hundred and seventy-one enrollees participated during the two 1957-58 quarters. The majority, sixty-eight percent, were private-paying scholarship enrollments.

Some thirty-two other participants had by this time completed additional courses beyond those required for the basic certificate.

The percentage of private enrollments was 21. If enrollment is restricted to the Downtown Center, the percentage rises to 29.1.

And yet, during the same year, fifty-five percent of the enrollment in the management training program was on the basis of private payment.

Although no detailed analysis has been made, a general check indicates that the composition of the participant group remained the same. Agencies tended to use their new authority, at least in part, by paying tuition costs for those employees who had already entered the program on a self-payment basis. The procedures established for subsidizing new program entrants were, of course, another matter.

Private enrollment accounted for six and a half percent.

A general review of enrollment records since 1957-58 indicates no other participating federal organizations.

Participation from these ten agencies amounted to sixty-eight percent.

Agencies with such authority enrolled sixty-three percent.

Agencies with such authority "graduated" sixty-four percent.

Their motivation to enter the program is, of course, even more significant as far as the focus of this dissertation is concerned.

Almost seventy percent were attending a fourth, fifth or advanced certificate seminar, indicating, perhaps, strong personal drives for certification, program completion or achievement objectives of this type.

The differences between these enrollment figures and those of Table II reflect the exclusion of participants at the Great Lakes Naval Training Center.

A discussion of the Center's approach to executive education is beyond the scope of this dissertation since an adequate discussion would require a very extended analysis. In his attempt to categorize executive development programs as either liberal, management skills, or specialized, Fakasataya classified the Summer Institute in Executive Development for Federal Administrators and the Program of Executive Development for Federal
Personnel among those programs applying the management skills approach. See Paksasataya, "Executive Development in the United States," p. 116. At the same time, other commentators view the latter program as an example of liberal education for a particular group. See Siegle and Whipple, New Directions in Programming, pp. 45-46. Two quotations from this source represent better the Center's basic approach. "Behind this program is the principle that administrative personnel can best be served by being provided with an education in theory rather than practice, with liberal education rather than technical. With this training it is assumed federal administrators will become better executives."

"The seminars emphasize principles on which practice is based."
CHAPTER III

SOME PROBLEMS FOR RESEARCH

Although the literature of executive development is now very large, there have been relatively few studies which bear, even indirectly, upon the primary focus of this dissertation -- the characteristics and motivations of federal executives participating in a university development program.

As the initial chapter indicated, there have been a number of descriptive catalogings of university executive development programs, some discussions of approaches to executive education, and some critical analyses of university programs. There have also been some beginning attempts to measure, or to evaluate more accurately, the effects of such programs. Finally, the recent publications of the U.S. Civil Service Commission, and the program literature of individual federal organizations and of various colleges and universities, have provided a source of information about formal training activities for federal executives.

In terms of the particular interests of this dissertation, the more relevant studies are those which have dealt with executives and their characteristics, university executive development programs, the motivations and characteristics of adult students, and formal programs for federal executives. In each instance, of course, the few studies bearing upon the federal executive are the most significant.
Executive Characteristics and the Executive Personality

Perhaps the best known study of the American executive is that by Warner and Abegglen. Their popular analysis of the big business leader in America presented a general description of the executive's origins, in terms of his economic level, occupational area, family, and education, and in terms of his social and geographical mobility. As the authors explained in their more technical research report, their principal purpose was to learn more about the vertical occupational mobility of the business elite — how fluid and flexible our society is in this important area. Their conclusion was most encouraging as they demonstrated that (in 1952) more fluidity and vertical mobility existed than in the previous generation. Among other findings, they mentioned education as one of the principal avenues used by mobile individuals in their drive to places of leadership and power.

The popular Warner-Abegglen study also included personality profiles of both the mobile business executive and his comparison counterpart, the member of the birth elite. In his more extended technical analysis of mobile business executives — an analysis based upon Thematic Apperception Test protocols — Abegglen concluded that these executives could be characterized as independent and autonomous individuals who had cut themselves off from their home backgrounds to concentrate realistically on the immediate and enjoyable challenges of work. As he discriminated further between mobile and non-mobile business executives, Abegglen found differences in terms of Murray's need variables. The mobile executive was identified as more dominant, more autonomous, and more exhibitionist, and as less insecure and anxious. Both types, however, were
seen as similar in their aggressive tendencies and in their needs for achievement — a finding which Abegglen stressed as being different than the conventional view. While both groups manifested ambitious and aggressive achievement drives, they may well have been higher in these respects than other populations.

Many others, using different techniques and different populations, have presented analyses of the executive personality. In his widely known study, Henry characterized the successful business executive as representing "a crystallization of many of the attitudes and values generally accepted by middle-class American society." He saw within this social grouping "acquisitiveness and achievement, self-directedness and independent thought" as "counterbalanced by uncertainty, constant activity, the continual fear of losing ground, and the inability to be introspectively casual." The work of Henry and his colleagues at the University of Chicago was done over a period of years. It utilized hundreds of executives from all major areas of business and industry and it was based upon the TAT and other more specific projective instruments.

Gardner described the results of TAT analyses of almost five hundred such executives in terms of eleven personality traits of the successful executives. These comprised a strong achievement desire, an acceptance of the idea of authority, a strong mobility drive, organizational ability, decisiveness, firmness of conviction, activity and aggressiveness, a fear of success or urge for failure, and various nervous and mental difficulties.

The study by Miner and Culver also resulted in a general executive profile, although it made no attempt to distinguish between successful and unsuccessful
executives. Using the Tomkins-Horn Picture Arrangement Test with business executives, college professors, and a random control group, the authors isolated two characteristics they associated with executive occupations. These were designated as a generalized fear of illness, and as a tendency to react to problem situations with a feeling of some degree of helplessness and a sense of being dependent on others for a solution.

Miner and Culver suggested that their "fear of illness characteristic" might be equivalent to the pervasive fear of failure identified by both Henry and Gardner. Rosen, in his studies, argued that more knowledge of what executives are really like is needed before anyone can say what an executive should be. On the basis of clinical studies of more than two hundred executives of all kinds, he concluded that executives seemed to fall into three functional groups — sales managers, production managers, and scientific research personnel. In his typologies, sales executives manifested an exaggerated reflection of the production man's characteristics, while scientific executives showed a diminution of the same characteristics. Thus, in his view, the production manager became the typical executive.

Using an extensive battery of intelligence, aptitude, interest and personality tests, Rosen enumerated six general personality traits which he felt executives reflected to varying degrees. He found that his median executive was very intelligent; that his sample was mentally healthier than the average; that most executives were markedly defensive and self-controlled but lacking in insight into themselves and their motivations; that they were ambitious, status-striving and competitive while identifying strongly with their
with their organizations; that they were highly positive in their attitudes towards others and generalized of others in terms of goodness and honesty; and that they were oriented to social service activities, to religious faith, and to family responsibilities. 20

In a secondary way, Rosen hypothesized more specific executive personality traits. He enumerated the following:

1. The executive is typically enormously extroverted;
2. tending to see others as sharply divided into good and bad, strong and weak, etc., he shows very definite dichotomous thinking;
3. he is a curious mixture of independence and dependence and shows the latter within the business hierarchy as a group dependence;
4. he manifests strongly-marked traits of optimism and self-confidence;
5. he has a marked preference for the practical as opposed to the theoretical approach;
6. he has an apparent ability to tolerate frustrations but not ambiguity; and
7. he is usually predictable in his words and actions. 21

As Rosen saw the typical executive — a controlled, ambitious, socially-oriented, moral, practical and extroverted individual — he was not totally different than the typical American male. In his terms, the executive had these characteristics to a greater degree. 22

Reporting further on this same series of studies, Huttner and his colleagues differentiated between executives in distinctive areas of management. They concluded that the differences between occupational groups were more in regard to intellectual capacity, education, and professional knowledge than in personality factors. 23 As for differences between more effective and less effective executives, the former "tended to be more intelligent, less error prone and more knowledgeable." In terms of personality, the more effective executives had more drive and enthusiasm and were more "what businessmen call a
doer." Their aggressiveness was not seen as the personal kind but as the kind which is "channelized and controlled by acceptance of the prevailing standards of business conduct." This effective executive was also seen as less anxious, more optimistic, and more trusting of his colleagues. 24

While projective testing has provided a major approach in attempts to evaluate executive characteristics, 25 other approaches have also been utilized. These have included numerous testings of small samples with specific intelligence or personality tests, as well as attempts to construct executive profiles on the basis of perceptions of executives. 26 These other approaches, however, have been quite particularized and the work of Warner and Abegglen, Henry and Gardner, and Rosen, Huttner and their associates has provided our most comprehensive knowledge. Newcomer's analysis of the big business executive should also be mentioned as a valuable contribution. 27 In addition to distinguishing trends in the development of executives, her study tended to validate the Warner-Abegglen profile of the mobile American executive. 28

When one looks to the subject of the contemporary federal executive, he can find only small-scale and quite restricted descriptions of characteristics, and no scientific study of personality factors. For example, Clark's dissertation described some limited data about the educational and experimental backgrounds of federal personnel executives, 29 while the Harvard Business Club inquiry provided information about businessmen in federal service. 30 While some other analyses have dealt with federal executives more generally, they have, for the most part, been concerned with very small samples and with quite limited areas of inquiry. Of these, the most significant have been the surveys conducted by the Second Hoover Commission's Task Force on Personnel and Civil Service, and
the U.S. Civil Service Commission's Bureau of Programs and Standards.

As part of its general inquiry, the Hoover Commission Task Force surveyed the career development of eighty selected top-level officials from twenty different federal agencies. The sample was considered to be typical of executives, at or above GS-15, who had substantial line or staff experience in the federal service. The survey examined the subjects' educational and experiential backgrounds.

Analysis of formal educational preparation led to the conclusion that the federal government "tends to select the more highly educated individuals for top positions." Eighty percent of the sample had college degrees, graduate work was prevalent, and most training bore directly or generally upon subsequent federal experience. Some two-thirds of the sample had non-federal work experience averaging almost seven years, but very few had entered federal service at executive grade levels.

While virtually all in this sample were thus careerist, their federal service ranged from eight to thirty-six years. The majority had service in more than one federal agency; most had remained in particular assignments for about two years; and the majority had multiple work-area experience. In an overall sense, the survey concluded that the federal executives studied were mobile — between work areas, between organizations, between staff and line, between field and headquarters within organizations, and between federal and nonfederal organizations — to only a limited degree.

The U.S. Civil Service Commission's survey also dealt with GS-15 and above executives, and with their work experiences and past education and training. The survey group was much larger however — over eight hundred respondents from
seven "prototype" agencies — and the inquiry also asked subjects for their personal evaluations of further training needs. The responding group averaged fifty-two years of age and eighteen years of federal service, and half had clearly entered the federal service at sub-executive grade levels.

The Commission survey implied a broad recruiting base as it indicated that one third of the executives studied had entered service from private industry. While almost a fifth had been in school, the remainder had entered the federal government from either the armed forces, professional practice, local government, or university instruction or administration. As with the Hoover Task Force finding, the executives showed little mobility, with half having spent their careers in one department, usually within one major segment of the organization.

The sample presented an impressive record of formal education. The typical executive had acquired a bachelor's degree and had taken some additional graduate work; only three percent had never attended college at all. While their undergraduate fields varied, more than forty percent had taken some college work after entry into the federal government. In the analysis of educational emphasis, it was pointed out that most executives lacked training in the processes of administration and in other areas relevant to the job of the government executive. Forty percent of the survey group lacked formal course work in economics and even larger percentages — sixty and sixty-seven — had no formal training in political science or government or in business or public administration.

In apparent recognition of these deficiencies, the sample voted heavily for more formal training in public administration, business administration and
personnel management. At the same time, the group "categorically rejected the idea of weekend and evening training in the event a staff college were established," with the majority preferring full-time off-the-job training.

The general picture presented, therefore, was one of a largely specialized group both needing and wanting further training in governmental affairs and administrative processes.

One of the few scientific investigations of the federal executive was that done over a decade ago by Reinhard Bendix. A revision of a doctoral dissertation, Bendix's study employed an elaborate methodology in an attempt to evaluate the social origins, careers and power-positions of upper-level federal administrators. On the basis of questionnaires, published biographical material, and interviews, he arrived at a number of conclusions regarding the social characteristics of federal civilian executives in general administrative or staff administrative positions.

As a result of his inquiry, Bendix concluded that federal administrators did not constitute a homogeneous social group. With their wide diversity of educational background, they lacked a common outlook and they in no sense constituted a professional group. Among the propositions in his investigation, the following might be mentioned as most meaningful to the concerns of this dissertation:

1. American administrators come predominantly from rural areas and small to medium-sized towns;
2. they come predominantly from lower middle-class and middle-class families;
3. during the last generation a gradual shift has taken place, such that administrators come in decreasing numbers from farmers' families and in increasing numbers from professional families, with the proportion ...coming from "business families" remaining generally stable;
a majority of the higher federal administrators have acquired their college and graduate education through their own efforts; and

5. their social origin, educational background, and occupational experience show considerable diversity. Such uniformities as appear can be accounted for by reference to over-all developments — namely, the decline in the proportion of farmers, the increasing spread of high school and college education, and the growing skill requirements in the government service.

As mentioned earlier, no scientific study of personality attributes of the federal executive is yet available. It is true, of course, that certain of Martin's preliminary findings in this area were widely discussed in the Washington press in March of 1958. Both the Washington News and the Washington Star reported in elaborate detail on his exploratory studies of characteristics of federal managers. While his inferences presented the executives studied in a favorable light — as of higher quality than the general stereotype, as generally intelligent and capable, and as high in organizational ability — the suggestions that they might lack drive in comparison to the business executive, and might tend to be hostile toward authority, aroused considerable comment and discussion. Martin's inquiries were, of course, clearly identified as "in process" and his findings were admittedly quite tentative.

A large scale study in progress — The Study of the Federal Executive — should produce our first comprehensive knowledge of the characteristics and personality structures of federal executives. This study of some twenty thousand top-level federal civilian and military executives deals with the origins, training, mobility, and attitudes of such executives. Among other things, it will attempt to present the first major comparison of federal and business executives.

Thus, while our knowledge of business executives and their social and personal characteristics has expanded, comparable knowledge of the federal
executive is still forthcoming. Research has indicated that our society is open as far as executive opportunities are concerned; that executive positions are open to mobile aspiring people with very diverse backgrounds; that education contributes to advancement in both business and government; and that a diversity of achievement drives and other psychological characteristics are associated with the personality structures of executives in business and industry, and, perhaps, in the federal government. Our knowledge of the executive, however, is still quite limited. It is also generally restricted to knowledge of the upper-level executive.

Related Research:

University Programs and Federal Programs

Both the Hoover Task Force and the U.S. Civil Service Commission surveys were carried out for the specific purpose of obtaining knowledge needed for federal executive development planning. The current Warner-Martin-Van Riper Study of the Federal Executive is also designed to contribute to practical problems of management training and development in the federal service. Other approaches have been used which relate, at least indirectly, to the same objective. Bernstein, for example, has provided valuable information through his attempt to define the job of the federal executive. With the Hoover Commission Task Force findings as one reference point, he and others working with him were interested in the political and the career executive, the settings in which they must work, and the consequent problems they face.

Earlier studies by Corson and by David and Pollock were concerned with the general question of obtaining a sufficient quantity of well-qualified federal administrators. Raksasataya has summarized their analyses and similar
studies as part of his survey of executive development activities relating to federal career executives. Although he also discussed formal executive development programming, his analysis was almost wholly descriptive.

There have, in fact, been few scientific research inquiries of any sort. One of the few has been Krieger's survey of opinion regarding significant problems of and issues relating to executives' development. On the basis of information obtained from over one hundred top executives throughout the country, he formulated criteria for executive success, most of which had to do with personal characteristics and abilities, and criteria for development training content.

As mentioned in the first chapter, studies by, among others, Bunker, Stewart and Andrews have been concerned with characteristics of executive development programs. The investigations of the first two have again been descriptive rather than analytical. Like Trickett, they have been concerned, at least to date, with the quantitative aspects of executive training. Andrews' recent work has been concerned with program evaluation, the manner in which those concerned view the executive development or executive training process, and the methods which various organizations have been using to measure program effect.

The three federal executive programs which have been researched to some degree -- the Brookings Institution's Executive Conference Program, and Wayne State University's executive and management programs -- have also focused upon evaluation of this sort. In both instances, but particularly in the latter case, some data about participating executives have been provided.

In reviewing the first year activities of the Brookings program, McDonald
and Stover characterized their sixty-nine participants (from thirty-four federal organizations) as possessing "characteristics similar to those found by John J. Corson and others in earlier surveys of federal executives." Most were between forty-five and fifty years of age, with an average of more than twenty years of service. More than half had worked within a single federal agency and very few had any significant work experience outside government. Their general educational backgrounds were quite varied. Only three individuals had significant prior training in public or business administration, and very few had prior executive or management training.

The program's first evaluation efforts — identified as "some modest beginnings" — consisted of a brief questionnaire at the end of each conference and, for the first conference, intensive interviews six months later. Participant reactions were quite positive; most felt that the program's major values included contact with fellow executives, identification of common administrative problems, and a renewed sense of confidence. These were, of course, familiar reactions which might have been anticipated. The finding, that nearly all "emerged as militant advocates of executive development and management training for their own departments" suggested a major value or effect of an external education program which is often overlooked.

Mowitz's study of the Detroit area programs for federal executives and managers has been the only one conducted to date which involved participants in local evening programs. Because it is more relevant to the focus of this dissertation, its findings — particularly those relating to the characteristics and motivations of participating executives — will be discussed in some detail. In general terms, the study sought "an accurate description of the participants
and their reactions to the programs. Data was collected from program records, agency files and interviews. One hundred and twenty-seven executive program participants and an equal number from the lower-level management program were involved. The executive sample comprised sixty-eight percent of the program enrollment during the first two and one-third academic years (1953-1955).

While the executives studied represented twenty-three federal organizations, over seventy percent were from five agencies. The extent of program participation varied but over two-thirds of the group had participated in more than one seminar. Although some participants paid their own tuition fees while others were supported by their agencies, the study did not seek to discriminate between the two types of participants.

Analysis of executive participant characteristics, in terms of grade level, general position area, age, education, agency service, and sex yielded the following findings:

1. Although grade levels ranged from GS-7 through GS-15, very few were below the GS-10 level and the great majority, seventy-eight percent, were clustered in the GS-10 through GS-13 range;
2. while generalization was very difficult, the program did not seem to be overloaded with staff executives;
3. almost half the group was between thirty-six and forty-five years of age, with a much greater proportion of the remainder being older than forty-five;
4. forty percent had received college degrees and, of the remainder, more than half had no college experience;
5. the length of agency service showed a great range with different patterns within individual agencies; and
6. all participants were male executives.

Mowitz also concluded that the most noticeable finding was the wide range of variation within the total group. At the same time, however, he pointed out that individual agencies seemed to have their own somewhat uniform patterns in terms of participants' ages, educations, and service years. In comparing
executives with management program participants, he found the education variable to be the most outstanding differential. The executive group included more (sixty-nine as against forty-three percent) who had attended or completed college. 77

The Detroit program study also sought information about the selection and enrollment process and about program effects. While the data were subjective reportings, they provided some interesting insights into participants' perceptions. Among other things, they indicated that many did not understand the selection process; also that enrollment was, for the most part, a voluntary process based upon personal decision. 78 Only five percent of the executive participants said that they enrolled because of pressure—because they "felt they had to" or because they were told to do so. 79

In order to obtain some insight into motivation, participants were asked to give their main reason for enrolling. Excluding the small number who felt they had been "pressured into" participation, the great majority (sixty-one percent) gave general responses which indicated either self-improvement desires, interest in or curiosity about the subject matter, or a general "faith in education." 80 The remaining number divided almost equally in reporting job-related motives—either those relating to personal advancement, promotion and prestige, or those relating to practical skills and techniques. 81 Participants in the lower-level management program seemed much more personally motivated by advancement or promotion factors. 82

The general pattern of executive response was reinforced when participants were asked what they had expected to get out of the program. Almost half responded in terms of better understandings—of management and of human
relations. Fifteen percent expected to be brought up to date or to benefit from "a college type program;' twenty-five percent spoke in terms of job promotion, skills or information expectations; and, somewhat surprisingly, over ten percent said that they had "no idea what to expect." While Mowitz was quite careful in his generalizations, he suggested that his study might indicate, among other things, a "training prone" population. In the Detroit programs, this population may have consisted of "middle-aged or older men holding positions in the middle grades (GS-3 through GS-11) who had not completed a college education and who had expectations that training would lead to promotion." This suggestion, of course, leads to the question of whether or not other "training prone" populations exist within federal executive groups and, if they do, what basis or bases might be involved.

Objectives and Values of Program Research

As Goode has made quite clear, research into personnel practice in government has been minimal, particularly when compared to that conducted within business and industry. If practice is to be improved, more must be known about both the working conditions and motivations of government workers. While research involving the federal executive has lagged behind examinations of the business executive and his milieu, there are now indications — the Warner-Martin-Van Riper study is only the most evident example — of a growing interest which should lead to an increasing number of studies. This dissertation is in a general sense a contribution to government personnel research in the area of
executive or management education.

It is also evident that development programs for federal and for other government executives will increase in future years. Our knowledge of existing programs is very limited, and if they are to be maintained and improved, a great deal of research into all aspects of such programs is both necessary and desirable. Knowledge of the characteristics and motivations of participants in a local area evening program should prove of value, to those concerned with both existing programs of this sort, and programs which are being developed or considered. This dissertation's findings should extend, therefore, beyond their immediate relevance to the Chicago program for federal executives.

While Havighurst and his associates have established the work role -- reaching the peak in one's work career -- as a primary factor in adult education, our knowledge of specific motivations of particular student populations is very limited. Their findings showing the significance of work motivations and their relation to participation in vocational education, to other life areas, and to social class provide interesting insights which must, however, be tested and/or extended within more discrete fields of adult education. While vocational motivations -- job-getting and professional advancement -- and cultural motivations provide basic categories for understanding, specific groups such as federal executives should be analyzed within their own contexts.

The existence of such a context also provides an opportunity to get into motivation in a deeper sense. If an inquiry into the motivations of a particular population is to be carried out in a broader sense, then non-participants within the same frame of reference should be considered. A voluntary executive training program provides an opportunity to study both students and "non-students"
within a more definable and more controlled context. If, as has been pointed out, research in motivation has been conspicuously lacking in adult education, part of the difficulty may lie in attempts to deal with our total adult population rather than with our definable and, therefore, researchable sub-populations.

At the same time, of course, the specific nature of a federal executive population will limit the degree to which the findings or conclusions of this research can be applied to other adult groups. Their partial relevance to other federal groups — to field service executives in other communities, to lower-level supervisors in this locale and in other areas, and to executives at higher levels in Washington — may be assumed but they must be considered as only limited in their application. Their relation to business executive groups will be even more tenuous, although it is hoped they will be provocative.

The objectives of this research are, therefore, both specific and general. The data gathered about the personal, social and motivational characteristics of federal executives in a university development program will go beyond an accurate description of participants, in an attempt to suggest a broader context of understanding and more refined causations for participation. In the most direct sense, the resultant knowledge should prove of significant value to the University's Center, the Seventh U.S. Civil Service Region, and Chicago area federal organizations, all of which are immediately involved in this important work of executive development. A primary objective of this dissertation, therefore, is the provision of knowledge and information which will permit these groups to:

1. Inform their eligible executives of the program and its characteristics in a more meaningful manner;
2. counsel interested executives more adequately in terms of their program expectations;
3. select those executives for agency-supported participation more effectively;
4. understand better the development needs and aspirations of the executive group;
5. understand better the relationship of a formal educational program to the total executive development objective;
6. reorganize the curriculum and the level and methods of instruction; and
7. generally promote and administer the program more efficiently and more realistically.

As has been mentioned, this information should also prove valuable to these same groups — universities and federal organizations — which are now or which may soon be involved in the administration of similar local programs for federal executives. To a lesser degree and in a more restricted sense, the findings of this inquiry may be of value to all who are interested in executive development, university programs, executive characteristics and executive personality.

Methods, Hypotheses and Chapter Overview

As with many studies of adult student populations, this dissertation will be, in part, descriptive. It will employ University records (the preceding chapter has already done so), records of some federal organizations, questionnaires and student inventories, and interviews. It will also utilize standardized and projective test data obtained from both existing sources and research administration. These data, and some personal history data, will provide both general assessment information and anchoring points for analysis of motivational influences. In some instances, data from non-participating federal executives and from other program samples will be used for purposes of comparative analysis.
In an attempt to present a study of characteristics and motivations of participating federal executives, the data collected will permit general descriptions of the program population, informed opinion of particular characteristics and motivations, subjective reports of characteristics and motivations, objective indications of motivation, social and personality implications in motivation, and partial comparisons with non-participants and other program participants. In a sense, the study deals with well-developed, subjectively meaningful motivations, as they relate to objectively determined, but sometimes quite complex, social and personal influences.

The study will employ, therefore, two basic research approaches to participation in adult education. These are a study of the characteristics of participants in a particular program, and sampling of a population to determine differences between participants and non-participants in relation to a program.

In terms of research design, a variety of approaches will be used, to varying degrees, as follows:

1. Cross-sectional studies utilizing samples selected as representative of the total population;
2. Comparative studies of selected samples differing significantly — sometimes with other factors controlled — to analyze the effect of particular factors;
3. Studies of samples representing extremes of certain characteristics; and
4. Studies of relations of particular samples to dynamic factors.

In more particular terms, the dissertation will proceed as follows:

1. It will use University records to provide a gross description of program participation — population size, degrees of program participation, participation status, occupational characteristics, etc.
2. It will use records of some federal organizations to obtain some personal characteristics and test data for general description and participant non-participant comparison;
3. It will use limited interview data to obtain information about organizational climate and participant motivation;
4. it will use an agency questionnaire to obtain informed opinion about organizational climate, program participation, characteristics of participants and non-participants, and participant motivation;
5. it will use a student inventory to obtain subjective reports of characteristics and motivations and comparisons with other groups;
6. it will use standardized tests to evaluate participant abilities and to compare participant and non-participant groups;
7. it will use personal history data from another research study to analyze social characteristics influencing program participation;
8. it will use projective test protocols from this same research study to analyze general personality factors influencing program participation; and
9. it will use a focused projective test to differentiate the job-related personality orientations of participants and non-participants.

For the most part, the initial hypotheses of this research have been formulated on the basis of the author's program impressions, review of the literature, discussions with University officials and federal executives, and direct experience with the program in a particular federal organization. These hypotheses — some of which will be reformulated at later stages — were originally stated as follows:

1. Program participants, as measured by informed opinion and psychological tests, tend to be "better than average" employees.
2. A majority of participants, as measured by informed opinion and the U.S. Civil Service Commission's Administrative Judgment Test, have executive potential.
3. The educational backgrounds of participants run to extremes; the majority of participants have either college degrees or little or no college training.
4. Participants with more formal educational background tend to participate in the program to a greater degree than those with less formal training.
5. A large number of program participants are in staff rather than line positions.
6. Participants whose program fees are paid for by their agencies are at higher grade levels and have more formal education than participants paying their own fees.
7. A majority of participants tend to relate the program to promotional opportunities.
8. A majority of participants believe the program provides an opportunity to learn practical executive skills.
9. Program participants are generally mature and average in personal adjustment, energy, and level of aspiration.
10. Participants tend to be low in qualities such as aggressiveness and decisiveness and high in frustration and objectivity.

As in all research efforts of any size and consequence, unanticipated findings, information, and significant data emerged and these will, of course, be presented. New hypotheses and areas for future inquiry will also be commented upon.

While the first and second chapters, and this chapter were designed to provide a context for program understanding, some of this information will serve as supporting data for findings, and interpretations in subsequent chapters.

The next chapter, Chapter IV, is based upon the results of a special questionnaire completed by well-informed executives within a broad range of federal organizations. It provides a picture of the organizational influences upon program participation and some preliminary information about characteristics and motivations of participants. A number of the initial hypotheses are tested in whole or in part.

Chapter V examines the results of an elaborate personal history inventory administered to a participant sample in attendance during a single program quarter. It describes participant characteristics, their statements of motivation, and their relation to some other program participant groups. Chapter VI discusses a test performance of this same sample — again in comparison with performances of other program groups — and test performances of participant and non-participant groups within specific federal agencies. Chapter VII is devoted to an analysis of social and personal factors differentiating participants and non-participants on an interagency basis, and comparing executives with varying degrees of program participation.

Chapters VIII and IX present the results of projective test analyses of
participant and non-participant groups. In the first instance, the analysis involves broad personality differentiation on an interagency basis. In Chapter IX, the analysis focuses on work orientations within an agency sample. The final chapter, Chapter X, summarizes the findings of the dissertation and presents a model for those interested in this particular field of adult education endeavor.
Notes


3. Ibid., p. 25.

4. Ibid., p. 29.


6. In terms of the Warner-Abegglen studies, mobile executives were those who had achieved a large degree of social distance, those who had risen from lower-status backgrounds. Non-mobile executives were the members of a birth elite, those whose backgrounds were already upper-class.


8. Ibid., p. 149.

9. Ibid.


11. Idem.


15. Ibid., p. 353.
16. Ibid., p. 351.


18. Ibid., pp. 9-10.


20. Ibid., pp. 10-11.

21. Ibid., pp. 11-15.

22. Ibid., p. 19.


24. Ibid., pp. 45-46.


28. For an excellent short summary of Newcomer's findings, see the review by Cecil E. Goode in the March-April 1956 issue of Personnel Administration XIX, 54-55.


32. Idem.
33. Idem., p. 236.
34. Ibid., pp. 236-238.
35. Ibid., p. 238.
36. Ibid., pp. 238-243.
37. Ibid., p. 243-244.
39. Idem. The chairman of the research committee has reported the major findings and implications of this study in an article which, for convenience, will be used for further citations. See Raymond L. Randall, "The Federal Career Executive — In Transition," Personnel Administration (July-August 1956), 23-28.
40. Randall, p. 25.
41. Idem.
42. Randall, pp. 25-26. The Commission's unpublished report provides a more detailed breakdown of the more than forty percent of the sample taking some college work after entry into federal service. Eight percent had taken some college work but less than the equivalent of a bachelor's degree; two percent had obtained a bachelor's degree but had gone no further; sixteen percent had taken graduate work, with six percent going to the master's degree or beyond; six percent had obtained a doctor's degree and nine percent had obtained a professional degree.
44. Randall, pp. 27-28.
45. Idem.
47. In examining the effect of bureaucracy on the executive branch's exercise of power, Bendix analyzed the bearing of social origin on administrative decision-making. He sought to determine whether federal administrators constituted a cohesive social group and/or an ethically united professional group; whether their educational backgrounds set them apart as a distinct social group and whether their public employment involved social prestige and material reward below that of private employment. See Bendix, pp. 12-13.
18. Political appointees, military officers, professional employees and technical or specialist administrators were excluded. See Bendix, pp. 15-16.


50. Ibid., pp. 121-122.


52. Idem.


56. Ibid., pp. 1-10.


58. Raksasataya, pp. 8-42.


60. Ibid., pp. 48-60, 121-128.


62. See Chapter I, note for references to Andrews' studies.

63. The research referred to does not, of course, include that of the University of Chicago's Center for Programs in Government Administration.


65. Idem.

66. Ibid., p. 299.
67. Idem.


69. Ibid., p. 3. Randall is now preparing a more elaborate study of the Brookings program. The study, "An Analysis of Intensive Short-Term Executive Development Programs for Government Officials," will be submitted as a doctoral dissertation in public administration at American University. It will draw some comparative data from other programs — among them, the University of Chicago's Summer Institute in Executive Development for Federal Administrators.

70. For the complete study, see Robert J. Mowitz, A Study of the Executive Development and Intermediate Management Development Programs for Federal Personnel in the Detroit Area (Detroit, February 1, 1957). A brief summary may be found in Robert J. Mowitz, "Benefits from Management Training," Public Administration Review XVIII (Autumn 1958), 300-305. Unless otherwise indicated, the citations which follow refer to the complete study. The study was published by the Ordnance Tank Automotive Command in Detroit, Michigan.

71. Mowitz, p. 2.

72. Ibid., pp. 2-6.

73. Idem.


76. Ibid., p. 11.

77. Idem.

78. Ibid., p. 21.

79. Ibid., p. 27.

80. Idem.

81. Idem.

82. Ibid., p. 22.

83. Ibid., p. 32.
81. Idem.
85. Ibid., pp. 33-35.
87. Idem.
88. See Cecil E. Goode, Personnel Research Frontiers (Chicago, 1958). This study provides an excellent overview of the few governmental studies which have been carried out and, as importantly, the major areas in which research is needed. Improvement of careers in government and improvement of leadership at all levels are among the primary areas of need mentioned.
90. Ibid., pp. 32-66.
91. Center for the Study of Liberal Education for Adults, Patterns of Liberal Education in the Evening College, A Study of Nine Institutions (Chicago, 1952), pp. 28-29.
93. Ibid., p. 90.
CHAPTER IV

ORGANIZATIONAL ENVIRONMENT: CHARACTERISTICS AND MOTIVATIONS OF PARTICIPANTS

An initial attempt to assess some personal and motivational characteristics of program participants — characteristics which might have influenced their entry into the program — was carried out during the summer and fall of 1958. At the same time, information was sought concerning agency "climate" for development — information about the manner in which the federal agencies contributing participants promoted the program, selected or nominated employees for participation and, in general, influenced program participation. The assumption was made that both organizational influences and personal motivations would affect participation.

In order to obtain such data, a questionnaire was developed in cooperation with University program administrators and a sample of federal training officers. The questionnaire asked carefully selected individuals within a large sample of participating agencies for 1) information about agency methods relating to the program and 2) opinions of the general backgrounds, characteristics and motivations of agency participants — in contrast, wherever possible, to nonparticipating but eligible employees of the agency. Some additional information not used in this research was also obtained through the questionnaire.

The purposes of this chapter are both general and specific. In general, the findings of the questionnaire inquiry should provide another broad context
for understanding of the participation of federal employees in a university executive development program. More specifically, the data are used to test a number of the original hypotheses of the dissertation, and to help formulate some more precise hypotheses for controlled testing.

The first section of the chapter discusses the questionnaire, its distribution, and response to the questionnaire. The next section presents a summary of the findings bearing upon organizational environment. Subsequent sections discuss general characteristics of program participants, and opinions of motivations and distinguishing personality characteristics. The final section summarizes the most significant implications and relates the principal findings to general hypotheses and subsequent investigations.

The Questionnaire - Distribution and Response

In conjunction with the University official directly administering the Program of Executive Development for Federal Personnel,³ the author developed a listing of "agency administrators." These so-called agency administrators were defined as those individuals within the participating agencies who, regardless of their official positions, had the most intimate and extensive knowledge of the workings of the program and of participating employees.⁴ These contact individuals were those who normally acted as liaison officials between the University and those executives interested in the program.

In most instances, administrators were the training or personnel officers of the agencies.⁵ The remaining number included line administrative officials - from the agency head down to employees at the middle managerial level - and staff specialists in fields other than personnel. In three instances, two officials from a single organization were jointly identified as agency
administrators. Thus, thirty individuals representing twenty-seven federal organizations contributing participants to the program — between the fall of 1957 and the 1958 inquiry — comprised the questionnaire sample.

Prior to the passage of the Government Employees Training Act in August of 1958, only certain agencies had legal authority to pay the costs of program attendance. For this reason agencies were grouped into employee-paying organizations — those in which participants had paid the tuition and other costs of program attendance — and agency-paying organizations — those in which the agency already had legal authority and had paid program costs for at least some participants. Thirteen agencies belonged to the former category and fourteen to the latter. On the basis of program attendance figures from the start of the program through the fall quarter of 1958, the agencies in which employees paid participation costs contributed slightly less than forty percent of the total. The possible effects of this differential payment factor will be discussed in connection with the summary and interpretation of questionnaire responses.

Completed questionnaires were received from nineteen of the twenty-seven agencies in the sample. These agencies included all that had contributed substantially to program participation during the period under survey. Taken together, responding agencies had been responsible for over eighty-two percent of the enrollees. Since the questionnaire sample accounted for about ninety-two percent of the participants, the level of response was considered very satisfactory. The respondent group provided data for about eighty-eight percent of the participants covered by the survey sample.

Sixteen of the nineteen responding agencies replied to the initial
questionnaire mailing and the other three answered a second letter of inquiry. Non-respondents were also sent a follow-up letter but, except for two instances of personal contact, no further attempts were made to obtain information from the non-respondent group. Three respondents preferred to complete their questionnaires during the course of an interview. These interview situations provided opportunities for more intensive discussion of agency climates.

Agency Climate and Program Participation

To provide a background for examining the reported personal and motivational characteristics of participants, agency administrators were asked to describe and to evaluate the methods used in informing eligible employees of the program and in promoting participation. They were also asked to discuss the significance of factors relating to the nomination process. Somewhat tangentially, they were asked to comment about desirable program changes, within the agency and more generally.

Before discussing the overall patterns and variations disclosed by the group's responses, it should prove useful to present in some detail a description of the climates for participation in the three agencies where interviews were held. As discussed by the three agency administrators involved, organizational influences upon program participants were quite different.

In the first organization, Agency A, ninety-two employees had participated in the program during the four academic years preceding the survey and sixteen had completed the series of courses leading to a basic certificate. Through the first two academic years of the program, the agency did not "sponsor" the program — in the sense of paying tuition costs — although it had legal
authority to do so. During this time span, three upper-level executives attended at their own expense. Beginning with the fall 1956 quarter and continuing through three subsequent quarters, the agency paid program costs for participants and large numbers attended. When the agency withdrew tuition support early in 1958, participation virtually stopped and only a very few employees continued in the program.

The agency's decision to pay tuition fees was the direct result of the local agency head's insistence that this be done. His positive reaction to the program overcame the opposition of headquarters training staff personnel to this kind of a program and thus "sponsorship" was obtained. During this sponsorship phase as many as fifty agency executives attended simultaneously. The agency's management and local personnel staff members promoted the program vigorously. There was distinct agency pressure upon all eligible employees; there was no screening process employed and all who met the University's minimum eligibility standards were nominated. According to the respondent, "many participants were captives and unwillingly participated because they thought it was expected."18

This "blanketing-in" of participants finally ended when the viewpoint of the headquarters training staff prevailed and funds for program tuition payment were cut off. Agency participation stopped abruptly and only a few employees who wanted to obtain a certificate by completing a final required course continued in the program. For all practical purposes agency participation in the program ended. Some employees who wanted to continue or to begin the program did not do so as a matter of principle. When financial sponsorship ended, the local management began to discourage participation. There was widespread resentment over the fact that the agency was not continuing tuition
payment. Since 1958 there has been no active encouragement of program participation.19

The second organization, Agency B, presented a somewhat different picture. In this agency, sixty-seven employees had participated over four academic years and twenty-six had obtained certificates.20 According to the respondent's estimate, the number participating was slightly more than a third of the number eligible on the basis of grade level. During the four-year period embraced by the survey, the agency did not have legal authority to pay tuition for employees.

The agency's approach to the program seemed to be positive but neutral. The head of the agency and some of his top executives had attended courses during the program's initial year. Employees at eligible grade levels were informed of the program through formal channels — bulletin boards, memoranda, and official distribution of program announcements — and more informally — through personal contacts by training staff members and through staff meeting discussions. Eligible employees were encouraged to participate in the program and, with the possible exception of negative attitudes expressed by individual supervisors, there was no apparent discouragement.

According to this respondent, the program in a sense did not have to be "sold" to eligible employees. On a national basis, the agency had been "training-minded" for a number of years and had, in fact, conducted its own periodic management training conferences for its executive group. In his opinion, however, the professional nature of the general executive corps was at least as important. The fact that most executives were well-educated specialists — in law, accounting or in both fields — pre-disposed them to a university program of a clearly academic nature. In this organizational milieu,
the minority group of non-professionally trained executives might well have entered the program to compensate for felt deficiencies in their educational backgrounds.

During the first academic year, an agency screening committee was organized to review the program applications of employees. This committee evaluated applicants rather carefully in terms of their grade levels, responsibilities, and reasons for wanting to enter the program. The difficulties encountered in this process were great, however, and screening rather quickly became routinized. When the University lowered grade level requirements for eligibility, many more employees became eligible. The screening process became perfunctory and, in practice, the individual employee became the deciding factor. In the opinion of the respondent, this lowering of selection and screening standards and the normal dissatisfaction of some program participants led to a gradually diminishing interest on the part of eligible employees.21

In the third and final instance, Agency C revealed a still different situation. During 1951–58, this agency enrolled fifty-one executives and twelve completed the certificate program.22 The participating employees comprised approximately one-fourth of the number of agency eligibles. Agency C also lacked out-service training authority prior to 1958.

During the first year of program activity the example set by top management was most significant. The agency head and most directors of organizational units attended courses and many employees sought admission to the program. The agency head reviewed all applications, rejecting many applicants — primarily those at the periphery of real executive responsibility — and approving only
those with significant responsibilities in the organization. Thus, while program participation was not openly encouraged, the selectivity of management in approving nominations resulted in a generally high level of interest among employees.23

This agency climate changed rather abruptly after the initial year. In the opinion of the respondent, the novelty of the program wore off rather quickly. Since the reactions of agency executives to the program were mixed after their early participation, the agency head and other top executives seemed to lose interest. The director of personnel and his staff members became the custodians of the program. As might be expected, participation declined perceptibly during the subsequent three years.

Although the personnel staff continued to "promote" the program through memoranda and other forms of announcement, top management had disassociated itself. While there was no official discouragement of participation, some officials openly expressed doubts about the program's value and very few of them continued to attend the program. The nomination process became meaningless and all eligible applicants were approved. Recognition of these employees who entered or continued in the program was occasional and insignificant.

Participation did, however, continue to some extent during the second, third and fourth program years. In the opinion of the respondent, this continued participation was due to a number of factors -- to the continuing encouragement and support of two or three upper-level executives, to the energies and initiative of a very effective training officer, and to the personal desires of individual employees.24 As far as the latter factor was concerned, he felt that the academically oriented type, the somewhat frustrated
type on the fringes of management activity, and the capable and ambitious younger type were all involved in the limited but continuing agency participation.

The three situational climates for program participation in these agencies indicate the quite evident effects of organizational environment. They suggest that certain factors — the attitude of the agency head and the attitudes of individual supervisors, the viewpoint of the professional personnel staff, the "expectations" of the agency, the screening process in nominating employees, the nature of the executive group etc. — are quite important in nominating employees to apply, enter, participate and continue in this kind of a university executive development program. The case interviews however, also point up the fact that more individual motivations or personal predispositions are involved as relevant factors. Before turning to a consideration of the latter, we should examine the degree to which the three organizations described above were representative of the total respondent group. 25

Most agencies used similar practices in informing eligible employees of the program and in promoting participation. In this respect Agency A was atypical, Agency B was most representative, and Agency C, after the initial year was representative of a minority group. All of the checklist questionnaire items — distribution of program announcements, memoranda or other forms of written communication, group meetings of eligibles, talks by University officials, and direct counseling of employees — were used by agencies to varying degrees and with some modifications. There was little difference in this regard between agency-paying and employee-paying organizations. Respondents from both types indicated heavier reliance on announcements and written
communication but personal contacting of eligible employees was also considered significant. 26

The free comments of respondents regarding effective practice suggested that the time factor — the first program year or after that time — was relevant and that the mechanics of promotion were much less important than the manner in which the agency and its top executives supported the program. Excluding Agency A and its early pressure tactics, only one agency might be described as neutral. The respondent from this organization reported almost complete agency detachment in the sense that the agency and its management had viewed the program neutrally — as a self-improvement activity in which the individual was completely free to participate or not (at his own expense) as he saw fit.

With these two exceptions, respondents indicated that their agencies encouraged, actively or at least positively, the participation of eligible employees. In some instances encouragement was in the form of policy statements and participation was "urged," "invited," or "solicited" as consonant with the agency's general management development plan or activity. In most instances, however, participation was less actively encouraged. In agency-paying organizations, fund limitations sometimes prevented what one respondent termed "over-encouragement."

Asked more explicitly to rate the impact of certain factors, the majority agreed that the agency's general policy toward executive development, and program participation by top officials were the two most significant factors. The first — the agency's general attitude toward executive development activities — was clearly seen as more significant than its attitude toward this
particular program. Support by the head of the agency and his top officials was also seen as very important.

Thus, with few exceptions, respondents reported agency attitudes toward program participation as supportive. Employees were encouraged to participate but were under no apparent compulsion to do so. If the views of respondents are to be accepted at face value, agency policies might be viewed in general terms as positive motivating factors but as factors lacking the element of threat or psychic compulsion.

The influence of the formal organization was naturally more meaningful when employee-paying organizations were considered apart from agency-paying organizations. In the former, respondents agreed that there were no meaningful screening mechanisms involved — particularly after the initial year — in the process of nominating employees for program participation. In practice, the individual himself decided upon program participation. The desire of the individual became the relevant factor and virtually all eligible applicants were nominated, approved, and accepted.

These generalizations held also for individuals paying their own way in agency-paying organizations. However, when the agency paid attendance costs, more elaborate screening procedures were used. The majority of these agencies used supervisory recommendations, committee review, and executive authorization as a method of selecting nominees. In the remaining instances, supervisory recommendation and personnel staff approval was the most frequently used technique.

One might reasonably infer, as in the Agency C example, that the presence or absence of real agency screening would affect the motivations of eligibles.
applying for program entry. In one instance virtually all who were at or above minimum grade levels were "qualified"; in the other instance — when executive potential, significance of responsibilities, and similar factors were at least ostensibly considered — the criteria for being "qualified" became more discrete and thus more meaningful.

The agency environment as it affected the entry motivations of program participants were relevant but not necessarily all pervasive. It is not, of course, the purpose of this dissertation nor of the questionnaire inquiry to define in any complete way this environmental factor. The data obtained, however, were suggestive and they did permit a greater exactitude in selecting participant and non-participant sample for later stages of the research effort.

Although agency climate has been identified as an influence, we can assume that within a given agency this climate would affect the eligible employee group to the same general degree. Since this climate did not control in any complete sense, and, if it is assumed to be a "relative constant" in its effect upon the motivations of all eligible employees, then the individual employee becomes the prime determinant. His personal motivations become the meaningful factors.

In both employee-paying and agency-paying organizations, respondents identified the desire of individual employees to enter the program as the most significant factor in the nomination process. In only one instance was this cited as a non-significant factor. Excluding the University's eligibility criteria, this was the most important single factor reported.
Characteristics and Motivations of Participants

In order to shift the questionnaire's emphasis from the organization to the individual, agency administrators were asked to discuss the typical participant — the general characteristics of participants — the type or types of employees attracted to the program. Their free responses covered both job-related and more personal characteristics and motivations.

While the majority were unwilling to identify either a typical participant or a clearly characteristic participation pattern, most provided some generalizations or some enumeration of types of participants. Some reported primarily in terms of the work factor — "already educated executives who still want to improve themselves as administrators," "the more ambitious person — but not the 'climber' — who is trying to do his present job better," "those interested in developing themselves for advancement in government service," "persons" interested in furthering their government careers," "employees who want to get ahead," "those who have already demonstrated more than average ability, energy, and ambition in their work," "those who take courses for the record" and "those who want to strengthen and improve their work." Some suggested more global characteristics — "those who want to improve themselves," "those who have a sincere desire for personal development," "the mature, conscientious, self-confident and ambitious type" and "the younger, harder-driving sort." A few spoke more concretely of "the professionally trained executive who is naturally oriented to formal education," "the 'academic' type" and "the uneducated executive who wants to make up for his deficiencies."

It is immediately obvious that, almost without exception, respondents ascribed positive motivations to participants in the program. It is also
significant that the characteristics attributed to participants were, for the most part, couched in terms of positive or desirable personality characteristics. This was done both explicitly — in reporting global characteristics — and implicitly — in reporting work-related motivations.

To tie the personal and work motivations more closely together, respondents were asked their opinions of promotion, self-development and job-skills as implicit motivations. They were also asked to evaluate the attractions of "going along" with "the thing to do" and of program participation as a way of impressing superiors.

The majority of respondents agreed that participants viewed the program primarily as an activity which would help their chances for promotion. However, a significant number from both types of agencies disagreed with this statement. This difference of opinion may possibly be explained in terms of a factor referred to earlier, the agency's general attitude toward executive development.

An even larger majority felt that participants were neither going along with a trend nor were they entering the program to impress superiors. This was, of course, reported as a factor in a few agencies. On the contrary, more administrators believed that entry was caused by the tendency of participants to view the program as a self-development opportunity — not as an opportunity to learn practical job skills but, apparently, to broaden their educational experience.

Respondents continued to see program participants in positive terms when asked opinion questions about more global characteristics of participants. Almost all respondents agreed that participants were "better than average" employees. The only dissenters were some administrators from employee-paying
organizations — the minority group from this category that was openly dissatisfied with loose nominating procedures. While most respondents agreed that participants had "executive potential," the level of agreement was somewhat lower.

Two additional items proposed that entry into the program might be influenced by a desire to "feel like an executive" and for the status reason of being "associated with" a university. A clear majority disagreed with both as motivation factors. A significant minority, however, felt that the status element in university attendance was a factor. Although here, as elsewhere in the questionnaire, respondents exhibited a majority pattern of opinion, some, in holding to the minority view, continued to suggest that such factors might be contributory.

As might be expected, respondents reported a broad range of reasons when asked why, in their opinions, non-participating eligibles stayed out of the program. A review of their replies again indicated the significance of both individual personal motivations and attitudes and of work-related viewpoints. Reasons cited included: "personal" reasons; satisfaction with present state of knowledge; unwillingness to give up time; disinterest; the rigidities of older employees' attitudes; the dislike of technicians for "general" education; failure to see any benefit to agency position; the cost of program attendance; the feeling that agency should pay program costs; schedule difficulties; attendance at other institutions; the non-credit nature of courses; lack of course relationship to job qualification standards; outside activities; the attitudes of supervisors toward the program; and variations of these. It should be noted that few reasons for non-participation were ascribed to negative traits of
employees. Most of the reasons given were rational or logical.

Respondents, therefore, tended to see program participation as primarily a personal matter where, for the most part, individual employees participated or did not participate for good and sufficient reasons. When asked to compare participants completing the program with "drop-out" participants — those beginning but not completing the series of courses constituting the basic program — the majority could not answer. Those who did reply could see no readily apparent differences and suggested only dissatisfaction with courses as a reason for dropping out.

Although some group characteristics of participants were available from University records, administrators were asked about formal backgrounds — educational and experiential — of participants. All respondents agreed that participants were generally experienced individuals with more than ten years experience in federal service.

The majority, however, felt that the educational backgrounds of participants from their agencies were generally similar — that backgrounds did not run to extremes. This did not, of course, imply homogeneity of educational background within the total program population. A significant number of respondents in their free comments suggested, in fact, such things as grouping of participants on the basis of education and ability, screening of eligibles for minimum educational qualifications, establishing the program as a "college course for college people," and using written tests for program entry. Thus, while a degree of commonality might well have existed among the executives of a given agency, the character of the organization was itself a differential factor. In reply to another question, agency administrators pointed out that
participants had backgrounds of education and experience in specific technical or professional areas.

Personality Characteristics and Program Participation

The questionnaire responses discussed in the preceding section showed that to some degree program entry was associated, by respondents, with personality factors. Participants were described as compensating for felt deficiencies, as interested in self-development, as seeking self-improvement and, in more generic terms, as ambitious, striving, energetic, sincere, mature, conscientious, self-confident, and hard-driving. These attributes were those suggested by respondents themselves in free-response questions.

In order to test preliminary hypotheses relating to personality and to formulate some more specific hypotheses for further research, respondents were asked directly for their opinions of participants' personality traits. They were also asked to compare participants and non-participant eligibles in terms of these traits. With the exception of three preliminary items, the items were phrased to correspond to differentiating characteristics obtained in previous research using a particular Thematic Apperception Test methodology used in later stages of this investigation.

Most items in this portion of the questionnaire reflected positive attributes which had been shown in previous studies to discriminate between achieving and non-achieving groups. Respondents were asked to judge participants' maturity and adjustment, aggressiveness and decisiveness, objectivity, frustration tolerance, optimism, self-reliance, initiative and sense of responsibility, and attitudes towards others, work, success and problems. Two items were stated in negative terms. Another item asked respondents to
estimate the manner in which participants might see themselves.

Excluding the comments of the Agency A administrator, the opinions of respondents formed a very uniform, positive pattern. Program participants' personality traits were seen in thoroughly positive terms. Respondents agreed that participants were:

1. generally mature and average in personal adjustment, energy and ambition;
2. objective rather than highly emotional;
3. generally optimistic in their outlooks on life; and
4. generally self-reliant and responsible people who tended to accept their responsibilities and were conscientious about their duties and obligations.

Respondents further agreed that program participants saw themselves as leaders — with some of the positive attributes implied in leadership — and that they had positive attitudes toward:

1. others (they were generally trusting of others, sympathetic, grateful for help cooperative);
2. work and success (they had a sincere interest in work, learned from their failures, were perseverant, had realistic goals, and felt that success depended on their own efforts); and
3. their problems (they viewed their problems calmly rather than emotionally, bore up well under strain, and tried to solve their own problems).

They disagreed, and usually quite strongly, with the suggestions that participants might have been somewhat frustrated people who were low in aggressiveness and decisiveness.

The tendency to see participants globally was substantiated when respondents' comparisons of participants and non-participants were examined. In an attempt to force agency administrators to make their judgments as discriminating as possible, they were asked to review the list of characteristics and to indicate the items which applied more or much more to participants.

Although some respondents did not answer or said they could not discriminate,
the majority reinforced the pattern described above. The maturity, objectivity, and positive work attitudes of participants were reemphasized.

It should be remembered that agency administrators were being asked to think of their organizations' participants as a group, in terms of common characteristics applicable to the majority of program participants. They were asked their opinions of these personality items and could agree "strongly" or, as happened more frequently, "generally." There was, of course, no way to determine the exact degree to which respondents made a conscientious effort to evaluate and to discriminate.

There may also have been a number of response sets involved — those involved in the questionnaire itself and those relating to the respondents' organizational roles. Since more than half of the respondents were personnel or training officials, they might be considered to have had somewhat of a vested interest in an executive development activity relating to their agencies and their employees. In a sense all respondents, in supplying information, were acting as spokesmen for their organizations. Most but not all had also been participants in the program being studied and, to some extent, they were appraising their own motives and characteristics as they were generalizing about participants as a group.

Summary and Implications for Related Research

With the factors just stated in mind, it should be evident that this questionnaire study and the data it obtained could yield only general and, in certain instances, tentative conclusions. The consistencies within a given questionnaire and among the total group of questionnaires, the pattern of uniformity revealed, the logical factors differentiating agencies, and the
agreements between questionnaire and interview information did, however, justify certain conclusions.

While the information provided by respondents did not allow us to get at the nuances of organizational environment, it indicated the evident influences which an agency's climate could exert upon the voluntary actions of executives as they sought entry to a university development program. This influence could be direct and pervasive as in the case of Agency A or, to quote a less extreme example from another respondent, it could be exerted through the "almost aggressive and forceful leadership examples of top administrators." It could manifest itself in a positive attitude of encouragement, neutrally indifferent attitudes, or in an ambivalent attitude over a period of time.

The climate for participation was undoubtedly influenced by other, more specific things — by the encouragement and example of the organization's principal executives, by its methods of identifying and selecting employees for program entry, by its techniques for engendering program interest, by its ability and/or desire to provide financial support and, most significantly, by its general attitude toward the whole problem of executive development. The view of respondents that individual desire and interest were the most important motivating factors was logical, however, in the light of the generally permissive or, at best, mildly supportive, climates described.

If an agency climate is more or less constant in its effect, then the personal motivations of eligible employees become the real determinants. While these personal motivations were varying, respondents were generally quite consistent in identifying the work-related and more personal reasons which seemingly underlay the application action of most program participants. As
they perceived the situation, motivations of participants were positive. Although participation may in some organizations have been related to promote aspirations, it was more frequently the result of a desire for self-improvement as a person and as a government executive.

With self-improvement as the primary goal, it is not surprising that most participants were seen as better-than-average employees, individuals who, for the most part, had potential for greater responsibility. While a few may have participated for status reasons or to impress superiors, the majority, although they had diverse backgrounds of education and experience, participated because they were energetic and ambitious and viewed the program as one avenue for improvement.

Many of the eligible employees who did not choose to enter the program failed to do so for understandable enough reasons — because they were involved in other worthwhile activities, because they could not afford the cost, because they did not believe the courses were relevant to their needs or because of family responsibilities. There were, of course, others who were disinterested or lethargic or who were too set in their ways. Their sense of self-satisfaction, their dislike for "this kind of education," their failure to see utility in the program's courses and their unwillingness to give up time or other interests may or may not have covered broader personality traits which were more valid reasons. Or, again, the valuation which the organization placed upon participation may not have provided any significant incentive.

Almost without exception respondents characterized employees in the program as having positive personality orientations and as being more mature, objective and self-determining than their non-participating counterparts. As ambitious
and self-confident people they manifested their optimism — as well as other traits — through participation in an executive development program.

The data obtained from the questionnaire inquiry bore upon the general hypotheses of this study in a number of respects. They may be related as follows:

1. The hypothesis was stated that program participants, as measured by informed opinion and psychological tests, tend to be "better than average" employees. In terms of the informed opinion of agency administrators, this hypothesis was upheld.

2. The hypothesis was stated that a majority of participants, as measured by informed opinion and the U.S. Civil Service Commission's Administrative Problems Test, have executive potential. In terms of the informed opinion of agency administrators, this hypothesis was upheld.

3. The hypothesis was stated that the educational backgrounds of participants run to extremes; that the majority of participants have either college degrees or little or no college training. While the majority of respondents disagreed with this initial premise as far as participants within their own agencies were concerned, a minority agreed. Related comments of some respondents suggested that heterogeneity of educational background may be a factor when participants are considered on a program-wide basis. This hypothesis remains to be tested.

4. The hypothesis was stated that participants with more formal educational background tend to participate in the program to a greater degree than those with less formal training. The questionnaire data did not bear on this hypothesis.

5. The hypothesis was stated that a large number of program participants are in staff rather than in line positions. The questionnaire data did not bear on this hypothesis.

6. The hypothesis was stated that participants whose program fees are paid for by their agencies are at higher grade levels and have more formal education than participants paying their own fees. This questionnaire data did not bear on this hypothesis.

7. The hypothesis was stated that a majority of participants tend to relate the program to promotional opportunities. The majority of respondents agreed with this proposition but a significant minority disagreed.
8. The hypothesis was stated that a majority of participants believe the program provides an opportunity to learn practical executive skills. A clear majority of respondents disagreed. While dissatisfaction with program courses was cited by some as the reason why some participants dropped out of the program, the nature of this dissatisfaction was not elaborated upon.

9. The hypothesis was stated that program participants are generally mature and average in personal adjustment, energy, and level of aspiration. Almost without exception and in both free comment and checklist rating, respondents upheld this hypothesis.

10. The hypothesis was stated that participants tend to be low in qualities such as aggressiveness and decisiveness and high in frustration and objectivity. The majority of respondents disagreed strongly with the estimate of the first three characteristics, but agreed that participants were highly objective.

As outlined in the preceding chapter, a number of these hypotheses were tested further in their original form, using different samples from the 1954-58 participant population. Other hypotheses were reformulated on the basis of initial research findings, and these were posited more precisely for subsequent testing.
Notes

1. A questionnaire was constructed by the author after review of a number of instruments used by other investigators studying federal employee groups. The draft was discussed with a number of professional colleagues — personnel and training officials in Chicago federal installations — with administrators of the University’s program, and with the author’s principal committee advisor. The draft was also tested through administration to three professional colleagues. The revised questionnaire used in the agency inquiry is reproduced as Appendix I. The questionnaire employed both free response and checklist items. Summaries of responses to checklist items are included in the appendix.

2. Eligible employees were those meeting the criteria announced by the University and employed by the interagency committee established to pass on agency nominees. The principal criterion — and the only one generally used operationally — was grade level.

3. The author is grateful to Mr. Thomas M. Calero, the then Associate Director of the Center for Programs in Government Administration, for his assistance with this phase of the inquiry.

4. Throughout this chapter the terms agency administrators and respondents will be used interchangeably.

5. Eighteen of the thirty agency administrators on the original list belonged in this category.

6. In these cases, the "free" comments of both were used and the two respondents jointly answered checklist items.

7. Chapter II summarized program enrollment statistics for the four academic years and the one academic quarter comprising the time span of the questionnaire inquiry. Since some participants from agency-paying organizations attended at their own expense, paying participants can be estimated at approximately fifty percent of the total enrollees.

8. The agencies in the sample contributed slightly over ninety-two percent of the 1954-58 program enrollment. The remaining percentage was distributed among agencies participating during only the initial academic year, 1954-55. The sample was considered, therefore, as almost completely representative of the 1954-58 participant population.

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9. Seven responding agencies were responsible for over fifty-seven percent of program enrollment. Agencies failing to respond had contributed fairly small enrollments, the greatest being slightly over three percent of the total.

10. Eleven agency-paying and eight employee-paying organizations responded. The former group accounted for over fifty-one percent of the participation; the latter group contributed almost thirty-one percent.

11. The high rate of response was probably due to a number of factors — the fact that most respondents knew the researcher personally and/or professionally, the informal support of the local Federal Training Council, the general level of agency interest in the program, and the promise of confidentiality and anonymity of agency.

12. The response and participant coverage obtained and the initial nature of the questionnaire inquiry made further efforts seem unnecessary.

13. See questions 1, 2 and 3 of Part I of the questionnaire.

14. See question 5 of Part I and question 2 of Part III.

15. Each interview was quite intensive, with discussion lasting from four to six hours. While the content of each interview was held closely to the questionnaire items, respondents were encouraged to discuss each item or group of related items as fully as possible.

16. On the basis, Agency A had been responsible for almost eleven percent of the participants and for over seven percent of the "certificate graduates."

17. Those opposed to agency support argued for a homogeneous program keyed directly to the organization's operational problems.

18. Conclusions, generalizations and specific statements reported are, of course, based upon notes taken during the three interviews.

19. It is interesting to note that the general agency situations described in all three organizations have apparently continued to the present. While many agencies have changed their practices as a result of the Government Employees Training Act and the increasingly great emphasis upon training and career development, the relationship of these three agencies to the program has remained static since 1958.

20. Agency B thus had almost eight percent of the participants; it contributed over twelve percent of the "graduates."

21. With the passage of the Government Employees Training Act, this agency has bolstered its own internal executive and management training programs. Participation in the program has remained insignificant since 1958.
22. Thus, Agency C enrolled almost six percent of the total and "graduated" almost six percent.

23. When the original discriminating selection standards were relaxed, very few of those whose applications had been originally disapproved sought entry into the program.

24. Although Agency C has used its post-1958 out-service training authority to pay partial tuition costs for lower-level supervisors attending the University's management program, only two of its executives have apparently been interested in attending the executive program on this basis.

25. The questionnaire responses for the three interview agencies are included in discussing the overall response.

26. For the most part, statistics on questionnaire items are not cited in either the body or the notes of this chapter. The item totals — for check-list items only — are included in the appendix. The first sub-figure indicates the response from agency-paying organizations, the second from employee-paying organizations. Where totals do not add up to nineteen, a respondent or respondents failed to answer the item or, as stated in the body of the chapter, the response of an agency has been purposely excluded. In generalizing statements, the terms "more," "a majority," or any comparative form is used when at least half of the respondents have answered in a given way. The terms "most," "a distinct majority," or any superlative form is used to indicate at least two-thirds agreement. The terms "significant," "significant number," "number," "minority group," and "some" are used when at least a third but less than half of the respondents followed a pattern.

27. The belief in executive development activities in a generalized and somewhat indiscriminate way has been commented upon by many. The concept rather than the particular program has very often been the focus for both positive support and negative criticism. The current personnel literature suggests, however, that this may well be changing as individuals and organizations become more sophisticated about executive development theory and practice.

28. The direct personal experience of the author is that this general procedure extended to the interagency committee established to pass on agency nominees before submission to the University. Eligible applicants were very rarely disapproved. Eligibles paying their own way naturally tended, therefore, to view the application-nomination process as insignificant.

29. Most agencies paying program costs had some employees attending at their own expense.

30. This does not mean, however, that these selection processes were necessarily stringent. A significant number of respondents wanted their organizations to use more rigorous procedures. This inference is drawn
from free responses to question 5 of Part I of the questionnaire.

31. See question 1 of Part II.

32. In Agency A, Agency C and in another agency.

33. The University's program literature and its administrators had consistently emphasized this position — that the program was broadly developmental rather than narrowly skilled-oriented.

34. See items k) and l) in question 2 of Part II.

35. See items i) and j) in question 2 of Part II.

36. See question l) in Part II.

37. See question 3 in Part II.

38. See items a), b) and c) of question 2 in Part II.

39. Free responses from three respondents suggested that this item, item b), question 2, Part II, was phrased somewhat ambiguously.

40. Comments of this sort were made in response to question 5 of Part I and question 2 of Part III. The Agency B respondent claimed that the heterogeneity of participants in terms of their educational backgrounds was a major factor in causing many of his agency's participants to leave the program. On the other hand, the Agency A respondent stated that his participants — virtually none of whom had college backgrounds — felt out of place in the program. Both reported during the interview situations that these expressed attitudes of participants may well have disuaded other eligibles from entering the program.

41. The opportunity for executives of varying backgrounds to obtain insight into and understanding of the common elements in administration and management is, of course, one of the reasons frequently advanced for the existence of university executive development programs.

42. See items p) through v) of question 2 in Part II.

43. This section precedes question 3 in Part II. Item totals for this section reflect a weighting of one point for "more" and two points for "much more."

44. This methodology, Arnold's sequential analysis, is discussed in detail in subsequent chapters dealing with projective test comparisons of participants and non-participants.

45. These studies are also discussed in conjunction with sequential analysis methodology.
16. Responses also substantiated prior opinions of participants as better-than-average employees with executive potential who viewed the program primarily as a self-development activity and, to a somewhat lesser extent, as an activity aiding their chances for promotion.

17. As one agency-paying respondent put the matter, "we wouldn't be spending the money except as an investment in very good people."
CHAPTER V

PERCEPTIONS OF A PARTICIPANT SAMPLE:
CHARACTERISTICS AND MOTIVATIONS

During the autumn quarter of the 1958-59 academic year, the University of Chicago administered an elaborate questionnaire -- its 1958 Anonymous Student Inventory -- to its evening student population. This inventory was designed as a primary instrument in a two-year self-study effort, a project financed by a grant from the Fund for Adult Education. Inventories were distributed in the classroom; they were completed by most of the students in attendance that quarter; and they were returned through the instructor or by mail.

The inventory sought a definitive statement on the nature of the student body. It collected information about the student's social background and, in Havighurst's terms, information about the student's family, work, citizen and leisure roles. It also attempted to learn more about the student's relationship to adult education -- his entry into the University, his evaluation of his experience there, and his identification with adult education in more general terms.

The students involved in the inventorying process included those in the academic program -- in courses at the undergraduate and graduate levels -- as well as those in major non-credit curricula, the Basic Program of Liberal Education for Adults, the Fine Arts Program, the Mass Media Program, and the
programs of the Office of Special Services to Business and Industry. In addition, the survey included students from the Reading Center and Special Courses programs, and management and professional participants from within the Center for Programs in Government Administration. It did not originally include students from the program with which this dissertation is concerned -- the Program of Executive Development for Federal Personnel.

To obtain comparable personal history data for this program group, the author had to obtain the permission and cooperation of College authorities. Having done so, he administered the student inventory to federal executives attending the program during this same autumn 1958 quarter. This chapter is based, therefore, upon the data so obtained and, to a lesser degree, upon other student data collected by the University in its total inventorying process.

After a brief summary of the inventory's distribution, the characteristics and motivations of federal executives are discussed -- both generally and in terms of a number of this dissertation's hypotheses. Subsequent sections are concerned with some comparisons between the federal executive sample, a lower-grade-level group from the federal management training program, and relevant non-governmental groups from other College programs.

**The Federal Executive Inventory: Distribution and Response**

As Chapter II indicated, one hundred and twenty-three students were enrolled in the Program of Executive Development for Federal Personnel during the autumn 1958 quarter. Of these, thirty-seven were enrolled in seminars at the Great Lakes Naval Training Center, and the remaining eighty-six were attending the University's Downtown Center. The Great Lakes group was excluded
from the author's student sample because it constituted a somewhat atypical group, and because some personal history data for this group were already available from agency records.

In their inventorying process, College officials had distributed the inventory to class groups on a "surprise" basis — that is, without prior announcement (except to the instructors) that the instrument would be used and distributed. This was done, of course, to minimize sample bias on the assumption that student absences would be due to the normal range of reasons. The sampling was restricted to those present at the time of inventory distribution and absentees were not involved. The author used the same procedures in obtaining data from federal executives.

On this basis, inventories were distributed to the seventy federal executives attending four different program seminars at the time of distribution. Sixty-five returned completed inventories at the next seminar session or through the mail. Since they comprised almost ninety-three percent of the inventory sample and over seventy-five percent of the Downtown Center's quarterly program enrollment, no attempt was made to obtain inventory data from the few non-respondents or from absentees.

As mentioned previously, eight hundred and fifty-four executives had participated in the program during its first four academic years, from 1954-55 through 1957-58. Since one hundred and fifty-two had attended the program at Great Lakes, the four-year Downtown Center executive program enrollment amounted to seven hundred and two. Thirty federal executives entered the Downtown Center program for the first time during the autumn 1958 quarter. Thus, seven hundred and thirty-two federal executives participated at the Downtown Center through
this quarter, and inventory respondents constituted almost a nine percent sample.9

Private payment enrollees comprised about thirty-seven percent and agency supported participants about sixty-three percent of the inventory sample10—the same proportions as during the first four years of the program.11 A general check of participant grade levels and agency representations indicated that the inventory sample was typical of the program's participation pattern of the preceding years.12 It was, perhaps, not completely representative of those participating during the first year or so of the program.13 It was, however, very well representative of the 1956-57, 1957-58 and 1958-59 participant groups, and it generally constituted a representative sample.

While the inventory was not developed for specific use with a federal executive group, its general purpose—a comprehensive description of the College's student body—was directly relevant to the interests of this dissertation.14 It was, moreover, an excellent general questionnaire prepared by a recognized professional group.15 The inventory had already been administered to samples from the Center's Program of Management Training16 and from other College groups17—providing, therefore, an opportunity for some intergroup comparisons.

For these reasons, the University's student inventory offered an opportunity to obtain relevant data bearing upon executive program participants' characteristics and motivations. The data bore upon hypotheses concerned with educational backgrounds and participation, and with program motivations.

Characteristics of Federal Executive Program Participants

Fifty-eight of the sixty-five federal executives in the inventory sample
were male — a proportion similar to the four-year pattern but a somewhat lesser proportion than that of the Detroit-area federal executive program studied by Mowitz. All reported that they were citizens of the United States. Over ninety percent belonged to the white race.

The average age of the executive sample was forty-two, well within the executive program ranges reported by Bunker. While their ages ranged from the lower thirties to the upper fifties, almost half were in the thirty-six through forty-five age group, with the majority of the remainder above forty-five — the same general pattern identified in the Detroit executive program. The average of forty-two, was, as might be expected, considerably lower than those of the upper-grade level federal executives in the U.S. Civil Service Commission study and in the Brookings Institution's first program group.

A distinct majority were married to their original spouses and only eight were single or divorced. All but one were born within the United States. A majority owned their own homes while almost a third were renters. A significant number were native Chicagoans. Annual incomes ranged from six to fifteen thousand dollars with a significant number in the eight to ten thousand dollar range. Almost half the subjects had taken part in voluntary community service work. All had at least one organizational affiliation in addition to church membership. Over ninety-five percent were raised in an organized religion and almost eighty-five percent professed a current belief in a definite religious position.

While these data did not, of course, point toward any definite conclusions, they suggested that a distinct majority of the federal executives reflected the kind of middle-class American values which Henry has ascribed to the successful
executive. If the typical executive in the sample is seen as a man in his early middle years who is still married to his first wife, who owns his own home, who takes part in community service work, who is a church member and a member of one or more other organizations, then he clearly approaches the orientations to family responsibilities, religious faith, and social service activities which Rosen has characterized as typical traits of the American executive.²⁶

As might be anticipated, federal executives revealed wide diversities in educational background although all had attained at least a high school diploma.²⁷ Comparison with educational data collected in other studies of the federal executive indicated that the Chicago program group was in between the top executive groups identified by the Hoover Commission and the U.S. Civil Service Commission, and the Detroit executive program participants described by Howitz. The Hoover Commission study concluded that eighty percent of its upper-level executives had college degrees and that graduate work was prevalent. The Commission investigation reached a similar conclusion in identifying the typical federal executive as a person with a bachelor's degree, who had done some graduate work. In contrast to these federal executives at the GS-15 and above level, executives from the Chicago program sample were less formally educated. While a majority (fifty-six percent) had attained at least a bachelor's degree, only a minority (twenty-nine percent) had done some graduate or professional work. While fifteen percent had never attended college, only three percent in the Commission study fell into this category. At the same time, the Detroit program pattern was still different. In the federal executive sample drawn from that program, only forty percent had attained a college degree and thirty-one percent had no education at the collegiate level.²⁸
Specific characteristics of the executive sample could be cited in elaborate detail. However, many student inventory items were grouped in such a way that broader dimensions of student characteristics might be determined. In a paper summarizing student inventory data for all of the College's government participants, beforehand used mobility, and activities and interests, as two focal points for consideration. Federal executives in this specific research sample may also be described in these terms.

Without considering at this point the possible relationship between mobility and motivation for education (program participation), it should be noted that the executive group showed evidences of mobility which differed from area to area. In terms of geographic mobility, some forty-three percent had lived in the Chicago area all or most of their lives. This was a somewhat lesser proportion than the fifty-four percent of the total University inventory sample. Sixty-five percent had lived in the area more than ten years, in contrast to a College proportion of seventy-two percent. Less than ten percent expected to move away from the area within a five-year period, while about twenty percent expected to move but did not know where. Almost eighteen percent planned to change their residence site within the Chicago area.

The executive sample revealed, therefore, significant percentages as far as actual and anticipated geographic mobilities were concerned. This degree of mobility was indicated despite the fact that the majority did not anticipate a move of any kind and a majority owned their own homes.

Social mobility may be inferred from the fact that over fifty-six percent of the group had acquired at least a bachelor's degree, whereas only six percent of their fathers and less than two percent of their mothers had attained a
Eighty-five percent had some college work as compared to fifteen percent of their fathers and three percent of their mothers. Almost half reported that few or none of their family members had college backgrounds. At the same time, ninety percent reported that half or more of their work associates had college backgrounds. The same percentage indicated the same degree of collegiate education among their friends. While these data did not in themselves prove the aggressive and ambitious traits which Henry and Rosen have attributed to the executive, they clearly substantiated the social mobility which Bendix identified as typifying the federal executive.34

As far as job mobility was concerned, seventeen percent of the federal executives sampled had held only one or two jobs since completing full-time schooling. Some forty percent had held three or four adult positions, while the remaining number had from five, to more than ten, such jobs. The inventory item was such, however, that responses did not indicate to what degree these "jobs" were within different organizations — governmental and/or private.35 Nor did they indicate to what extent job movements were horizontal (across different occupations) or vertical (upward or downward within an occupation). In view of the normal mobility which a career executive might experience within a federal organization, it is very likely that some respondents interpreted job changes to include promotions or reassignments within their agencies.

Both the Hoover Commission and the U.S. Civil Service Commission inquiries revealed limited occupational mobility among federal executives — the former describing executives as mobile to a limited degree and the latter, as evidencing little mobility.36 It is most probable that the Chicago program executive group fitted this pattern. It is clear, for example, that most were career civil
servants with limited experience in private organizations. Registration information for two hundred and fifty-eight executive participants (1951-58) indicated that thirty-eight percent had at least twenty years of federal civilian service at the time of program entry. Sixty-three percent had fifteen or more years of service, and eighty-five percent had ten or more service years.37

It is also probable that the mobility of federal executives within their own organizations was largely vertical. In a separate investigation, the author had studied the occupational histories of forty participating executives in a Chicago federal agency.38 Although five basic mobility patterns were tentatively identified, most histories involved varying degrees of vertical occupational movement. Almost eighty-three percent of the cases involved either completely vertical movement or generally consistent vertical movement with only very minor horizontal job shifts. The agency studied was considered to be representative but the patterns revealed there may or may not have been typical.

In any event, it appeared that whatever horizontal mobility might have existed among the executive sample had stabilized by the time of inventorying. Over ninety-one percent of the executives considered their jobs as part of their permanent primary careers. Ninety-two percent expected to be in the same occupation within a five-year period.

While these responses indicated a very high level of job satisfaction, related responses evidenced a considerable degree of optimism toward the future. Seventy-six percent of the executives anticipated being at a higher level of responsibility within five years. Some ninety-three percent expected their incomes to increase during the same span -- a normal expectation in view of salary procedures (automatic increments) within the federal civil service. More significantly, however, a full fifty-five percent expected their incomes to rise
by at least two thousand dollars. Since this amount considerably exceeded normal increments and clearly exceeded the amount involved in a single grade increase, it represented an ambitious, though attainable, goal.

Outside of the work environment, the activities of the Center's student-executives were varied but largely sedentary. "Visiting and entertaining friends" (over eighty percent) and "enjoying the family at home" (over seventy percent) were most frequently cited as important leisure activities. A majority (almost seventy percent) included reading as an important leisure activity and a somewhat lesser majority (sixty percent) reported that "visiting and entertaining relatives" was important. Other pursuits mentioned by a significant number of executives were sports (swimming and bowling in particular), attending motion pictures, and home "do-it-yourself" projects. Slightly more than half listed seeing plays, and over a third attended lectures. Fewer than a third attended symphony concerts, recitals, opera or ballet performances, or visited art galleries.

A recent study of the Chicago area market indicated that — indicated that — in the average month — about one-third of Chicagoans attended a movie and some sixteen percent went bowling. Some seven percent attended a lecture, the same proportion attended the theater, and some five percent attended a concert. It is evident, therefore, that federal executives in the sample exceeded the pattern of leisure activities of the general Chicago population in all these areas — that they were above all of the averages to varying degrees. Many more federal executives attended the theater (in the sense of reporting "seeing plays") and lectures, somewhat more attended concerts, and a slightly greater proportion went to movies and bowled. This was, of course, to be expected, since virtually the entire executive sample fell within the upper class
and upper middle class typologies used in the market study.41

Responses which concerned reading habits — a major factor relating to potential educational interests — indicated that some twenty-two percent had read no books during the two months preceding the inventory. In the same period, fully sixty-nine percent had read one or two books which were course related; forty-two percent had read one or two books unrelated to course work. Sixteen percent had read three or more books related to program courses. A majority stated that some of the books they normally read bore upon their occupations, while a significant number stated that at least half were related to their work. Approximately ninety-two percent read some periodicals which related to their occupations.

Apart from these periodicals, significant numbers read Readers Digest, Life, Time, Newsweek, U.S. News and World Report, and the Saturday Evening Post with some degree of regularity. Slightly more than ten percent read National Geographic and Atlantic Monthly, and about ten percent read Fortune or Business Week. Very few read Nation, New Republic, Progressive or the Reporter. Most federal executives regularly read a Chicago paper and a significant number read The New York Times, The Wall Street Journal or The Christian Science Monitor on an occasional basis. None of the executives read more esoteric journals such as Partisan Review, Downbeat or Art News. Nor, for that matter, did any admit to reading Galaxy or Confidential.

A majority had participated quite actively in organizational life. In the five years prior to the inventory, almost a quarter had held office in a religious organization. A majority had been officers in civic or social bodies and a significant number had attended organizational meetings regularly. As mentioned earlier, almost half had engaged in voluntary, unpaid, community
In a political sense, a slight majority of the respondents were Democrats or leaned toward Democratic candidates; of the remainder, the most significant number were Republicans or leaned in that party's direction. More importantly perhaps in terms of civic responsibility, almost all (ninety-eight percent) voted in national elections. Most reported voting in state and local elections and a majority stated that they voted in primaries.

It was not possible to tell from these data the degree to which federal executives in this sample had expanded their interests beyond the work role. In terms of the set of developmental tasks posited by Havighurst and Orr, the data could only indicate that a significant number — perhaps in some instances a majority — were achieving a degree of satisfaction in "achieving mature social and civic responsibility," "making a satisfying and creative use of leisure time," "becoming or maintaining oneself as an active club or organization member," and "becoming or maintaining oneself as an active church member."

It seemed more certain, however, that the work role was a principal source of satisfaction for executives participating in the program — as it is for many men in our society, particularly for those from the upper middle class strata. Executive responses concerned with level of job and career satisfactions and expectations, would relate well to the high work performance rating scale devised by Havighurst and Orr. In the task area of reaching the peak of one's work career, they suggest the following guidelines:

Present job holds an important place in his work career — probably regarded as the high point. He has a feeling of working productively and efficiently, with materials or people, whether in a position of authority or low status.
Is well satisfied with his choice of vocation. Derives satisfaction from it in terms of feeling secure about his contribution and value of his services. Feels that he is using his talents and pursuing his interests. Gets some of the following satisfactions from his work: prestige, self-respect, feeling of being of service, enjoyment of friendships made at work, feeling of being creative, new and interesting experience.\(^{45}\)

This is not to say, of course, that some of the executive participants did not come closer to medium performance in their work careers. But, as the preceding chapter indicated, agency administrators quite consistently saw executive program participants as better-than-average employees who, at least by implication, were far from being self-satisfied. The self-improvement motives ascribed to participants, and the positive personality characteristics attributed to them, support the inference that most were performing their work roles very well. Inventory data tended to confirm the opinion of agency administrators that participating executives were ambitious and optimistic.

**Motivations in Program Participation**

An initial hypothesis of this dissertation held that "the educational backgrounds of participants run to extremes; the majority of participants have either college degrees or little or no college training."\(^{46}\) The rationale underlying this proposition was based on the assumptions that the college trained (graduate) executive would be predisposed to program participation; that the executive with relatively little collegiate education would also be predisposed (to compensate for his deficiency); and that each of these two directional influences would be generally equal in effect.

Agency administrators generally agreed that this hypothesis did not hold true for participating executives from their individual agencies. They felt that the educational backgrounds of participants from their agencies were generally similar,\(^{47}\) confirming the suggestion of Novitz that federal agencies might have
their own patterns of participant characteristics. These administrators were, of course, evaluating their own participants and a number suggested the existence of participant differences on an interagency basis.

Inventory data relating to the educational backgrounds of executive participants provided another opportunity for testing this hypothesis. If the hypothesis were to be upheld, there should have been a bimodal distribution of participants' formal education, with an approximately equal distribution for each extreme category, and a much lesser remaining proportion in the intermediate educational category.

As mentioned earlier in this chapter, over fifty-six percent of the executive sample had obtained a bachelor's degree, had completed some graduate work, or had obtained a graduate or professional degree. Some six percent had completed three years of college-level work and approximately sixteen percent had completed two collegiate years. If this twenty-two percent without a degree is taken to constitute an intermediate group, and if the remaining twenty-one percent which had acquired less formal education is construed as a group "having little or no college training," the hypothesis is not upheld. While a majority had college degrees, this group was not at all balanced by the other extreme category — individuals with little or no college training. On the contrary, most executive participants (almost eighty percent) were college trained in that they had at least a junior college level background.

Thus, while the hypothesis would have held true for the Detroit federal executive program group, it was not substantiated by inventory data as far as Chicago program executives were concerned. The educational distribution pattern may not, of course, have been unique to federal executives participating
in the program. It may have reflected the pattern normal to the Chicago federal executive population. This hypothesis will be tested in Chapter VII.

It had also been hypothesized that 1) a majority of participants tend to relate the program to promotional opportunities and that 2) a majority believe the program provides an opportunity to learn practical executive skills. As noted in the preceding chapter, a majority of agency administrators agreed with the first proposition — while a significant minority disagreed — and a clear majority of these informed respondents disagreed with the second.

Responses to related items within the inventory did nothing to substantiate either of the two hypotheses. While executives said they were influenced in entering the program by a number of factors — the reputation of the University, the program's announcement literature, and financial support by the agency were mentioned as significant considerations — it seemed clear that the more specific motivations for program participation were broadly rather than narrowly occupational. An overwhelming number, some ninety-five percent, reported that they enrolled because of a desire to increase vocational competence. Almost eighty percent reported that this objective was of primary importance.

This did not imply that either promotion or job skills were basic objectives of the majority of participating executives. For example, none of the executives reported the desire to change jobs or vocations as either a primary or secondary objective. Although most respondents reported that changes were taking place in their work situations at the time of program entry, their points of view toward their life situations were positive. Over sixty-three percent were satisfied with their present situations, and virtually all of this
group anticipated an even better future situation. All of the remaining thirty-seven percent — the dissatisfied — anticipated "a good many improvements in the future." And, as mentioned previously, a majority (seventy-six percent) expected to continue in the same occupational area.

Over sixty percent said that they were looking for intellectual enrichment and the stimulation of ideas in entering the program. This was cited as the primary objective by over ten percent. A majority also reported that they hoped to gain self-confidence through intellectual growth and achievement. A significant number mentioned knowledge for purposes of self-understanding as an influencing motive.

Thus, while some executive participants may well have been motivated by hopes of promotion or specific skill acquisition, the principal motivation for program participation seemed to have been broadly rather than narrowly occupational. It has already been mentioned that the Program of Executive Development for Federal Personnel had been clearly and consistently described — by University administrators and agency officials — as broadly developmental rather than narrowly skill-oriented. The author's personal experience with the seminars in the program's curriculum and with the mode of instruction substantiated the fact that this focus was carried out in practice. When asked whether their experiences in the program had fulfilled their original expectations, forty-five percent stated that the program was fulfilling their primary objective. Fifty percent felt that they were partly achieving their principal goal. This too might indicate a majority interest in broad rather than narrow vocational goals.
Comparison with a Lower-Level Federal Sample

As Mowitz pointed out in studying the Detroit programs for federal personnel, differences between higher and lower graded participants were noticeable in terms of degree of formal educational background.\(^52\) Using another inventory sample of eighty-seven federal employees at the sub-executive level, it was possible to compare the educational attainments of federal executive participants and a lower-level federal participant group.

Whereas fifty-six percent of the executives had at least a bachelor's degree, only twenty-two percent of the federal management program group had reached a similar level of formal education. While all of the executives had graduated from high school, four percent of the management sample had failed to obtain a high school diploma. In the comparative terms used by Mowitz, the difference was also marked. In the Detroit programs, sixty-nine percent of the executives and forty-three percent of the managers had attended or completed college. The Chicago programs' federal samples indicated that eighty-five percent of the executives and sixty-three percent of the managers had attended or completed college.\(^53\)

Additional comparisons between the two Chicago program samples indicated a greater proportion of Negroes (eighteen percent as compared to six percent) in the lower-level management program. The management group also had a much higher degree of female participation (thirty-seven percent instead of eleven percent). There was not, however, as great an age differential as might have been expected. As has been noted, some seventy-six percent of the executives were in the thirty-six through fifty age group. Sixty-two percent of the management sample were within this same age range. While seventeen percent of each sample was
between thirty-one and thirty-five, eleven percent of the executives and slightly over ten percent of the managers were over fifty. This finding tended to substantiate Mowita's suggestion that a program of this type might attract a "training prone" group of middle-aged managers at lower-middle positions in their organizations.

The two samples were almost identical as far as citizenship, American birth, and Chicago origin were concerned. A lesser proportion of management program participants (fifty-six percent as contrasted to seventy-six percent) were married to their original spouses and a much higher percentage (twenty-seven as compared to eight) were single. The management group's income averaged two thousand dollars less than that of the executive group. A lesser proportion of managers -- with over a third of the sample women -- took part in voluntary community service work (a third as contrasted to almost half).

In terms of geographic mobility, only slight differences existed between the two groups. As might be expected from the socio-economic differences observed, a much lesser proportion of the management program participants (thirty-one as contrasted to sixty-one percent) owned their own homes.

The executive group also seemed to be more socially mobile. Executive participants (fifty-six percent of whom reported a minimum of a bachelor's degree) indicated that six percent of their fathers and less than two percent of their mothers had obtained a degree. Management participants (twenty-two percent with a bachelor's degree or more) reported that thirteen percent of their fathers and six percent of their mothers had a degree. In terms of educational achievement, executive participants had attained a significantly greater degree of social distance from their family situations. While nearly
fifty percent of the executives stated that few or none of the members of their families had college backgrounds, only twenty-six percent of the managers came from families with this kind of a non-collegiate background.

Although somewhat less dramatically, the same differential existed when college training in general was considered. Eighty-five percent of the executives had completed some college work; fifteen percent of their fathers and three percent of their mothers had some college training. Among the management group, sixty-three percent had attended college, but twenty-six percent of their fathers and ten percent of their mothers had also had some amount of college training. Ninety percent of the executives had both friends and work associates who were largely college trained. Sixty-eight percent of the managers had work associates and seventy-seven percent had friends, the majority of whom had college backgrounds.

Participants in both programs manifested very similar job mobility patterns. Although both groups were similarly satisfied with their vocational choices, their expectations of future mobility were somewhat different. Eighty-two percent of the managers (as compared to ninety-three percent of the executives) anticipated an increase in income, but a much lesser proportion — twenty-nine percent instead of fifty-five percent — expected the kind of increase which could come only from a significant kind of a promotion.

Management participants also entered their program primarily to increase their vocational competence. A lesser proportion, however, (eighty percent rather than ninety-five percent) felt that they were achieving, in whole or in part, their primary program objectives. Although this difference and the difference in income expectations might conceivably have reflected a lesser
degree of optimism, it is more likely that it indicated a normally realistic attitude toward job and program. Fully seventy percent of the management sample (as compared to sixty-three percent of the executive sample) indicated satisfaction with their ways of life and virtually all anticipated an improved situation. 59

Comparison of the two samples seemed to have indicated that the executive group, in occupying a higher socio-economic position, was markedly better educated. Executive participants demonstrated significantly more social mobility and — in terms of the less-than-expected age differential between the two samples — more career success. Their expectations of further upward career mobility were also greater than those of the lower-graded management program participants.

Comparison with Non-Governmental Samples

An initial attempt to summarize Student Inventory findings on a college-wide basis was carried out by Dannhauser during 1959. 60 His summarizations on an item-by-item basis were based on two thousand five hundred and twenty-eight completed questionnaires, representing almost one-half of the College's total autumn 1958 quarterly enrollment. 61 Although careful to point out the implicit limitations of his data, Dannhauser's preliminary interpretations provided some provocative insights which permitted analysis of executive program responses in terms of their relationships to the responses of other College program groups. 62

Of the nine programs comprehended by the self-study inventory, 63 two were generally similar to the executive program in that they were predominantly male, vocationally-oriented programs. These were the programs of the Office of Special Services to Business and Industry and of the Center from Programs in the
mass Media. As described by Hruby, the former offered programs of a broadening
and humanizing nature, for business men and for those preparing for a career in
business. The mass media courses were designed for men and women engaged in
publishing and the graphic arts. These two program samples provided, therefore, the best basis for comparison. In both program areas, the overwhelming
proportion were adult practitioners rather than pre-service or in-service
employees.

Thus, for the most part, comparisons were confined to these groups, providing, as a result, some indices as to how federal executive participants
differed from their participant counterparts in business and industry, and
within a particular area of business activity. Comments are confined, of course,
to those inventory areas where the items and the response patterns provided some
appropriate bases for inference. For convenience, the terms business and media
are used to refer to the two comparison samples.

Some commonalities and some differences were immediately apparent. The
federal executive group was somewhat older, averaging forty-two years of age in
comparison to forty for the business group and only thirty for the media group.
While all three groups were predominantly white, a few Negroes were among the
federal group. All groups exhibited very similar patterns of individual and
family national origins. As would be expected in view of the age differential,
a much greater proportion of the media sample was single (forty-two percent as
compared to ten percent of the business sample and eight percent of the federal
executives).

As a group, federal executives were home-owners to a greater degree than
were business and media participants. Their incomes were also higher on the
average, with the business sample being closer to the federal pattern.70 In view of these difference, it was not surprising that the federal and business participants belonged to community organizations and participated in community services affairs to a decidedly greater degree than did media participants.71

The differences between the three samples, in terms of participants' formal education backgrounds, can be seen from the following table.

**TABLE V**

**FORMAL EDUCATION OF FEDERAL, BUSINESS, MEDIA SAMPLES**

<table>
<thead>
<tr>
<th>Amount of Education</th>
<th>% Federal Sample</th>
<th>% Business Sample</th>
<th>% Media Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>High school or equivalent</td>
<td>15</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Some college training</td>
<td>29</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>27</td>
<td>12</td>
<td>42</td>
</tr>
<tr>
<td>Some graduate work</td>
<td>15</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Master's degree</td>
<td>11</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

In general, it would seem that federal executives were somewhat better educated than business program participants, and somewhat less formally educated than media program participants. Fifty-six percent of the executives had attained at least a bachelor's degree, in contrast to forty-eight percent of the business employees and sixty-two percent of the media sample. A greater proportion of the business group had reached only the high school graduation level.

It would be difficult, however, to draw any conclusive inferences from these data. The relative youthfulness of media participants — an average of thirty years of age — might well be contributory in explaining the high proportion of bachelor's degrees and general college training within this group.
It may be that the federal executive and business groups were really more achieving in this regard when the age differentials are considered. At the same time, the lesser percentage of post-graduate training among the media group might also have reflected their lesser age average. The diversity of background -- mentioned earlier in connection with the federal executive sample -- was evident for all groups, although the media sample was much more homogeneous.

A full sixty-six percent had some college training or bachelor's level training.

Although the inventory data were again too fragmentary to be conclusive, they suggested a greater degree of social mobility -- in terms of comparative educational achievement -- for the federal executive group. As previously mentioned, almost fifty percent of these executives had come from families where few or none of the family members had college backgrounds. About a third of the business sample and less than a quarter of the media sample had come from such "non-collegiate" families.

All three groups considered their jobs to be an integral part of their permanent primary careers, but federal executives were somewhat more career minded in the sense that more expected to be in the same occupation during a five-year future period. Ninety-two percent of the federal group felt this way (in contrast to eighty percent of the business sample and seventy-three percent of the media sample). Federal executives were, if anything, more optimistic about future income than were their business participant counterparts. Fifty-five percent (as compared to forty-three percent) anticipated at least two thousand dollars more within five years. The youth factor and the income opportunities inherent in their professions probably caused the even greater expectations of media participants. A majority of this sample expected this
kind of an increase, but an additional twenty-five percent expected to earn over five thousand dollars more income.

As might be expected, all three "vocational" groups had read materials related to their jobs to a generally similar degree. Each group also indicated the desire to increase vocational competence as influencing program participation — the significant majority of each citing this as the most important single objective. The more practical bent of business and media participants was suggested by the fact that only minorities in each instance (thirty-six and forty-two percents) considered intellectual enrichment and stimulation an influential motive. For over sixty percent of the federal executive sample, this was a significant influence. It was quite possible, of course, that the different program samples were using different concepts in relating these motives to their varying program experiences.

The differences that emerged, therefore, seemed to have been primarily normal consequences of age and sex differentials (marital status, income level and, perhaps, educational attainment) and of socio-economic status (home ownership and community activity). While the federal executive participants may have been more socially mobile, the data were only suggestive. If they were more career minded than the business or media participants, it was probably due to the fact that they had committed themselves to careers as civil servants — a commitment that might have positively influenced both their future expectations and their program motivations.

It should be mentioned, in conclusion, that many of the inferences made about federal executive participants jibed with Dannhauser's general conclusions regarding the total College inventory population. He concluded, for example,
that the total student population was socially mobile — that "the majority of students at the Downtown Center came from families in which they are the first generation to be able to receive some advanced education." He also concluded that "one can unqualifiedly say that the student body is optimistic about its future earning power." Excluding credit program students, most of whom were working toward a degree, he found that job improvement factors and intellectual stimulation were the overriding considerations influencing program participation. He found a number of factors indicating that most students (some sixty-four percent) were "course-takers," having participated in a variety of other adult education enterprises apart from their University experiences.

Having divided the College student body in a number of ways — into male and female program participants, and into participants in vocationally and liberally oriented programs — and emphasizing the general diversity of students, Dannhauser found the majority to be conservative rather than liberal, "joiners" rather than isolates, stable rather than impulsive, and "middle-class" rather than "high-brows." And, most apparently, they were a highly mobile group.

Summary and Conclusions

Utilizing the Student Inventory developed by the University to define its evening student population, the author was able to collect extensive personal history information from sixty-five of the eighty-six Downtown Center registrants in the autumn 1958 quarter of the Program of Executive Development for Federal Personnel. The predominantly male sample averaged forty-two years of age. The majority were homeowners, married to their original spouses, who earned between six and fifteen thousand dollars a year. The great majority
were church members; all had at least one other organizational affiliation; and almost half had taken part in community service activities. The general group clearly reflected middle-class American characteristics.

Although the educational backgrounds of sample members varied widely, the group could be identified as occupying a middle position in comparison to other federal executive groups which have been studied. Most were college trained and a majority had obtained at least a bachelor's degree. While inventory and other data suggested some degrees of geographic and occupational mobility — suggesting in particular a predominantly vertical occupational mobility — social mobility could be more clearly inferred from the group's level of educational achievement. Comparing their attainments educationally with those of their parents, friends and work associates, they were socially mobile — a characteristic which other investigators have attributed to the federal executive.

Executives in the sample were career civil servants who manifested a high level of optimism regarding their future career and income prospects. Their non-work activities, while generally sedentary, were somewhat typical of the Chicago area population. Since the group was representative of the metropolitan community's upper or upper-middle classes, this was to be expected. While much of their reading was related to their work or to their college program courses, their other reading might also be characterized as middle class. A majority had participated quite actively in organizational life and almost a fourth of the group had been officeholders in their church groups. The voting habits they reported indicated a very high level of civic responsibility.
Quite naturally, this kind of an executive group found principal satisfactions in work roles. Inventory responses suggested that they performed these roles at least fairly well. Their educational background patterns did not indicate to what degree their program participation might have been due to attempts to compensate for deficiencies, or to the predispositions of already well educated individuals. Although the inventory data did not bear directly upon precise vocational motives, they did nothing to support the view that promotional or job skill aspirations impelled executives to participate in the program. The group's program interests seemed to have been broadly rather than narrowly vocational.

As anticipated, this federal executive sample revealed both differences and similarities when it was compared to a lower-graded federal sample drawn from another of the Center's programs. Apart from the normal differences attendant to differences in socio-economic status, the executives were clearly a better educated group. In terms of educational attainment, they were also more socially mobile than their lower-level federal colleagues. There was a surprisingly small age average differential between the two groups -- due in part, perhaps, to the greater proportion of women in the comparison Program of Management Training for Federal Personnel.

In job-related areas, the executive pattern was not greatly dissimilar to that of the management program group. Job mobility patterns and vocational participation motives were similar. Many more executives, however, anticipated significant career promotion.

Further comparison with student participants from business programs within the College - business people in general as well as mass media professionals --
again revealed commonalities among all three program groups. The federal executives and business program participants were quite similar, while mass media participants -- a younger group -- were less economically advanced and less home and community involved. In general terms, federal executive proved to be better educated than business participants and somewhat less educated, on the average, than media program participants. No definite conclusions, however, could be drawn from these particular data.

It was evident, of course, that the three samples involved were not completely comparable. With this in mind, the suggestions that federal executives were more socially mobile, more committed to their careers, more optimistic about future income, and more broadly vocational in their outlooks, must be accepted only generally and tentatively. However, since most of the inferences about the federal executive group agreed with Dannhauser's broad portrait of the total college group, the characteristics attributed to the executives were substantiated. The differences discernible, when federal executives were compared to other group participants, were probably genuine. The degree to which some of these characteristics were representative of the Chicago federal executive population -- rather than of executive program participants -- was not determined.

Inventory data were used to test three hypotheses of the dissertation -- hypotheses three, seven and eight as previously stated. Results may be summarized as follows:

3. The hypothesis was stated that the educational backgrounds of participants run to extremes; that the majority of participants have either college degrees or little or no college training. Defining little or no college training as less than two years of college, and positing a bimodal distribution emphasizing both extremes, the inventory data did not uphold this hypothesis.
7. The hypothesis was stated that a majority of participants tend to relate the program to promotional opportunities. While inventory data could not be conclusive in rejecting the hypothesis, the hypothesis was not upheld.

8. The hypothesis was stated that a majority of participants believe the program provides an opportunity to learn practical executive skills. Inventory data could not, again be conclusive; they did not, however, support this hypothesis.

Data from the agency administrator questionnaire had tended to reject the third hypothesis, but they were in no way conclusive. Although inventory data rejected this hypothesis, it was later retested with another sample.
Notes

1. The term inventory will be used in this chapter and in subsequent sections of the dissertation to refer to this questionnaire.

2. For a brief general reference to the study and some of its broad findings, see Chicago Daily News, May 29, 1959, p. 55, pt. 2.

3. The management program is the Program of Management Training for Federal Personnel, and the professional program is the Program of Professional Studies in Public Administration. Both are described in Chapter II.

4. This group was originally excluded because it was scheduled to be tested in other ways in connection with the separate Executive Judgment Research Study being conducted by the Center for Programs in Government Administration. That study is also mentioned in Chapter II.

5. The author is grateful to college officials for this permission. He is also grateful to Dr. Carlie A. Forehand, Research Associate, Center for Programs in Government Administration, who assisted him with this phase of data collection.

6. The percentages were 92.85 and 75.78 respectively.

7. See Chapter II.

8. See Chapter II.

9. The percentage was 8.87.

10. The percentages were 37.2 and 62.8 respectively.

11. As Chapter II also points out, a large percentage of the autumn quarter 1958 participants participated during the winter and spring quarters of this academic year. The inventory sample was, therefore, generally representative of the 1958-59 academic year's program population.

12. In the opinion of the program director, the pattern was quite typical.

13. This early group is better represented in another sample one described in Chapter VII.
14. Consideration was given to the possibility of constructing a supplementary questionnaire for use with the federal executive sample — a questionnaire which would focus more directly upon most of the hypotheses of the dissertation. The length of the student inventory and the necessity of distributing materials before the end of the quarter made this impracticable.

15. In addition to College administrators, representatives of the University's Committee on Human Development, Population Research and Training Center, and departments of education and sociology served as project consultants. Other consultants from the National Opinion Research Center and the Center for the Study of Liberal Education for Adults were involved. Because of the length of the student inventory — ninety-three multiple response items spread over twenty-nine pages — it has not been reproduced in this dissertation. Those interested may obtain a copy of the inventory by writing to the author in care of the Center for Programs in Government Administration.

16. Inventory data were collected from eighty-seven participants in the Center's Program of Management Training for Federal Personnel.

17. These other groups included executives from business and industry who were participating in their own "vocational" development programs.

18. During the first four years of the federal executive program, men comprised about ninety-two percent of the student population.

19. As mentioned in Chapter III, all of the one hundred and twenty-seven executives in the Wayne State program were male.

20. In this instance, one subject did not respond. Throughout the inventory, at least sixty-three of the sixty-five executive subjects responded to over ninety percent of the items.

21. The percentage was 92.1. As in Chapter IV, percentages, in some instances, are cited in the text. In other instances, the same generalizing terms are used. "More," "a majority" or any comparative term is used when at least half of the respondents have answered in a given manner. The terms "most," "a distinct majority" or any superlative form is used to indicate at least two-thirds agreement. The terms "significant," "a significant number," "a number," "minority group" and "same" are used when at least a third but less than half followed a pattern.

22. See Chapter I. Program averages as reported by Bunker ranged from 34 to 46

23. The percentage was 42.47.

24. See Chapter III

25. See Chapter III.
26. See Chapter III references to the Henry and Rosen Studies.

27. This finding was in line with Bendix's conclusion that federal executives are extremely heterogeneous in their formal educational backgrounds.

28. See Chapter III references to the Hoover Commission, Civil Service Commission, and Detroit Studies.


30. This proportion is reported in Forehand, p. 4.

31. The percentage was 52.22

32. The percentage was 61.29

33. Since so many fractional percentages are involved in the remainder of this chapter, those cited hereafter have been rounded and presented only in the text.

34. See Chapter III references.

35. The inventory statement was as follows: "How many jobs have you held since you first left full-time school?"

36. Again, see Chapter III references.

37. This information was drawn by the author from the University's program records.

38. This investigation is summarized in Forehand, pp. 20-22. Those involved were federal executives who had participated in the Program of Executive Development for Federal Personnel. They had an average of eighteen years of service within their agency, and their careers spanned an average of nine classification grades.

39. Chicago Sun-Times, January 23, 1961, p. 34. The study reported on herein was conducted by W. R. Simmons and Associates, a New York research firm, for the Chicago Sun-Times and the Chicago Daily News. As the report indicated, the study was based on a sample of over four thousand validated interviews with subjects selected by a strict area probability sample.

40. Percentages were computed by the author from totals given in the article.

41. Typologies used were based on A. B. Hollingshead's index of social position. The upper class group was defined as "persons with incomes ranging from less than $10,000 to more than $50,000; typical occupations: doctor, lawyer, business executive; college educated." The upper middle class group
was defined as "persons with incomes ranging from less than $6,500 to more than $10,000; typical occupations: engineer, pharmacist, accountant; most men college graduates." Slightly more than three percent of the Chicago retail market area fell into the former category, while approximately nine percent fell into the latter. Very few in the federal executive inventory sample would fit the low or middle class typology (approximately fifteen percent of Chicagoans) identified as "persons with incomes ranging from less than $3,000 to more than $10,000; typical occupations: skilled blue collar, administrative, clerical jobs: most are high school graduates."

42. Havighurst and Orr, Adult Education and Adult Needs, p.9.
43. Ibid.
44. Ibid., pp. 4,32,35.
45. Ibid., pp 19-20. The underlinings are the author's.
46. Chapter III.
47. See the discussion in Chapter IV.
48. In the Detroit program, forty percent of the executives had a college degree, twenty-nine percent had some college, and thirty-one percent had no college training. If one assumes that a proportion of the twenty-nine percent had only one year of college education, the distribution approximates a bimodal pattern with a low proportion at the intermediate stage. See the discussion in Chapter III.
49. See Chapter III.
50. See Chapter IV.
51. The inventory statement was as follows: "I want to increase my competence in my job or vocation."
52. See Chapter III.
53. The management sample indicated, however, a greater proportion with "little or no college training." Fifty-two percent (as compared to twenty-one percent of the executives) had completed no more than one year of college training. Although the hypothesis regarding bimodal distribution of educational background would not, therefore, hold for the management program group, it seems more likely that more participants in this program were compensating for educational deficiencies. Twenty-nine percent had completed only trade or high school, and six percent had less than a complete high school education.
54. See Chapter III.
55. The higher proportion of female participants in the management program sample may have been a factor in this differential situation.

56. Nine percent of the management group expected to change occupations in contrast to eight percent of the executives. Over ninety percent of each group considered their jobs as part of their permanent primary careers.

57. Again, the greater proportion of women in the management sample might have influenced the difference. Even within the civil service, women would tend to expect lesser opportunities for a major kind of promotion within a five-year span.

58. Almost ninety-nine percent indicated this as a reason, and over eighty percent identified this as their primary motive.

59. While the non-work activities of the management sample were also reviewed, comparisons are not reported on herein. Inventory data did not reveal any striking differences between the executive and management groups in these areas.


61. Ibid., p.3. More than half of those receiving inventories completed and returned them. A subsequent review of two hundred and fourteen late returns was made and no significant deviations from the previous totals were noted. On this basis, no attempt was made to obtain a forced response sample.

62. Dannhauser's summaries utilized the responses of one hundred and eighty-two participants from the Center for Programs in Government Administration. This total comprised the executive and management samples used in this chapter and a much smaller sample of city and state employees from the program of Professional Studies in Public Administration. Since all these were lumped together as the Government Programs group, the author had to recompare and reinterpret Dannhauser's statistical and inferential comparisons in terms of the separate executive program sample.

63. There were nine programs if the executive program is considered as a part of the College's total program for government personnel.

64. Bruby, "Description of Current Programs and Services at the Downtown Center of University College," pp. 13-14.

65. Ibid., pp. 10-11.

66. One hundred and seventeen participants comprised the business-industry sample, and one hundred and ten the mass media sample.
67. It should be noted that the program divisions described were those in effect at the time of the 1958 inventorying process. The organizational structure of University College has changed considerably since that time.

68. While these three "vocational" program groups were quite similar in this respect, Dannhauser pointed out that a sharp distinction was evident when these groups were compared to the "liberal education" program groups. These latter groups came from more recent American families. See Dannhauser, p. 12.

69. While over sixty-one percent of the federal executives owned their own homes, only forty-seven percent of the business sample and less than thirty percent of the media sample so reported.

70. The differences represented by the media sample were probably due to the age differential and to the fact that a larger proportion were women (thirty-seven percent as compared to twenty-four percent for business, and eleven percent for federal executives).

71. Federal executive and business patterns were very similar in these respects.

72. Over ninety-one percent of the federal executives, ninety percent of the business group, and eighty-eight percent of the media sample so responded.
CHAPTER VI

TEST PERFORMANCES OF SOME PARTICIPANT SAMPLES

Two of the hypotheses cited earlier in this dissertation concerned the adequacy of federal executives participating in the University's development program. In terms of informed opinion, it was hypothesized that program participants tend to be "better than average" employees and that a majority have executive potential. Results of a detailed agency administrator questionnaire substantiated both positions. In the opinion of almost all informed respondents, program participants were "better than average." A somewhat lesser proportion, but still a clear majority, agreed that participants had executive potential.

The total pattern of agency administrator response supported these majority viewpoints. Ascribing positive personal and motivational characteristics to participants, respondents characterized them as better than average individuals who, for the most part, had potential for greater executive responsibility, and who, in contrast to their non-participating counterparts, were more mature, objective and self-determining. The minority disagreeing with the two hypotheses was composed of a few respondents who were somewhat dissatisfied with the loose program nominating procedures in their agencies.

In addition to the opinion criterion, both of these hypotheses involved measurement of participant abilities by means of psychological tests. In this
chapter, therefore, the results of a number of studies of the capabilities of participating federal executives will be reported. The majority of the studies involved hypotheses to the effect that program participants performed better than did non-participants in terms of the instruments used. The instruments included the American Council on Education Psychological Examination for College Freshmen (the ACE), the U.S. Civil Service Commission's Test No. 600 (the Administrative Judgment Test), (the AJT), and part of the U.S. Civil Service Commission's Test No. 56 (56A), (the verbal abilities portion of a general abilities test).

Participant Performance in Agency C

In discussing organizational climate and its possible effects upon program participation, Agency C was described in Chapter IV as an employee-payment agency where the attitude and example of top management seemed to have been very significant. After a short initial period of encouragement and selectivity in nominating executives for the program, the situation changed rather abruptly. The top executive group seemed to lose interest, some dissatisfaction with the program were voiced, and little or no recognition was given to program participation. And yet, participation in the program continued during subsequent academic years. Although, for the most part, participation was not officially discouraged, it became quite clearly a matter of individual interest and one for individual decision.

These circumstances provided an excellent opportunity for observing differences between participating and non-participating executives in an organization in which differences might be maximized. Review of agency administrator questionnaires suggested that Agency C presented a situation where
individual choice would be the most relevant factor. In Agency C, therefore, where participants paid their own tuition and fees and where they entered the program voluntarily and with, at best, perfunctory encouragement from the organization, participants might be expected to be "better" executives than non-participants. The AJT and the ACE were administered to a sample of participating executives and to a matching sample of non-participating executives,\(^8\) to determine abilities in the areas measured by the two tests.

A sample of twenty executives was chosen from the population of fifty-one attending the program during 1954-58. Participants attending only during 1954-55, the initial academic year when agency support of the program was evident, were excluded, as were participants from two or three units of the organization where a positive or negative influence on the part of the directing official could be identified.\(^9\) The resulting sample comprised nineteen men and one woman from eight different units (bureaus or offices) of the agency. Right of the group had attended a single program seminar at the time of testing; three each had attended two and three seminars; one had attended four seminars, and five had completed the five-course certificate series.\(^10\) The group averaged between forty-nine and fifty years of age; more than half had over twenty years of federal service, and all but two had over fifteen years service. Sample members ranged in grade from GS-11 to GS-16, while a majority were at the GS-12 of GS-13 levels. Half were in staff positions and half in line supervisory jobs. Half had obtained graduate or professional degrees, three were college graduates, and four of the remaining seven had some college training.

In selecting a non-participant sample of nineteen men and one woman, an attempt was made to balance these factors as much as possible. Comparisons
between the two samples are summarized in the following table.

### Table VI

**AGENCY C SAMPLE CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Agency #20 Service Units</th>
<th>#15 Service Years</th>
<th>#10 Service Years</th>
<th>#Staff #Line Years</th>
<th>#P-20</th>
<th>#NP-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>1</td>
<td>8</td>
<td>13</td>
<td>5</td>
<td>2</td>
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<td>19</td>
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<td>11</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GS</th>
<th>GS</th>
<th>Graduate Degree</th>
<th>Bachelor's Degree</th>
<th>College Training</th>
<th>High School Graduation</th>
<th>Age 10-19</th>
<th>Age 50-59</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-13</td>
<td>11-16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-20</td>
<td>15</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>NP-20</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>11</td>
<td>9</td>
</tr>
</tbody>
</table>

P - Participant Sample  
NP - Non-Participant Sample

Although an even closer balancing could have been obtained by not excluding first-year participants and some participants from director-influenced units, such exclusions were felt to be more desirable.

The Administrative Judgment Test was first administered to the group. A fifty-five item multiple-choice form, the test includes problems of relationships between headquarters and field offices in an organization, and those between research (or staff) and operating personnel. It also includes problems concerning the timing of programs and the organization of the office of an administrator. The test does not involve personnel, budgeting, accounting or other technical knowledges. Designed by Handell to measure broad understanding of the processes of administration (whether government or private,) the
test has been used successfully in predicting federal executive achievement - as measured by performance ratings and grade level attainment. It has also been shown to be more valid in such predictions than tests of general mental ability, although such tests correlated in the .60's with the AJT. This superior relationship may be due in part to the fact that some of the items have been shown to relate to personality characteristics.

In making the AJT available to federal departments and agencies as an element in selecting employees for promotion or reassignment, the Civil Service Commission has recommended a range of scores keyed to line and staff grade levels. Using these guides, a preliminary investigation was made of the score relationships of ten cases from each sample. Five of ten executives from the participant sample met or exceeded the minimum scores suggested for their positions, with three of the five scoring in the high-average range. Of the remaining five, only one executive fell fifteen points below his criterion score. Among the members of the non-participant sample, only two of ten met or exceeded the appropriate scores for their position levels. Of the eight falling below the minimum suggested levels, five scored from fifteen to twenty-one points below their minimums.

Since these differential patterns for half-samples tended to imply a greater level of AJT achievement by program participants, statistical tests were applied to data from the total samples. Having calculated arithmetic means and standard deviations from the original scores in each sample, the null hypothesis was posited — that there was no true difference between the two population means and, therefore, that the difference between sample means was accidental and unimportant, a difference due to sampling error. Having
determined the standard error of the difference between the means of the two small independent samples (assuming the equivalence of population variances), a t test was employed to infer the significance of the mean difference. The resulting t was 3.06 with thirty-eight degrees of freedom. Since a t of 2.72 with thirty-five df is significant at the .01 level, the null hypotheses was rejected at or beyond the .01 level.

On the basis of this significant difference between the two samples, it could be said that participating executives within Agency C were more capable in terms of the characteristics measured by the AJT. They manifested a greater degree of understanding of the general processes of administration. As measured by the AJT and within the context of the first two hypotheses of this dissertation, program participants were "better than average" — they had more executive potential than a similar group of non-participants.

The ACE, a timed aptitude test in six sections, was then administered to the same group. To test the hypothesis that executive participants would again perform better by demonstrating more scholastic aptitude than non-participants, the null hypothesis was asserted and the same statistical tests as used with the AJT were employed. A t test resulted in a ratio of 2.65 with thirty-eight df — a ratio significant at or beyond the .02 level. With thirty-five df, a ratio of 2.44 is significant at this level. With almost the same degree of confidence, therefore, it could be said that Agency C participants were superior to non-participants in terms of ACE determined aptitudes.

Since three of the ACE units may be grouped to yield an L or language score and the remaining units combined to provide a Q (mathematical) score, the t test was again applied to sample data. In terms of the group's L scores, the
participant sample again demonstrated a significant differential ability. The obtained t of 3.04 (with thirty-eight df) was again significant beyond the .01 level. As far as Q scores were concerned, however, the null hypothesis could not be rejected. Comparison of Q samples yielded a t of 1.55 — below the 2.03 ratio of the .05 confidence level for thirty-five df.\(^\text{22}\) It seemed clear, therefore, that Agency C participants excelled in those areas related to language abilities, and that mathematical abilities did not differentiate between participant and non-participant samples.

As a final measure of possible difference between the executive groups within Agency C, three top-level administrators within the organization were asked to evaluate the general job performances of each of the executives in the total group of forty. Comparison samples were not, of course, identified.\(^\text{23}\) Each administrator was asked to rate each executive’s overall performance (or ability to perform the duties and responsibilities of his position) as satisfactory, better than average, or superior. Thirteen of the program participants (sixty-five percent) were characterized as at least better than average by at least two of the three raters, and six of these thirteen were rated (on the same majority basis) as superior. In contrast, but on the same bases, nine of the non-participating executives (forty-five percent) were above average and four of the nine were superior.

Informed opinion of top administrators in Agency C reconfirmed, therefore, the original hypothesis that program participants tend to be better than average employees. Since a lesser proportion of non-participants fell into this category, the statistical tests used with AJT and ACF scores were applied to the ratings. Point values (one, two and three from satisfactory through superior)
were assigned and the sum of each executive's three ratings comprised his score. An t test resulted in a ratio of 1.33 with, again, thirty-eight df involved. With 2.03 and thirty-five df significant at the .05 level, the null hypothesis could not be rejected. The higher composite ratings given executives in the program participant sample may have been the result of sampling error. They may also, of course, have reflected a tendency toward more satisfactory job performance and more performance capabilities on the part of participating executives.

As mentioned previously, Agency C was expected to provide an organizational environment in which participant and non-participant differences might be maximized. Before discussing the implications of this environment as they might be inferred from Agency C test results, data and conclusions from related studies should be reported.

Participant Performance in Agency D

As a contrast to test experiments within Agency C, similar testing approaches were used in another agency where the climate for participation seemed very different. In this agency — identified herein and hereafter as Agency D — participation in the Program of Executive Development for Federal Personnel was more general. Over thirteen percent of the program's 1957-58 student population was supplied by this organization. Virtually all of the executives who participated did so at agency expense. The great majority participated on a more complete program basis; that is, they attended the five-course sequence required for certification.

Participation was encouraged rather consistently by top administrators in Agency D but no stringent screening mechanisms were employed in nominating
executives for program entry. The program was openly identified as an important and integral part of the organization's overall executive development program; it was vigorously promoted and widely publicized; and top officials were visibly identified with the program. Each major unit within the agency established a tuition-payment quota and a training committee within the unit assigned eligible applicants to the program.

Applications for program consideration consistently exceeded established quotas. All who met grade level minimums could apply. In the opinion of the agency's personnel chief, one could not be sure of the individual applicant's motivations nor of the unit leader's motives in evidencing strong support for the program. It is interesting to note, however, that the agency administrators completing the detailed program questionnaire strongly emphasized status factors (a "college" program), the expectations of superiors, participation as a possible promotion consideration, and participation by the agency's upper-level executives as influencing factors. Eligible executives not participating in the program failed to do so because of "lack of time," a "desire" for credit courses or, as was sometimes the case, because they were not asked by their superiors to participate.

In Agency D, therefore, where the program was strongly supported and financially underwritten and where, with some exceptions, eligible employees were interested in entering the program, participants should not be expected to differ very greatly from non-participating executives. This was a reasonable expectation in the absence of any real program selection criteria beyond grade level and interest, and in view of the agency's supportive position.

A sample of fifty executives — twenty-two program participants and twenty
eight non-participating eligibles — was drawn from Agency D. This group comprised the total population of eligible executives from two large organizational units with Agency D. Thus, while no attempt was made to match sub-samples, complete coverage was obtained. As the following summary indicates, the participant and non-participant groups were generally equivalent.

**Table VII**

**Agency D Sample Characteristics**

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Agency #20 Service</th>
<th>#15 Service</th>
<th>#10 Service</th>
<th>#Staff</th>
<th>#Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>P -22</td>
<td>22</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>NP-28</td>
<td>28</td>
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<td>2</td>
<td>6</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GS</td>
<td>GS</td>
<td>College</td>
<td>College</td>
<td>High School</td>
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<td></td>
<td></td>
<td>9-11</td>
<td>12-14</td>
<td>Degrees</td>
<td>Training</td>
<td>Graduation</td>
</tr>
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<td>P -22</td>
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<td>11</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>NP-28</td>
<td>16</td>
<td>12</td>
<td>6</td>
<td>13</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

P: Participant Sample  
NP: Non-Participant Sample

As in the case of Agency C samples, scores for the Administrative Judgment Test were obtained. While it was not possible to obtain ACE performance scores, results on a well validated test of verbal abilities, the U.S. Civil Service Commission's Test No. 56A, were obtainable. Both tests had been administered to program participants and non-participants in Agency D. Given the environmental situation described, it was hypothesized that the differences in test performances between participant and non-participant samples would not be significant.
Comparison of test scores with the recommended grades for the AJT revealed that similar proportions from each sample attained the levels recommended for their positions. Almost twenty-three percent of the participant sample and exactly twenty-five percent of the non-participant sample met these suggested minimum levels. The null hypothesis was stated and the same statistical tests (as with Agency C data) were employed. A t of .59 with forty-eight degrees of freedom was obtained. Since a t of 2.02 with forty-five df is significant at the .05 level, the null hypothesis was accepted. As far as AJT abilities were concerned, there were, as anticipated, no real differences between the agency's executives in the program and non-participant sample members.

In utilizing Test No. 56A, it was possible to draw larger samples from Agency D organizational units. Scores for thirty-nine participants and one hundred and forty-seven non-participants were obtained. It was again hypothesized that there would be no meaningful difference in verbal ability between the two groups. A t test applied to the statistically treated data yielded a ratio of .40 with one hundred and eighty-four degrees of freedom. With a t of 1.98 and one hundred and fifty df significant at the .05 level, the null hypothesis was upheld.

These results within Agency D did not, of course, disprove the assertion that program participants are better than average employees, the majority of whom have executive potential. They indicated, however, that many if not most participants in some agencies lacked the kind of executive potential measured by the AJT. They also indicated that there may have been little intellectual difference between participants and non-participants in the kind of an
organization where sponsored, large-scale participation was the prevailing pattern. The data drawn from Agencies C and D highlighted the degree to which organizational characteristics and climate could affect executive participation in a university development program.

Participant Performance of an Interagency Sample

In addition to the student inventory described in Chapter V, the University utilized the ACE with its evening college population. The ACE was administered to "virtually every student who attended classes" at the University's Downtown Center during a specific week of the autumn 1958 quarter. This was the first time that such a mass testing program had been carried on in a university adult education program and the overall results were rather striking.

As was the case with the Anonymous Student Inventory, the ACE was subsequently administered to quarterly participants in the Program of Executive Development for Federal Personnel. A similar proportion of the quarterly enrollees — sixty-one executives — provided test data. The mean score for this group was slightly more than one hundred and sixteen — out of a possible ACE score of two hundred. As might be expected from this kind of an interagency sample, the range — one hundred and twenty-two points — was very great.

Excluding for the moment the ACE performances of Agency C executives, there were a number of ways in which this federal executive sample could be compared in terms of a "tendency to be better than average." The group's test performance could be compared in general terms to various college norms, and to performances of other program groups within the evening College.

On the basis of norms established from the testing of two thousand four hundred and seventy-eight evening College students, the majority of federal
executives (fifty-six percent) fell below the total College mean. Sixty percent scored at a level below the mean of students entering the undergraduate College of the University, and slightly over three quarters of the sample were below the mean of those taking regular academic courses at the evening College. At the same time, a clear majority (fifty-nine percent) scored above the mean established by the Educational Testing Service for a national population of college freshmen. 38

The relationships above refer, of course, to total score means. The L and Q scores of the federal executive sample related to these same reference group norms in about the same way. Taking into account the extreme range of scores within the executive participant sample, and the fact that a majority of the evening College sample consisted of students enrolled in undergraduate and graduate credit courses, 39 the intra-College performance of the federal executive sample was quite creditable.

The group’s performance was more impressive when the total College non-credit sample was separated from the credit group. In these circumstances, a majority of federal executives scored above the mean of the total non-credit sample. 40 As might be expected, in view of the differences in educational achievement discussed in the previous chapter, the federal executive group scored higher than a lower graded group from the Program of Management Training for Federal Personnel. 41

The relationships (of ACF scores) between the federal executive sample and the other College executive samples described in Chapter IV (the business and media groups), also followed the pattern of educational achievement ranking. The federal executive sample averaged higher ACF scores than the business
executive sample and lower scores than the mass media program sample. Comparison with another group not discussed in Chapter IV—a sample from the Program of Professional Studies in Public Administration—revealed no major test performance difference between federal executives and their counterparts in other levels of government.

As the following table indicates, statistical tests determined that the differences between the federal executive sample and these other program samples were, with one exception, real rather than accidental.

**TABLE VIII**

ACE STUDENT INVENTORY SAMPLES

<table>
<thead>
<tr>
<th>Sample</th>
<th>Test N</th>
<th>Sigmas</th>
<th>Means</th>
<th>Difference</th>
<th>Sigma</th>
<th>Critical Ratio</th>
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</thead>
<tbody>
<tr>
<td>Federal Executive</td>
<td>61</td>
<td>19.44</td>
<td>116.02</td>
<td>7.72</td>
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<td>2.26 *</td>
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<td>116.02</td>
<td>6.52</td>
<td>3.19</td>
<td>2.09 *</td>
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<tr>
<td>Business Executive</td>
<td>117</td>
<td>21.5</td>
<td>109.5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Federal Executive</td>
<td>61</td>
<td>19.44</td>
<td>116.02</td>
<td>12.88</td>
<td>3.29</td>
<td>3.91 **</td>
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<td>Media Executive</td>
<td>106</td>
<td>17.76</td>
<td>128.9</td>
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<tr>
<td>Federal Executive</td>
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<td>19.44</td>
<td>116.02</td>
<td>1.88</td>
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<td>1.5</td>
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<td>32</td>
<td>19.10</td>
<td>117.9</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Significant at the .01 level**

**Significant at the .05 level**

In terms of total ACE performance, the interagency federal executive group was significantly inferior to the sample drawn from the mass media program. Federal executives were, however, significantly superior to a business executive sample and to a lower-graded group of federal managers. There was no significant difference as far as federal and other governmental executives were concerned.
Mass media executives achieved significantly superior scores on both the L and O portions of the ACF. The superior performances of federal executives — in comparison to federal managerial and business executive samples — were, however, the result of more adequate language abilities. There was no significant differences in O score performances.

Discussion of Sample Differences

Within Agency C — where program executives were expected to be superior to non-participating executives — participants demonstrated a significantly greater knowledge and understanding of administrative problems. While the organization’s climate for participation had made this an anticipated result, there was no certainty that this difference could be generalized to another agency. On the contrary, the assumption was made that another agency with a contrasting environment for participation would reveal a test pattern where differences between participants and non-participants would not be as striking. AJT samples in Agency D bore out this hypothesis as sample performances were not significantly different. They were, in fact, very similar.

Since participants were superior — in AJT performance — to non-participants in Agency C but not in Agency D, a number of further questions could be posed. For example, was the Agency C participant non-participant difference greater than the comparable difference in Agency D, and were executive participants in Agency C comparable to participants in Agency D? In the first instance, therefore, statistical tests were applied to the difference of the agency differences. Assuming the null hypothesis of sampling error difference, total variance was estimated and a t ratio between differences was obtained. The t of 1.72 (with eighty-six degrees of freedom) was significant.
beyond the .01 level, since a ratio of 2.64 (with 80 df) is significant at that level. The intra-agency differences were, therefore, not accidental. The difference in administrative understanding between participants and non-participants in Agency C was clearly greater than this same difference within Agency D.

A t test was also employed to determine the interagency participant difference. Using the null hypothesis again in comparing the AJT performances of Agency C and Agency D program participants, a t of 2.32 with forty degrees of freedom resulted. With a t of 2.02 and forty df significant at the .05 level, it was evident that the program executives from Agency C were superior in AJT performance. The basic comparisons between these agency AJT samples are summarized below.

**TABLE IX**

AJT PERFORMANCE IN AGENCIES C AND D

<table>
<thead>
<tr>
<th>Test</th>
<th>Samples</th>
<th>Means</th>
<th>SD's</th>
<th>Means Differences</th>
<th>Pooled SD's</th>
<th>t ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJT</td>
<td>Agency Cp</td>
<td>33.65</td>
<td>5.72</td>
<td>6.15</td>
<td>6.34</td>
<td>3.06</td>
</tr>
<tr>
<td></td>
<td>Agency Cnp</td>
<td>27.5</td>
<td>6.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJT</td>
<td>Agency Dp</td>
<td>30.0</td>
<td>6.38</td>
<td>.1</td>
<td>6.01</td>
<td>.59</td>
</tr>
<tr>
<td></td>
<td>Agency Dnp</td>
<td>30.1</td>
<td>5.62</td>
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<td></td>
</tr>
<tr>
<td>AJT</td>
<td>Agency C</td>
<td></td>
<td></td>
<td>6.15</td>
<td>1.285</td>
<td>1.72</td>
</tr>
</tbody>
</table>

*** Significant at the .01 level
* Significant at the .05 level.

On the basis of these comparisons, it could be said that no one participant
beyond the .01 level, since a ratio of 2.64 (with 80 df) is significant at that level. The intra-agency differences were, therefore, not accidental. The difference in administrative understanding between participants and non-participants in Agency C was clearly greater than this same difference within Agency D.

A t test was also employed to determine the interagency participant difference. Using the null hypothesis again in comparing the AJT performances of Agency C and Agency D program participants, a t of 2.32 with forty degrees of freedom resulted. With a t of 2.02 and forty df significant at the .05 level, it was evident that the program executives from Agency C were superior in AJT performance. The basic comparisons between these agency AJT samples are summarized below.

<table>
<thead>
<tr>
<th>Test Samples</th>
<th>Means</th>
<th>SD's</th>
<th>AJT Agency Cp</th>
<th>33.65</th>
<th>5.72</th>
<th>6.15</th>
<th>6.34</th>
<th>3.06</th>
<th>***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Cmp</td>
<td>27.5</td>
<td>6.9</td>
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<td></td>
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<tr>
<td>AJT Agency Dp</td>
<td>30.0</td>
<td>6.38</td>
<td>.1</td>
<td>6.01</td>
<td></td>
<td></td>
<td></td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Agency Dmp</td>
<td>30.1</td>
<td>5.62</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJT Agency C</td>
<td>6.15</td>
<td>1.285</td>
<td>1.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at the .01 level**

On the basis of these comparisons, it could be said that no one participant
On the basis of these comparisons, it could be said that no one participant group should have been considered typical of federal administrators in the Program of Executive Development for Federal Personnel. While participants may well have been superior to their non-participating counterparts within a given agency, this superior performance did not extend to another agency where the climate effects — and, perhaps, the abilities of executives — were different. As indicated herein, participant performance could vary significantly from one organization to another.

To test the suggestion above — that executive abilities may have differed significantly from agency to agency, apart from any relation to program participation — the two AJT samples from Agency C were combined for comparison with the combined Agency D sample. Testing for the significance of the difference between means resulted in a ratio of .70 which, in terms of the normal probability curve, was not significant. On this basis, therefore, there was no significant difference in AJT abilities between the combined executive groups within the two agencies.

If, however, participants were superior to non-participants in one agency but not in the other, the scores of participants in Agency C provided the significant variable. To determine further this significance, AJT samples were recombined to form participant and non-participant samples on an interagency basis. To compare the test performances of participants from both agencies with the combined group of non-participants, the difference between means was tested for significance. The resulting ratio of 2.23 was significant beyond the .05 level.

The significant difference between participant and non-participant test
performances was maintained, therefore, when the two contrasting agencies were combined. Since this participant non-participant difference was observed in one agency but not in the other, it was possible, of course, that the difference would have washed out if broader interagency samples had been involved.

The likelihood that this would have happened is suggested by an additional comparison of samples in terms of ACF performances. While less comprehensive data were available, participant samples from Agency C and an interagency group, and a non-participant sample from Agency C, were available. It should be remembered also that participants in Agency C proved superior to non-participants in total ACF achievement and in language abilities scores. At the same time, there was no significant difference in achievement between Agency D participants and non-participants in their performances with a generally comparable language abilities test, Test 56A.

Hypothesizing that Agency C participants would perform significantly better than an interagency participant sample in terms of their total ACF scores, the requisite t ratio was computed. The ratio of 4.08 with seventy-nine degrees of freedom was significant beyond the .01 level. Participating executives from Agency C were, therefore, clearly not representative of the broader interagency group participating in the Program of Executive Development for Federal Personnel. Its non-participant sample was, in fact, more typical. A t test comparing this sample's ACF performance to that of the interagency participant sample provided a non-significant ratio of .61.

In terms of ACF achievement, the Agency C executive participant group was clearly not representative of executive participants from a broad range of agencies. Seventy-five percent exceeded the total College mean and ninety
percent scored above the mean of the College's non-credit program students. Agency C participants were more representative of the best performing student inventory executive group — those from the Mass Media program. 53

Conclusions: Effect Upon Hypotheses

The series of testing experiments and comparisons involving Agency C, Agency D and student inventory samples may be summarized as follows:

1. In the generally non-supportive program climate of Agency C, participating executives were clearly superior to non-participants in tests of administrative understanding (the AJT) and learning ability (the ACE). Their language ability was significantly greater.

2. While a majority of Agency C's executive participants were rated as better than average, the proportion so rated was not significantly greater than a comparable group of non-participants.

3. In the generally supportive climate of Agency D, there were no significant differences between program participants and non-participants as far as their administrative knowledge and language abilities (the AJT and 56A) were concerned.

4. Executive participants in an interagency sample averaged below the total College mean but above the total non-credit mean in a test of learning ability (the ACE).

5. These interagency participants were superior in learning ability — particularly in language ability — to lower-graded federal employees and to business executives.

6. While these same participants demonstrated learning ability generally similar to that of other government executives attending the College, their performance was significantly below those of executives from a mass media training program.

7. The difference in administrative understanding (the AJT) between participants and non-participants in Agency C was significantly greater than the same kind of difference in Agency D.

8. Agency C executive participants were superior in administrative understanding (the AJT) to participants from Agency D.

9. In terms of this same ability, there was no significant difference between the total executive samples — program participants and non-participants — drawn from each agency.

10. The participant non-participant difference was so great in Agency C and so small in Agency D, there was still a significant AJT difference when interagency participants were compared to interagency non-participants.

11. Agency C participants had more learning ability (the ACE) than program executives in the broad interagency sample. Non-participants in Agency C performed as well as the interagency participants.
12. Participating executives from Agency C were clearly superior in learning ability (the AQ%) to the general College student body—particularly to those in non-credit programs.

13. As an atypical group, Agency C participants demonstrated as much learning ability as any comparison sample in the College study.

It seemed, therefore, that the precise climate for participating within an agency was a very significant factor in the test-determined characteristics of executive participants. In the environment where the choice factor was highly personal—where the agency was clearly non-supportive, albeit not overtly discouraging—an extremely capable group was attracted to program participation. In a much more positive environment—where the agency was generally supportive but not compelling—there was little difference in capabilities between participating executives and those who chose to stay out of the program. Since the capabilities of the larger executive groups within the two environments did not differ markedly, one could only conclude that very capable executives tended to be drawn to a university development program when their organization did little to encourage their participation.

This is not to say, of course, that there were no other intellectual or psychological motivations present in such circumstances. They were, however, the kind which are not easily observable. Although more Agency participants were rated as very competent or highly competent executives, administrators rated non-participating executives almost as highly.

As noted in Chapter IV, virtually all agency spokesmen identified their program climates as supportive. Where such "support" actually tended toward the Agency D climate, it seems more likely that there would have been fewer differences in capabilities between participants and non-participants. If, as the agency administrator questionnaire suggested, most private payment agencies
were only mildly supportive — particularly after the enthusiasm of the first program year had diminished — perhaps some whose climates began to approach that of Agency C would have nominated a number of quite capable executives whose characteristics were similar to those identified herein. The end result of both tendencies would have been an interagency group of executive participants with widely varying capabilities — a group similar to that of the student inventory sample.

By using the test performance data of this chapter together with information obtained through the agency administrator questionnaire, the first and second hypotheses of this dissertation were reevaluated as follows:

1. The hypothesis was stated that program participants, as measured by informed opinion and psychological tests, tend to be "better than average" employees. Almost all agency administrators (eighty-nine percent) agreed when asked to respond to this question within a series of twenty-two opinion items. While the majority only generally agreed, a considerable minority (thirty-two percent) strongly agreed. In a single agency, a panel of three top-level administrators evaluated sixty-five percent of a participant sample as at least better than average in general job performance. These evaluations were made apart from the raters' knowledge of program participation as the research criterion. Somewhat less than half of a comparable non-participant group were so rated. On a scaled basis, the difference in ratings of participants and non-participants was not statistically significant. In terms of informed opinion, therefore, the hypothesis may be accepted with the understanding that the tendency may also apply to non-participating eligibles — perhaps to a somewhat lesser degree — in some agencies.

On an interagency basis, program participants tended to perform (on the American Council on Education Psychological Examination) below the average of a large College sample, but above the averages of a large non-credit sample and three of four government or executive comparison samples. A specific agency participant group performed well above the averages of these same College comparison samples and significantly better than a counterpart non-participant agency group. In another agency, however, participant performance was not significantly different than that of non-participants — with performances measured by a language abilities test (Civil Service Commission Test No. 56A). In terms of psychological tests, therefore, the hypothesis may be accepted with the understandings that: (1) the tendency is more pronounced.
when comparison programs and groups are more comparable; (2) the tendency may be much more pronounced when a single agency group rather than an interagency group is involved; and (3) the tendency may or may not — depending upon the agencies involved — also apply to non-participating executives.

2. The hypothesis was stated that a majority of participants, as measured by informed opinion and the U.S. Civil Service Commission's Administrative Judgment Test, have executive potential. A majority of agency administrators (over seventy-three percent) strongly agreed. In view of the generally loose screening procedures employed by most agencies, it is not surprising that relatively few evaluated participants as superior to non-participants in this respect. In terms of informed opinion, therefore, the hypothesis may be accepted, as a tendency and with the understanding that it may also apply to non-participating executives.

Within one agency, half of the program participants met their suggested grade level scores on the Administrative Judgment Test; in another agency, somewhat less than a quarter met the suggested scores for their grade levels. In the first instance, participants performed significantly better than a comparable group of non-participants — on a raw score basis apart from Civil Service Commission standards. In the second instance, performances were not significantly different. Participants from the first agency were superior to participants from the second; participants from both agencies were superior to the combined groups of non-participant although, on a combined sample agency basis, there was no significant difference between agencies. In terms of the Administrative Judgment Test, therefore, the hypothesis may be accepted: (1) as applicable within one agency and not in another; and (2) with the understanding that the executive potential of participants (as measured by raw scores in contrast to suggested norms) may or may not be greater than that of comparable non-participants.
Notes

1. These are the first and second hypotheses originally stated in Chapter III.

2. See the discussion in Chapter IV.

3. While eighty-nine percent of the respondents agreed to the first hypothesis (thirty-two percent agreeing strongly), some seventy-four percent agreed to the second (twenty-one percent agreeing strongly).

4. See the discussion in Chapter IV.

5. Review of the response patterns in items d) through l) of question 2 of Part II of the agency administrator questionnaire (Appendix I), will reveal this minority viewpoint quite clearly.

6. Apart from the fact that the ACE is a well validated test with excellent norms, the author selected this instrument knowing that it would be used by the University — along with the Anonymous Student Inventory — during the self-study project. The AJT — known also as the Administrative Problems Test — was selected because of its extensive use (within the federal service) as an executive appraisal device. Since it is a restricted test, special permission for its use was obtained from the Director of the Bureau of Programs and Standards of the U.S. Civil Service Commission. This permission was obtained (for members of the research team) by Professor Harold Guetzkow of Northwestern University, Research Consultant to the University's Center for Programs in Government Administration. This test and Test 56A were also employed because the agencies in which they were used for research wished to have records of their executives' performances with these instruments. The terms ACE, AJT and 56A will be used to refer to these tests.

7. See the discussion in Chapter IV. The agency is designated in this chapter as Agency C to make the connection clear and to avoid confusion.

8. It should be mentioned at this point that sample members did not know that they were being tested for research purposes. All of the agency's executives at defined levels were being tested for personnel record purposes. The author administered both tests to executives other than those in the two samples and results were made available to all testees. The author did, of course, obtain the permission of agency officials to use anonymous data for samples relevant to his research purposes.
9. This attempt to "control" the agency climate even further was made during the author's interview with the Agency C questionnaire respondent, and at a subsequent meeting with this same official.

10. This distribution pattern followed the total participation pattern. As mentioned in Chapter IV, almost twenty-four percent (twelve of fifty-one) of Agency C's participants were program graduates.

11. The test is cataloged by the U.S. Civil Service Commission as Test No. 600, Series No. 1a. See note 31 below for a citation of the test inventory.


13. Ibid., p. 115.


16. In terms of the grade levels of sample members, a score of 40 is suggested for GS-13 and above staff employees; 39 for GS-14 and above line employees; 38 for GS-12 staff employees; 36 for GS-13 and below line employees and GS-11 staff employees. For complete norms, see section 8-8 of the June 1956 edition of the U.S. Civil Service Commission's Manual X-119.

17. Raw scores for each sample are included, with other test data, in Appendix II.


19. Ibid., p. 213.

20. Ibid., pp. 223-225.

21. See Appendix II for sample scores.

22. A t of 1.69 with thirty-five df is significant at the .10 level.
23. Raters performed their tasks with the knowledge that they were providing data for the author's study of executive characteristics but they were not aware of the particular criterion being used — participation (or lack of it) in the University's Program of Executive Development for Federal Personnel.

24. The percentage was 13.72.

25. The encouragement given for this kind of general executive participation did not involve any pressure — it was certainly not the kind of "encouragement" that was involved in Agency A as that organization is described in Chapter IV.

26. While he did not participate in the agency questionnaire inquiry, this official was interviewed in connection with program participation.

27. Two agency administrators independently completed questionnaires. Here as elsewhere, the significant content of their responses was very similar.

28. In this instance, tests were administered not by the author but by agency staff members in the course of collecting data for employees' personal history records. Test scores and some basic personal history data were made available to the author on an anonymous basis. Individual cases were identified as being program participant or non-participant cases.

29. These two units were the most active in supporting program participation. During this study's 1954-58 survey period, they contributed over eighty percent of the agency's participant group.

30. The requirements of Agency D's personal history records for Civil Service Commission test data made the ACE an inappropriate test in this instance.

31. Test No. 56A is a test of verbal ability involving twenty questions each on verbal ability, grammar, and reading comprehension. The test requires about one hour to complete. Series 8 of the test was used in the Agency D program. Test 56A has been used extensively for testing entry level professional and technical personnel in the federal civil service. For a full description of validation studies, see the section (IV) concerned with use of tests in U.S. Civil Service Commission, Civil Service Handbook X-119, Inventory of Tests of the United States Civil Service Commission (Washington, 1953).

32. Five of twenty-two participants and eight of twenty-eight non-participants attained their minimums.

33. Test data were obtained from two additional organizational units and added to data of the fifty cases already available.

34. Prank T. Hess, "Report on the Administration of The ACE Examination," (Chicago, n.d.), p. 1. This is still another unpublished College self-
Although ACE performance of the evening College student body will not be discussed herein, a few generalizations should be made because of their applicability to executive program participants. As both Hess and Dannhauser noted in their recapitulations, the record was very good when comparisons — with national norms and norms of credit students entering the regular College of the University — were made. The 50th ACE percentile at University College — where many were mature adults unpracticed in taking such examinations and where some were resistant to the testing effort — was 121. On the campus, this percentile for the bright, test-wise, young people entering the College was 123. The score for the average college freshman throughout the country was 107. On the basis of his analysis, Hess concluded that the proportion of very able people at University College was as great as in the day College; that the proportion of people of low ability was much greater at University College as compared to the day College; and that the norms for University College were very much higher than the national Educational Testing Service population at all levels except the very lowest. See Hess, p. 17.

While all sixty-two executives in four class groups completed the ACE under timed class conditions, the test of one student was withdrawn from the sample because of his failure to follow directions.

This number comprised some seventy-seven percent of the students enrolled during the autumn 1958 quarter. See Hess, p. 3.

These various norms are presented on pages 5, 6, 7, and 10 of the Hess report.

Fifty-six percent of the College sample were engaged in academic credit course work.

Fifty-two percent scored above the mean of 112.4.

Against the executive group mean of 116.02, the management sample had an ACE mean of 108.3. The L and " scores for the former — 76.4 and 39.8 — contrasted to 69.7 and 38.6 for the latter.

The federal executive sample's total, L, and " mean scores of 116.02, 76.4 and 39.8 were higher than the 109.5, 72.1 and 37.4 means of the business group, and lower than the 128.9, 83.7 and 45.2 means of the media group.

For each comparison of samples, the standard error of the difference between the means was computed and a critical ratio obtained. See Garrett, pp. 213-217. As usual, the null hypothesis was posed and related to obtained confidence levels.
14. Comparison of their mean performances of 83.7 (L) and 65.2 (Q) to the 76.4 and 39.8 means of federal executives — with sigmas, in order, of 9.81, 10.3, 9.69 and 7.97 — yielded critical ratios of 1.68 and 1.5, ratios significant far beyond the .01 level.

15. The mean of 76.4 and sigma of 9.69 for the federal executive sample were tested against the management program (69.7 and 12.3) and business program (72.1 and 10.51) means. The resulting ratios, 3.82 and 2.79, were both significant beyond the .01 level.

16. Federal executives produced a mean of 39.8 and a sigma of 7.97 in comparison to 38.6 and 9.11 for federal managers, and 37.4 and 12.8 for business participants. The resultant ratios of .89 and 1.55 were below the 1.96 level of .05 confidence.

17. These combinations resulted in an Agency C executive mean of 30.58 and a standard deviation of 7.08. The Agency D mean was 30.04 and the standard deviation 2.2. The pooled differences amounted to 3.66.

18. A sigma score of 9.96 is significant at the .05 level.

19. These recombinations yielded a participant mean of 31.74 and a standard deviation of 5.33, as against a non-participant mean of 29.0 and a standard deviation of 5.11. Pooled differences amounted to 5.81.

20. Means and standard deviations for both samples are given in Table VII as well as in Appendix II. Pooled differences amounted to 19.01.

21. A t of 2.65 with seventy df is significant at this level.

22. The mean and standard deviation for the Agency C non-participant sample are also given in Table VII and Appendix II. Pooled differences in this test amounted to 20.13. With seventy df, a t of 2.00 is significant at the .05 level.

23. While the mean performance of Agency C participants exceeded that of the media group, the difference was significant only at the .10 confidence level. A t test resulted in a ratio of 1.66 with one hundred and twenty-four degrees of freedom — a ratio significant at .10 with one hundred df.

24. The ACF mean of Agency C program participants was more than seven points higher than the mean of any program group, credit or non-credit, discussed in the previously cited Hess report.

25. See the discussion in Chapter IV.
CHAPTER VII

PERSONAL HISTORY FACTORS: THEIR RELATION TO PROGRAM PARTICIPATION

The three previous chapters of this dissertation have been concerned with characteristics and motivations of participants in the University of Chicago's Program of Executive Development for Federal Personnel. Chapter IV summarized the views of informed agency representatives. Chapter V presented the characteristics and program motivations of an interagency sample— as subjectively described by members of that sample. Chapter VI suggested the effects which agency climate might have upon program participation — effects which could be inferred from the test performances of a number of participant and non-participant samples.

In this chapter, personal history data will be employed to discriminate between program participants and eligible executives who did not choose to enter the program. Agency administrators were not able to provide any clear-cut criteria which could distinguish the two categories. They suggested a number of factors which might have been relevant — most of them of a psychological nature — but none which seemed to be clearly discriminative.¹

The same personal history data used in comparing participating and non-participating executives will be used to compare intraparticipant groups — those who entered the program but rather quickly dropped out, and those who persisted and completed all or most of the program's basic curriculum. Agency administrators could not readily distinguish between these two groups.
Although University records and agency-provided information included some relevant data, the principal source used for these purposes was a questionnaire developed by the group conducting The Study of the Federal Executive. As a prelude to its national inquiry, this group sampled the Chicago Federal executive population. The data so obtained were made available to the author for his study of the Program of Executive Development for Federal Personnel.

Previous chapters have also dealt with a number of hypotheses involving the capabilities of participating executives, their educational backgrounds, and their objectives in program participation. While this chapter will again test one of the original hypotheses regarding educational backgrounds of participants, it will also examine a number of other hypotheses which have not as yet been discussed. It will also seek to discriminate more precisely between program participants and non-participants, and between participant groups within the program. In considering the results of interpretation of these data, educational, occupational, and social mobility groupings will be used.

The Study of the Federal Executive

As mentioned previously, The Study of the Federal Executive was designed to produce a comprehensive knowledge of the characteristics and personality structures of federal executive—a knowledge based upon analysis of the origins, training, mobility, and attitudes of some twenty thousand such executives. Although basically a descriptive study, it has been described by its directors as "a study of individual opportunity in the federal service"—a study of such opportunity as compared to opportunity in private enterprise. The broader outlines of the research were described, however, as inquiries into who the federal executive is, where he comes from, what he is like as a person,
how and why he first entered the federal service, how and why he reached his present position, how he goes about doing his job, what his impact is on government policy and national life, and how he compares with his business counterpart. 7

The Study employed four techniques in obtaining its data — a detailed personal history questionnaire, depth interview, the Thematic Apperception Test, and observation of executive action. 8 In the phasing of the Study, the first three of these techniques were used — to varying degrees — during the first half of 1959 in the Chicago area. This Chicago area pilot study involved some two hundred and twenty-five executives. 9 The Chicago subjects were chosen randomly. The only criterion was grade level, and both those at or above and those below the Study's GS-15 executive minimum grade level, were involved. An attempt was made to obtain data from executives in as many Chicago federal agencies as possible. Although a number of versions of a basic questionnaire were involved, all versions included certain core information.

Almost two hundred questionnaires were eventually distributed and one hundred and forty were completed and returned. In reviewing the responses, and in checking respondents against the registration files of the Center for Programs in Government Administration, the author identified forty-five of the one hundred and forty as participants in the Program of Executive Development for Federal Personnel. Of these, twenty-six had participated in the program to a minimal degree — that is, they had completed only one or two seminars in the program's curriculum. The remaining nineteen had participated to a greater degree. They had completed at least three seminars and most had finished the five-course certificate sequence. 10 Since all had started their participation
in the 1954-55, 1955-56 or 1956-57 academic years, all forty-five had had the opportunity to graduate by the winter 1959 period of questionnaire distribution.

The forty-five program participants represented fifteen different federal agencies. Agencies were primarily those which had had continuing and somewhat representative participation in the program. Only five of the forty-five were from agency-payment organizations. Thus, with almost ninety percent of the sample paying their own program costs, personal choice was a primary determining factor. The ninety-five federal executives who were not program participants represented the same fifteen agencies, as well as five other agencies which had had some participants in the program. Since both participants and non-participants seemed to have had an equal opportunity to participate in the program — during the initial academic years when general interest was high — the total Warner-Martin-Van Riper sample provided an excellent opportunity to test for discrimination on the basis of personal history factors.

As mentioned above, a number of questionnaire versions had been used. Core information abstracted by the author included the following data for each executive:

1. Federal agency;
2. Age;
3. Number of years in position;
4. Grade;
5. Number of years in agency;
6. Number of organizations served;
7. Nature of position (line or staff);
8. Occupations over a fifteen-year period;
9. Relation of occupations to public service;
10. Occupational area of major government experience;
11. Principal occupations of parents and grandparents;
12. Age at time of entry into federal service;
13. Extent of parents' schooling;
14. Extent and nature of college training;  
15. National origins of respondents and family members;  
16. Sex;  
17. Marital status;  
18. Number of years of federal service; and  

The data were, of course, regrouped to fit the needs of the author in comparing participants with non-participants, and minimal participants with more persevering participants.

Formal Education and Program Participation

In both Chapters IV and V, the hypothesis that "the educational backgrounds of participants run to extremes" — in the sense that "the majority have either college degrees or little or no college training" — was tested. In the former instance, most agency administrators disagreed with the hypothesis. They felt that the educational backgrounds of their participants were generally similar. Some suggested, however, that this kind of diversity might well exist on an interagency basis. In the latter instance, data from an interagency participant sample were used to test the hypothesis. Participants were grouped into graduate, intermediate, and minimal categories. Since the extreme categories (graduate and minimal) were not at all equally balanced — the graduate category was almost three times as large — the hypothesis was not upheld.

Since this sample may not have been typical, the hypothesis was again tested in terms of the forty-five participants drawn from the Warner-Martin-Van Riper survey. Some sixty-nine percent had obtained a bachelor's degree, had completed some graduate work, or had obtained a graduate or professional degree.
Some thirteen percent had completed two or three years of college. Again considering this as an intermediate group, the remaining eighteen percent with less formal education was considered as having "little or no college training."

As with the earlier sample, therefore, a majority had college degrees but only a small minority were at the other extremes. They hypothesis was, therefore, not upheld.\(^\text{16}\)

Participants from three samples -- the interagency Student Inventory Sample, the Warner-Martin-Van Riper sample, and an Agency C sample -- all revealed somewhat similar patterns of formal educational achievement. Fifty-six percent, sixty-nine percent, and sixty-nine percent respectively belonged to the graduate category. These proportions were, of course, in line with previous findings regarding federal executive groups.\(^\text{17}\) Lesser proportions (twenty-two, thirteen and five percents) fell into the intermediate (two or three years of college) category. The lesser proportions (twenty-one, eighteen and twenty-six percents) with "little or no college training" did not, of course, indicate that such a lack of training might not have influenced some federal executives to enter and to participate in the program. A few agency administrators considered this to be an influencing factor\(^\text{18}\) but the degree of influence -- even within the relatively "uneducated" minorities -- was not readily apparent.

The proportions above, however, may have indicated that these federal executives did not exhibit the degree of educational diversity which Bendix had suggested as typical.\(^\text{19}\) When the backgrounds of the ninety-five non-participants in the Warner-Martin-Van Riper sample were examined, a pattern similar to that of the participant group emerged. Some sixty-five percent (as contrasted
to sixty-nine percent of the participants) had attained at least a bachelor's degree; almost ten percent (as opposed to thirteen percent) had two or three years of collegiate training; and an even twenty-five percent (instead of eighteen percent) had one year of college, or less formal education. 20

It seemed, therefore, that there was relatively little difference in formal educational background between participants and executives who had not participated in the program. To test the hypothesis of no difference, the educational data were regrouped to provide for two variables--college graduation and non-graduation for both the participant and non-participant groups—and the chi-square test was employed. A chi-square of .183 was obtained with one degree of freedom. This was, of course, not significant. 21

Another initial hypothesis of this dissertation — one not yet considered—held that "participants with more formal educational background tend to participate in the program to a greater degree than those with less formal training." 22 To test this hypothesis, educational data for both the twenty-six minimal participants and the nineteen more persevering participants (those attending at least three seminars) were grouped in the same way — in terms of college graduation or educational achievement below this level. On this basis, eighteen of the twenty-six less persevering participants (those attending only one or two seminars) were college graduates, and thirteen of the nineteen in the persevering group had one or more degrees. Application of the chi-square test resulted in a chi-square of .003 — one which was not significant. 23 College graduation was not, therefore, a significant factor in discriminating between minimal program participants and executives who participated in the program to a greater degree.
A more detailed review of participants' educational backgrounds revealed some apparent differences when educational achievement was broken down more precisely — into 1) training below the degree level, 2) the bachelor's level, and 3) the graduate or professional degree level. Fourteen of the forty-five had acquired some college background, fourteen had obtained a bachelor's degree, and the remaining seventeen had graduate or professional degrees. More importantly, the three groups seemed to demonstrate different patterns as far as program participation was concerned. A majority of the non-degree group (eight of fourteen) were among the more persevering program participants — those who had completed at least three seminars. A minority of the bachelor's degree group (three of fourteen) fell into the same category. An even greater majority of the graduate or professional degree group (ten of seventeen) were among the more active participants in the program.

The chi-square test was again employed to test for the significance of these apparent differences. When participants without college degrees were contrasted to those with bachelor's degrees — on the basis of minimal or continuing program participation — the resultant chi-square of .787 was not significant. Comparison of those without college degrees to those with graduate or professional degrees — on the same participation bases — resulted in the very similar non-significant chi-square of .784. Where the superficial differences seemed greatest, however — between the bachelor's degree group and participants with graduate or professional degrees — a chi-square of 4.409 was obtained. This value, with one degree of freedom, was significant at the .05 level. These comparisons indicated, therefore, that the amount of formal educational background had some influence on program participation. While
college graduation was not in itself a discriminating factor and while the extreme groups (those without degrees and those with graduate or professional degrees) did not differ significantly in terms of program perseverance, executives with advanced degrees (graduate or professional) continued in the program to a greater extent than did college graduates who had not proceeded beyond the bachelor's level.

This was a somewhat unanticipated result from which a number of implications might have been drawn. Those participants with graduate or professional degrees did not persevere in the program to a significantly greater degree than executives without a college degree. This might imply, therefore, that at least some executives in this latter category were compensating for their educational deficiencies through program participation. This supposition was borne out by the fact that four of the fourteen in this group mentioned their participation in the Program of Executive Development for Federal Personnel — in response to an inquiry in the Warner-Martin-Van Riper questionnaire — as part of their formal education or training.

It should be noted, however, that nine of the remaining thirty-five in the sample (five with bachelor's degrees and four with graduate or professional degrees) also mentioned their program participation in this same situation. Of the total of thirteen who responded in this way, eight were active rather than minimal program participants.24

Since the significantly greater participation on the part of those with advanced degrees — in contrast to executives with only a bachelor's degree — was unexpected (although not paradoxical), the inquiry into this relationship was pushed further. Forty-five program participants from Agency C were grouped
into the same three educational categories, and these categories were again compared in terms of degree of program participation. Although Agency C was not necessarily a typical federal organization, it was one in which personal choice was clearly a major participation factor. In Agency C, five of the sixteen participants with less than a college education were among those who continued beyond two program seminars. Only two of the ten with bachelor's degrees participated to this degree, and eight of the nineteen with graduate or professional degrees were so involved. In all three sets of comparisons, the differences in participation levels were not significant. The difference was greatest, however, between bachelor's and graduate-professional participants.

College graduation as a general variable had not discriminated between program participant and non-participant groups from the Warner-Martin-Van Riper survey sample, nor did it discriminate between minimal and continuing executives within the participant sample. Since a more precise breakdown has seemed to discriminate between the various classes of participants, the educational backgrounds of the ninety-five non-participants in the sample were grouped similarly. Thirty-six percent of the non-participants had less than a college degree (as compared to thirty-one percent of the participants); thirty-eight percent had obtained a bachelor's degree (as contrasted to thirty-one percent of the participants); and twenty-six percent held a graduate or professional degree (as contrasted to thirty-eight percent of participating executives). Although comparisons between the three educational levels — with program participation as the criterion variable — revealed no significant differences, the greatest difference was again between the bachelor's and graduate-professional levels.
In a final effort at analysis, total personal history data for the graduate or professional degree executives who had continued in the program were examined. A number of the more relevant factors are summarized in the following table.

**TABLE X**

**RELEVANT FACTORS IN CONTINUING PROGRAM PARTICIPATION**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Line/Staff</th>
<th>Job Area</th>
<th>Graduate/Professional Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Civil Service Commission</td>
<td>Staff</td>
<td>Personnel</td>
<td>Law</td>
</tr>
<tr>
<td>2. Civil Service Commission</td>
<td>Staff</td>
<td>Personnel</td>
<td>Law</td>
</tr>
<tr>
<td>3. Civil Service Commission</td>
<td>Staff</td>
<td>Personnel</td>
<td>Law</td>
</tr>
<tr>
<td>4. Civil Service Commission</td>
<td>Line</td>
<td>Personnel</td>
<td>Law</td>
</tr>
<tr>
<td>5. Internal Revenue Service</td>
<td>Staff</td>
<td>Inspection</td>
<td>Accounting</td>
</tr>
<tr>
<td>6. Internal Revenue Service</td>
<td>Staff</td>
<td>Personnel</td>
<td>Accounting</td>
</tr>
<tr>
<td>7. Internal Revenue Service</td>
<td>Staff</td>
<td>Inspection</td>
<td>Accounting</td>
</tr>
<tr>
<td>8. Internal Revenue Service</td>
<td>Staff</td>
<td>Inspection</td>
<td>Accounting</td>
</tr>
<tr>
<td>9. Internal Revenue Service</td>
<td>Line</td>
<td>Inspection</td>
<td>Accounting</td>
</tr>
<tr>
<td>10. Bureau of Public Debt</td>
<td>Line</td>
<td>Administration</td>
<td>Law</td>
</tr>
</tbody>
</table>

A number of factors could be seen as potentially relevant. Considerable proportions were from two agencies. In the first instance — that of the Civil Service Commission — it was natural to suspect that executives from this particular organization would feel some obligation to support the program through their participation. This agency was, of course, in the forefront during the organizational phases of the program's inauguration. There were no other representatives of the agency in the participant sample, but there were eight other participants who were the chief executives of their local installations. Four of these eight were program graduates. In the second instance, the Internal Revenue Service was an agency in which executive participation was encouraged during the first years of the program — an agency which was very much training-minded. This agency had only one other representative in the
participant sample — although twelve were represented in the ninety-five man
non-participant sample.

It was possible, therefore, that factors other than educational attainment
were influencing the best-educated executives within the continuing program
group. Were it not for the Civil Service Commission's representation in the
Warner-Martin-Van Riper Sample, the difference between bachelor's degree and
graduate-professional degree participants would not have been significant.31
While seventy percent of this small group was composed of staff executives, some
twenty-two percent of the other persevering participants, thirty-eight percent
of the minimal program participants, and fifty-two percent of the non-
participant sample were staff rather than line officials.32 The proportion of
personnel executives — half of the group — was also considerably greater than
those of the other continuing participants (some eleven percent), the minimal
participants (some four percent), and the non-participant sample (some six
percent).33 The concentration of degrees in law and accounting was probably
not significant since considerable proportions within the non-participant sample
had degrees in these fields.

In summary, therefore, analysis of educational background data from the
Warner-Martin-Van Riper sample led to the following conclusions:

1. The great majority of program participants were college trained—
   with sixty-nine percent having obtained at least a baccalaureate
dergree;
2. this proportion was very similar to that of non-participants, since
   sixty-five percent of these executives had also attained a degree;
3. While college graduation did not discriminate between participation
   in the program to a minimal degree (attending only one or two
   seminars) and to a continuing degree (attending at least three
   seminars), a more precise categorization of educational level
   suggested some discriminating factors;
4. Participants with graduate or professional degrees continued in the program to a significantly greater degree than did those with only a bachelor's degree;

5. While this significant difference did not carry over to a single agency participant sample or to the non-participant sample (in terms of the program entry criterion), the general tendency continued; and

6. This relationship between advanced education level and degree of program participation may only have been a tendency since agency, position, and job area factors may also have been influential.

In its survey of federal executives, the U. S. Civil Service Commission pointed out that most lacked training in the processes of administration and in other areas relevant to the context of the government executive. The majority lacked formal training in political science or government, and in business or public administration. While Warner-Martin-Van Riper survey data did not provide enough detail to generalize with any degree of exactitude, they suggested a similar situation. They indicated that only about fifteen percent of the sample's executives had had some formal training in business administration. Very few had acquired any degree-level training in political science (or government) or economics.

Occupational Factors and Program Participation

As mentioned previously, the forty-five program participants drawn from the Warner-Martin-Van Riper sample represented fifteen federal organizations in the Chicago area. During the 1954-55 through 1957-58 academic years, these agencies enrolled three hundred and seventy-six executives — over forty-three percent of the total — in the Program of Executive Development for Federal Personnel. Since only five participants came from agency-payment organizations, the remaining forty — representing thirteen different agencies — were from employee-payment organizations. These organizations provided two hundred and sixty-
eight enrollees — over thirty-one percent of the four year total — which constituted most of the employee-payment enrollment during 1954-58.\textsuperscript{36} As was also mentioned, the ninety-five non-participating executives represented these same fifteen agencies and five others which had had some program participants.\textsuperscript{39}

Sample characteristics were such, therefore, that the agency-payment factor was virtually eliminated as a possible influence upon program participation. At the same time, however, these characteristics made it impossible to test the one initial hypothesis which had to do with agency payment as a program variable. It had originally been hypothesized that "participants whose program fees" were "paid for by their agencies" would be "at higher grade levels and have more formal education than participants paying their own fees."\textsuperscript{40} It was decided to forego the testing of this particular hypothesis and to concentrate upon the richer materials of the Warner-Martin-Van Riper survey.\textsuperscript{41} The more generally relevant categorizations of executives and of participants seemed to offer more promise.

The forty-five participant sample included executives at the GS-13, GS-14, GS-15 and GS-16 levels. The ninety-four non-participants whose grades could be identified were at substantially the same levels, although this sample included a few (six) at lower or higher grades. A third of the participants were at GS-13 and another third were at GS-14; thirteen of the remaining fifteen were at GS-15, and the final two were GS-16 executives. Slightly more than thirty-eight percent of the non-participants were at GS-13; slightly less than a third were at GS-14; and slightly more than eighteen of the remaining twenty-nine percent were GS-15 executives.\textsuperscript{42} In terms of average grade, the participant mean was 14.04, the non-participant mean, 13.92.\textsuperscript{43}
To determine the significance of the grade difference between samples, the standard error of the difference between the means was computed and a critical ratio obtained. Using the null hypothesis, the resultant ratio of 0.430 was found to be non-significant. While there was no significant grade difference, therefore, between participants and non-participants, it was still possible that minimal and continuing participants might differ in this regard.

Minimal participants were fairly evenly divided among grades 13, 14, and 15, with a mean of 13.92 for the twenty-six executives in this particular group. The mean for the nineteen continuing participants was 14.21. As with previous comparisons, a t test was employed to determine the significance of the mean difference. In this instance, the obtained t of 0.42 with forty-three degrees of freedom was not significant. Since this lack of grade-level significant difference between minimal and continuing participants might have been the result of the generally higher grades of the Warner-Martin-Van Riper sample, a larger group of data was examined.

Program records provided grade-level identification for four hundred and sixty-six executives participating during the first four academic years. Slightly more than half — some two hundred and thirty-four — were minimal participants and the remainder were continuing participants. Since GS-9, GS-10, GS-11 and GS-12 participants were included in these samples, the means were considerably lower than those of the Warner-Martin-Van Riper samples. The mean for minimal participants was 11.44; for continuing participants, it was 11.55. The critical ratio of 0.8209 obtained in comparing the difference between means was, again, not significant. At both higher and more comprehensive grade levels, therefore, grade averages did not discriminate between minimal and continuing
Although age might be expected to be positively related to grade level within the federal executive ranks, the correlation is by no means perfect. For this reason, therefore, age as a discrete factor was considered in discriminating between participants and non-participants, and between participants. Among the members of the participant sample, executives ranged in age from thirty-seven to seventy-two. With approximately eighty-two percent in the forty through fifty-five age group, the mean was 48.6 for this sample. The ninety-five non-participants ranged in age from thirty-four to seventy, with half in the same forty through fifty-five category. On an average age basis, the sample's mean was 50.9. In spite of the apparently greater difference (of ages as compared to grades) and the proportionate differences in the middle-aged category, the means difference between participants and non-participants was not statistically significant.

Minimal and continuing participants were also found to be non-significantly different in terms of the age factor. With a mean age of 45.73, some seventy-three percent of the minimal participants were in the forty to fifty-five range. With a mean of 46.73, almost ninety-five percent of the continuing participants were within the same range. A t test of means difference resulted in a non-significant ratio of .09 with forty-three degrees of freedom. Although there was a tendency for a greater proportion of participants to be in the middle-aged grouping (in comparison to non-participants), the intra-participant difference was not as pronounced. There was a slight tendency for middle-aged participants to continue in the program to a greater degree.

Since neither grade level nor age discriminated between participant and
non-participant, and intraparticipant, samples, length of federal service was considered as a possible discriminating variable. It seemed reasonable to hypothesize that executives with less federal service would tend to enter the program to a greater degree than those with a longer career tenure — that once involved in the program, they would continue to participate more extensively than their more experienced (in a federal career sense) counterparts.

Within the participant sample, executives with from one to thirty-four years of federal service were involved. All but three had over ten service years and a majority of the remainder (some sixty-nine percent) had twenty or more years of service. Within the non-participant sample, executives had from one to forty-six service years. Only six of the eighty-eight in this particular sample had less than ten years of service. An even greater proportion of the remainder (over seventy-four percent) had twenty or more years of service. The means for the two samples, 20.93 and 24.36, were tested for significant difference. The resulting ratio of 3.24 was significant well beyond the .01 level of confidence.

It seemed quite clear, therefore, that executives with relatively less federal service were attracted to the program to a much greater degree than those with longer career tenures. As mentioned above, sixty-nine percent of the participant sample and seventy-four percent of the non-participant sample had at least twenty-years of federal service. A much greater proportion of the total non-participant group (some nineteen percent as contrasted to slightly more than two percent of the participants) were in the thirty or more service years category. The difference in service-year patterns can be seen in the following summary table.
The principal disproportion existed, of course, in the fourth and fifth categories. This could be partially explained in terms of conventional retirement expectations. If twenty-one is accepted as a typical career entry age and sixty-five as a usual retirement age, then over a quarter of the non-participating executives were in the immediate pre-retirement stage. Another ten percent were in the decade of the fifties — at a stage where retirement was a foreseeable if not an immediate prospect.

This did not, however, completely explain the difference. Almost twice as many participants as non-participants were in the twenty to twenty-nine year category. And, for that matter, well over a third of the participating executives were in their fifties. One, at seventy-two, was considerably past normal retirement age. It was reasonable, therefore, to assume some degree of program entry motivation based on a lesser total of years of federal experience. Unlike their colleagues with more extensive experience, some executives might well have anticipated benefits from participation in the Program of Executive Development for Federal Personnel.

Within the participant group, however, years of federal service did not
prove to be a clearly distinguishing variable. Since the mean for minimal participants was 24.73 and the mean for continuing participants 21.00, the latter group was, on the average, composed of executives with less career service. Application of the t test to the means difference resulted in a ratio of 1.28 with forty-three degrees of freedom. This ratio was non-significant. The tendency for less-experienced executives to participate to a greater degree could have been due, therefore, to sampling error.

Service data (for two hundred and fifty-eight participants) from University records permitted further testing of this particular hypothesis. Reflecting as it did a broader range of program participants, the data yielded means of 17.45 for minimal participants and 17.54 for continuing participants. The test for the significance of means difference yielded a non-significant ratio of .0811. It was possible, of course, that the presence of lower-graded (GS-9, GS-10, GS-11 and GS-12) and younger executives in this particular sample washed out any difference that might have existed among the somewhat more mature and somewhat more advanced executives. In still another situation, however, an intra-agency comparison indicated that continuing participants had, on the average, more federal experience than their minimal counterparts. While years of federal service may have distinguished between participants and non-participants, it was not a discriminating factor in program continuance.

A somewhat different dimension — years of service within the executives' particular federal agencies — was also analyzed for potential significance. Within the participant group, service within the agency ranged from one to thirty-four years. Some twenty-two percent had less than ten years of agency service, and the majority of the remainder (some fifty-seven percent) were in
the from ten through nineteen years classification. Agency service among
non-participants ranged from one through forty-six years. Almost thirty per-
cent had less than ten service years. Some seventy-six percent of the re-
mainder were equally divided among the ten through nineteen and twenty through
twenty-nine year categories. Although the means of 16.16 (participants) and
17.36 (non-participants) and the different distributions indicated some
degree of difference, an obtained ratio of .544 indicated that the difference
was not statistically significant.

As with previous variables, minimal and continuing participants were
compared. Although participants averaged less than non-participants, in this
instance the mean for continuing participants (17.39) was higher than that for
minimal participants (16.38). Fifty percent of the former and some forty-six
percent (46.15) of the latter had from ten through nineteen years of agency
service. A t test produced a ratio of .79 with forty-two degrees of freedom—
below the .05 significance level of 2.02.

The Warner-Martin-Van Riper survey materials provided still another
approach to the analysis of career orientations (and experiences) of partici-
pating and non-participating executives. In outlining their occupational
histories, respondents identified their experience as public service or private
at four stages -- at time of becoming self-supporting, five years later, ten
years later, and fifteen years later. Of the eighty-four non-participants
providing this particular data, some fifty-six percent had entered the public
service at either the first or second stage -- at the time they first became
self-supporting or five years later. Of the forty-three participants
providing data, a larger proportion, almost sixty-nine percent, began their
It seemed, therefore, that executives who began their public service careers earlier rather than later tended to enter the Program of Executive Development for Federal Personnel. In order to test this tendency for significance, the public service data were regrouped into two classes — the first and second stages as contrasted to all later stages — for participants and non-participants. The null hypothesis was posed, and the chi-square test employed. A chi-square of 3.126 with one degree of freedom was obtained. Although this ratio was significant beyond the .10 level of confidence — confirming the tendency to some degree — the difference could still have resulted from chance.

Since the greatest disproportion occurred among those non-participants who did not begin their public service careers until they had been self-supporting for more than fifteen years, the data were regrouped to heighten this difference. Participants and non-participants were classified into those who started in public service within ten years after they became self-supporting, and those who started after fifteen or more years. The chi-square test was applied to these data and a ratio of 6.028 — one significant beyond the .02 level of confidence — was obtained.

It would not, of course, be surprising if some or most executives who began their public service careers at these later stages — some perhaps entering on the basis of political appointment or technical competence — failed to be attracted to the Program of Executive Development for Federal Personnel. They could not have had the same kind of public service career orientation as those executives who had entered federal organizations at adulthood, or
relatively early in their working career years. At the same time, however, this relative lack of public service experience might have been expected to act as a positive motivating influence — in the sense of their seeing the program at something which would help compensate for their minimum experience in the federal service. This did not, apparently, occur. 78

This implicit kind of career orientation did not, however, discriminate between minimal and continuing participants. Some seventy-five percent of the minimal participants and sixty-eight percent of the continuing participants fell into the first and second stage categories — executives who entered the public service less than ten years after becoming self-supporting. The chi-square test applied to this comparison yielded a non-significant chi-square of .228 with one degree of freedom. Since relatively few participants (twelve) were distributed among the remaining career stages, the data were not regrouped as with the participant non-participant samples. 79

In addition to the general area of administration (or management), ninety-two non-participants represented seventeen different professional or technical specializations. Almost thirty-five percent were in the administrative category. Engineering, law, accounting, inspection work and personnel management were most frequently involved in the professional-technical areas. 80 As a smaller sample, the forty-five participants represented — in addition to administration — eleven particular fields. A similar proportion — nearly thirty-seven percent — were in administrative work and the great majority of the remainder came from the same five basic specialties. 81 Participant and non-participant samples were, therefore, very similar in terms of occupational areas.
One of the items in the Warner-Martin-Van Riper questionnaire asked federal executives to locate their primary area of occupational experience within seven general categories. Responding executives -- both participants and non-participants -- identified themselves within one of five of the seven suggested occupational groupings as follows:

**TABLE XII**

**PARTICIPANT, NON-PARTICIPANT PRIMARY OCCUPATIONS**

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Non-Participants</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insurance, retirement, social security</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>2. Natural resources management or development</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>3. Economic or business regulation</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>4. Procurement, supply, manufacturing, maintenance etc., of material</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>5. Administrative staff services (personnel, legal, public relations, budgeting, etc.)</td>
<td>35</td>
<td>20</td>
</tr>
</tbody>
</table>

In terms of the questionnaire item, therefore, the two samples were quite generally similar. Within the participant sample, occupational distribution for minimal and continuing executives were also quite similar. Of the six participants with material (grouping 4) experience, all were within the minimal category. This difference between the two samples did not prove to be significant.83

A questionnaire item pertaining to the line or staff character of the respondent's position provided data for another of the dissertation's hypotheses. As first stated in Chapter III, the hypothesis held that "a large number of program participants are in staff rather than line positions". Although the
relative proportions of staff executive and line executive positions within the Chicago area federal population could not be determined with any real degree of precision, officials of the U.S. Civil Service Commission's Chicago regional office agreed that the proportions were roughly equivalent. For the hypothesis to be upheld, therefore, a clearly larger proportion of the Warner-Martin-Van Riper participant sample would have had to consist of staff executives.

This was not, however, the case. The participant sample was almost equally divided, with twenty-two staff executives and twenty-three line executives. Among another sample of forty-five executives -- one drawn from Agency C -- the division was exactly the same. A third source of information -- the University's program records -- indicated another instance of general equivalence. Of five hundred and sixty-five participants during the program's first four academic years, two hundred and eighty could be classified as staff and two hundred and eighty-five as line. With these data to substantiate that drawn from the Warner-Martin-Van Riper sample, the hypothesis was rejected. Staff executives were not, apparently, disproportionately attracted to the program.

Two occupational factors within the questionnaire -- those relating to the number of organizations served in (both public and private) and to the number of years in position -- could be utilized as indicators of occupational mobility. In both instances, mobility was assumed to be a potentially discriminating factor -- between participants and non-participants, and within the participant sample. The assumptions were made that participants would be more occupationally mobile than non-participants -- that they would have served in
more organizations and for a lesser period of time in their positions; that continuing participants would be more mobile in these respects than minimal participants.

In terms of interorganisational mobility -- the number of organizations served in -- eighty-seven non-participants served in from one to twenty-one organizations. The great majority, some eighty-five percent, were involved with no more than seven organizations during their careers. Of the forty-two participants for whom data were available, none served in more than eleven different organisations. An even greater proportion, almost ninety-three percent, had experience in from one through seven organisations. The average for the two groups were 4.64 (non-participants) and 4.41 (participants). The difference was not meaningful. A test of means difference resulted in a ratio of 0.7288 -- one which was not statistically significant. The chi-square test -- based on service in one through seven or more than seven organizations -- provided the non-significant ratio of 0.402.

Consideration of participants and non-participants in terms of intra-organizational mobility -- in terms of years in position -- also failed to distinguish the two groups. Participants averaged 4.91 years in their positions and thus seemed more mobile. Only some seven percent had held their present positions for more than ten years and a majority, approximately sixty-one percent, had been in position less than five years. In contrast, non-participants averaged 6.22 years. Twenty percent had been in position for more than ten years but almost half fall into the less-than-five-year group. The same statistical test of means difference, however, produced a non-significant ratio of 0.8562. The chi-square test -- based on less than ten, and ten or more
position years—also proved to be non-significant.94

The assumption, therefore, that program participants would be more
occupationally mobile was not supported in either instance. While participants
averaged fewer organizational experiences than non-participants, they also
averaged fewer position years. The differences were not meaningful, however,
as far as tests of statistical significance were concerned. As importantly,
perhaps, these same data failed to discriminate between minimal and continuing
participants.

As measured by number of organizations, continuing participants seemed
less mobile. They averaged 3.95 organizations, with very few (some six percent)
serving in more than seven organizations. Minimal participants averaged 4.75
with somewhat more (twelve percent) having been in at least eight different
situations.95 A t test of means difference produced a ratio of 1.48 with forty
degrees of freedom. The tendency for continuing participants to be less mobile
in this regard was not, therefore, confirmed statistically. The mobility
tendency was, in fact, in the other direction—toward minimal participants.
The tendency also existed when the position years factor was tested. Here too,
however, the difference was not significant.96

A complete review of occupational elements within the Warner-Martin-Van
Riper questionnaire suggested, therefore, the following inferences:

1. Grade averages, age averages, average years of agency service,
average number of organizations served in, and average position
years were not discriminating in distinguishing between program
participants and non-participants;
2. these same variables also failed to distinguish, in any significant
way, minimal and continuing participants;
3. since the basic occupational distributions of participants and non-
participants—as well as minimal and continuing participants—
were quite similar, these failures to discriminate were not too
surprising;
4. somewhat more surprisingly, participation on the parts of both line and staff executives was generally equivalent;
5. although length of federal service was not significant within the participant sample, this variable did influence program participation -- participants were executives with less years of service, on the average, than non-participants;
6. this difference may, of course, have been influenced to some degree by age-in-relation-to-retirement but it was clearly significant;
7. while executives with less experience were more involved in the program, those who began their public service careers at later occupational stages -- particularly those starting after fifteen years -- tended to stay out of the program.

While occupational mobility did not discriminate in any of the comparisons, it was considered quite likely that some factors implying social mobility would do so.

Social Mobility: Its Relation to Program Participation

Since both the participant and non-participant samples were composed exclusively of male executives, sex was an irrelevant factor in attempts at discrimination. Marital status also proved to be irrelevant as virtually all -- all but one participant and three non-participants -- were married. Remaining relevant data from the survey were concerned with national origins of executives and their families, with educational and social mobilities in relation to families, and with mobilities in achieving executive positions.

While the latter factor -- the degree of mobility involved in achieving an executive position -- could have been discussed in the preceding section concerned with occupational factors, it is discussed here because of its social implications. As mentioned previously, the questionnaire asked respondents to identify their occupations at four stages -- at the time of first becoming self-supporting, and at succeeding five, ten and fifteen year intervals. The general categories provided within the questionnaire included lower,
middle, and upper-class occupations. The lower-class occupations mentioned by sample members included the positions of clerk, blue-collar worker, farm laborer, messenger, custodian, unskilled laborer and other miscellaneous unskilled jobs. Middle-class positions included farm owner, foreman or first-line supervisor, salesman and small business owner. For purposes of this analysis, movement from these positions into the executive category constituted social mobility.

Again for purposes of this analysis, teachers, engineers, lawyers, accountants, journalists, personnel administrators, social workers, scientists, veterinarians, editors, and owners of large businesses were classified as upper-class. Those who began their adult working careers as management interns or management trainees — as people brought into their federal organizations as potential managers or executives — were also so classified. While these positions were not all necessarily upper class in terms of our broader social classification systems, they were felt to be so in terms of the particular milieu involved — that of the federal bureaucracy with its well defined hierarchical structure. Movement from these positions into the executive level within the federal organizations involved was viewed as a relative socio-occupational stability, in contrast to the mobility previously mentioned.

Of some forty-one participants in the Warner-Martín-Van Riper sample, some sixty-one percent were socially mobile in that they had attained the executive level after beginning their adult careers in lower or middle occupations. Of the eighty-eight non-participants for whom these data were available, only about thirty-eight percent were similarly mobile, with the clear majority being stable in that they began their adult careers in professional, technical or
management intern positions. This difference proved to be real rather than accidental. The chi-square test involving participants and non-participants, in terms of their mobility or stability, resulted in a chi-square of 6.229 — a ratio significant, with one degree of freedom, beyond the .02 level. It seemed clear, therefore, that federal executives whose early careers involved lower or middle-class occupations were attracted to the Program to a significantly greater degree than their fellow executives who began at what have been defined as upper-level positions.

This was, of course, a finding which could not have been anticipated. While this would seem to be a natural enough consequence of having started at the sub-professional or sub-technical level, it would have been just as logical to expect the stable executive to be attracted to program participation because of his earlier identification with an upper-level occupational role. Apparently, however, the stable executive felt less need to identify with or to benefit from the explicit or implicit values associated with program participation.

Measured on the same basis, socio-occupational mobility did not discriminate significantly between minimal and continuing program participants. Approximately forty-six percent of the minimal participants and eighty-two percent of the continuing participants were mobile. In this instance, the chi-square test yielded a ratio of 3.065. Thus, while there was a pronounced tendency for continuing participants to be occupationally mobile rather than stable — in contrast to minimal participants — the difference was not statistically significant.

A more detailed analysis of minimal and continuing patterns suggested greater participation by executives who attained this level within five years
after becoming self-supporting. Among minimal participants, some fifty-four percent were stable and twenty-five percent were those who had achieved mobility within five years. Among continuing participants, the percentages were eighteen and thirty-five. The chi-square test applied to these categories and these percentages produced a chi-square of 3.070. While not statistically significant, this finding suggested the possibility that executives who were successfully mobile earlier in their careers tended to be attracted to more extensive program participation.

The questionnaires used for The Study of Federal Executives also asked respondents to identify the primary occupations of their fathers, paternal grandparents, and maternal grandparents. These data provided another opportunity to test socio-occupational mobility as a relevant factor in program participation. Using the paternal occupation and the same three occupational classifications described above, it was possible to identify federal executives in the sample as mobile or stable. Mobile executives were those whose fathers had occupied what have been defined as lower or middle-class positions; stable executives were those whose fathers were within the professional, technical or business positions identified as upper-class.

On these bases, some seventy-six percent of eighty non-participants were mobile -- the same approximate percentage as for forty-one participants. As would be expected, a chi-square test involving these proportions produced a non-significant result. A somewhat larger proportion of continuing participants (some eighty-two percent as contrasted to almost seventy-one percent of the minimal participants) were mobile in these same terms. This difference in proportions was also, however, quite non-significant. This particular kind of
social mobility -- social distance from paternal occupation -- failed to dis-

criminate, therefore, between participants and non-participants, and between

minimal and continuing participants.

In detailing their personal histories, respondents also provided inform-

ation about their national origins and the national origins of their parents,

grandparents, wives, wives' parents, and wives' grandparents. Using the

paternal line only (father and paternal grandfather), all executives in the

sample were classified as foreign born, first generation (father foreign born),

second generation (father native born, paternal grandfather foreign born), or

third generation (both father and paternal grandfather native born). Those

who were either foreign born or first generation Americans were considered

mobile executives -- in terms of their birth origins. Second or third generation

executives were categorized, within the same context, as stable.

Some thirty-five percent of the sample's participants and some twenty-nine

percent of its non-participants were mobile in these terms. The difference

between the two sub-samples was not statistically significant. Within the

participant sample, twenty-seven percent of the minimal participants and

approximately forty-seven percent of the continuing participants were mobile.

Although, there was, therefore, a pronounced tendency for mobile executives to

participate in the program to a greater rather than a lesser degree, the chi-

square test did not produce a significant ratio. Still another factor,

therefore, that of mobility as determined by national origin, failed to dis-

criminate among participants or between participants and non-participants.

In Chapter V, the educational backgrounds of participants from the Student

Inventory sample were compared -- in general terms -- to the backgrounds of
their parents. In that particular instance, participants were socially mobile
in that more than fifty-six percent had attained at least a bachelor's degree,
while only six percent of their fathers had reached the same minimum level of
educational achievement. Within the Warner-Martin-Van Riper participant
sample, some sixty-nine percent had attained at least a bachelor's degree and,
of these, only thirteen percent had fathers who had reached the status of
college graduates. Thus, participants proved again to be socially mobile in
terms of educational achievement. 114

Data from the Warner-Martin-Van Riper questionnaire provided much more
detailed information about the educational backgrounds of executives and their
parents. Both were described in terms of the following progressive categories:
1) less than high school education, 2) some high school education, 3) high
school graduation, 4) some college training, 5) bachelor's degree level and 6)
postgraduate (graduate or professional) degree level. With these data, it was
possible to compare the relative educational achievement levels of executives
and their parents much more accurately. Comparisons could be made in terms of
simple mobility -- when executives had achieved, educationally, to any greater
degree than their parents -- and in terms of a high degree of mobility -- when
executives had attained a very clearly higher level (at least two categories
higher) than their parents. Stability was assumed when a parent's educational
achievement level equaled or exceeded the level of the federal executive
involved. In the comparisons described in the following paragraphs, the
paternal level was used to determine both general and more significant mobility,
as well as stability.

Of the eighty-nine non-participants for whom these data were available,
some eighty-five percent were mobile in the general sense that they had reached higher educational levels than their fathers. Of the forty-four participants for whom similar data were available, almost eighty-two percent were mobile to the same degree. As would be expected, a chi-square test showed the difference in proportions to be non-significant. The difference was not much greater when executives and their parents were compared in terms of a higher degree of mobility. Sixty-one percent (participants) and sixty-five percent (non-participants) were highly mobile in that their educational classifications were at least two categories above those of their fathers. The participant non-participant difference was again not significant.

Although subsequent chi-square tests involving minimal and continuing participant samples were also non-significant, they revealed a pronounced tendency for continuing participants to be more educationally mobile than minimal participants. As far as simple mobility was concerned, ninety-five percent of the continuing participants and approximately seventy-three percent of the minimal participants were mobile. A comparison on this basis provided a chi-square of 3.26 with one degree of freedom — below the 3.841 of the .05 confidence level but beyond the 2.706 of the .10 level. While over seventy-two percent of the continuing participants were highly mobile, only some fifty-four percent of the minimal participants were mobile to this degree. These proportions provided almost exactly the same kind of chi-square — 3.26. In any event, therefore, this kind of social mobility discriminated within the two participant groups to a much greater degree than it did between participants and non-participants.

Analysis of these various social mobility factors — relating to self-and
parental occupations, national origins, and educational achievement — produced, therefore, the following conclusions:

1. Federal executives starting their adult careers in lower and middle class occupations were attracted to program participation to a significantly greater degree than those beginning in upper-class positions;
2. While there was a pronounced tendency for continuing participants to be characterized by this same kind of socio-occupational mobility — in contrast to minimal participants — the tendency was not statistically significant;
3. Even less significant — for participants and non-participants and within the participant group — was socio-occupational mobility based on distance from father's occupation;
4. Mobility based on national origins also failed to discriminate, although there was a pronounced tendency (not statistically significant) for continuing participants to be more mobile in this regard than minimal participants; and
5. While educational mobility did not distinguish between participants and non-participants, it too suggested a tendency (not statistically significant) for continuing participants to be more mobile than minimal participants.

While the various factors suggesting that continuing participants were more mobile than minimal participants did not prove to be statistically significant, the uniform trend substantiated the inference that real differences might have existed. Since continuing participants proved to be more mobile when compared in terms of occupational, national origins, and educational elements, their relative mobility was probably greater.

Summary and Conclusions

Three of the initial hypotheses of this dissertation were considered in connection with data drawn from the Warner-Martin-Van Riper Chicago survey sample. One which was tested before — using Student Inventory and Agency C samples — held that the educational backgrounds of participants would run to extremes; that participants would be primarily executives with college degrees or little or no college training, and that the two extremes would be fairly
equally represented. Within the sample, a clear majority were college graduates but only about one-fourth as many were at the other extreme, and the hypothesis was not upheld by the data. Another hypothesis dealing with educational backgrounds -- one to the effect that participants with more formal education would tend to participate in the program more, once they had begun -- also failed to be substantiated by the data. A third hypothesis suggesting that staff executives would tend to enter the program more frequently than line executives was not borne out. A fourth hypothesis -- one holding that agency-supported participants would be higher-graded and better educated than self-payment participants -- could not be tested because the sample's data were not adequate.

In terms of these data, therefore, three of the dissertation's hypotheses may be evaluated as follows:

3. The hypothesis was stated that the educational backgrounds of participants run to extremes: that the majority of participants have either college degrees or little or no college training. Using the same definition of "little or no college training" and again positing a bimodal emphasis upon the two extremes, the hypothesis was not upheld.

4. The hypothesis was stated that participants with more formal educational background tend to participate in the program to a greater degree than those with less formal training. The data did not support this hypothesis.

5. The hypothesis was stated that a large number of program participants are in staff rather than in line positions. Assuming a general equivalence of staff-line positions among Chicago-area federal executives eligible for program participation, the hypothesis was not upheld.

In a more general sense, this chapter sought information about participants and non-participants in terms of their educational backgrounds, and in terms of the relationships of their occupational and social mobilities to program participation. The Warner-Martin-Van Riper questionnaires used with Chicago
federal executives provided relevant data for one hundred and forty executives (ninety-five non-participants and forty-five participants) from fifteen agencies which contributed the bulk of program participants.

To a much lesser degree, some areas discussed in this chapter were based on data drawn from University and Agency C records. Since the total Warner-Martin-Van Riper sample involved male executives in grades thirteen and above, virtually all of whom were married and virtually all of whom were quite mature, it was quite homogeneous.

Gross educational comparisons did not distinguish the program participant category. As was the case with previous samples used, the great majority of participants had at least one college degree and very few had a really minimal amount of college training. The distribution pattern was very similar within the non-participant sample. Although a somewhat larger proportion were within the lowest educational category, the variation was not great. With college graduation as the discriminating variable, the difference between participant and non-participant groups was not statistically significant.

This same kind of comparison also failed to discriminate between minimal and continuing participants. The proportions were very similar and the difference indicated no real statistical significance at any level. When educational achievement was categorized somewhat more discretely -- into non-degree, bachelor's degree, and professional or graduate degree categories -- some differences became apparent. When participants and non-participants were contrasted, in terms of non-degree and professional or graduate degree levels, there was no significant difference. The same kind of contrast involving non-degree and bachelor's degree levels indicated, however, a tendency for more non-
degree executives to be continuing participants. The statistical difference was almost at the .05 level of confidence. A final contrast of bachelor's degree and professional or graduate degree categories indicated a significant statistical difference -- evidence of the fact that more from the latter level were continuing program participants.

When the same categorizations were used, and the same three comparisons made among Agency C participants and among participants and non-participants of the total Warner-Martin-Van Riper sample, none of the differences were statistically significant. At the same time, however, the differences were greatest when the bachelor's degree and professional or graduate degree categories were involved. They were somewhat less when non-degree and bachelor's degree categories were involved, and least when non-degree and professional or graduate degree categories were compared. The series of comparisons suggested, therefore, that advanced degree status, as compared to a basic bachelor's status, was most influential in terms of both general program participation and degree of participation within the program. While both participants and non-participants, and minimal and continuing participants, did not differ greatly as far as the proportions of non-degree and advanced degree executives were concerned, there was some tendency for non-degree executives to enter the program, and to continue in it to a greater extent, than executives with only a bachelor's degree. And, as indicated, the tendencies were greater for advanced degree executives as contested to those with the bachelor's degree.

These were, however, only tendencies. Even in the one instance where a difference was statistically significant, other factors may have been influential. Although participants with a professional or graduate degree continued in
the program more than participants with a bachelor's degree, the small number of the former were from federal agencies with either involvement in the program, or a decidedly positive attitude toward executive development activities.

In considering occupational factors, agency payment of program fees could not be used as a variable in evaluating the grade or educational levels of participants. The Warner-Martín-Van Riper sample comprised participants who came, for the most part, from agencies without this authority. Grade level was employed, however, in comparing participants and non-participants, minimal participants and continuing participants. Using group grade averages for comparisons, the grade factor was not significant in any instance. Data on grade levels drawn from the University's program records substantiated the lack of significant difference between minimal and continuing participants.

While the average age of the Warner-Martín-Van Riper participant sample was greater than that of the more heterogeneous Student Inventory sample -- forty-eight as contrasted to forty-two -- age was also a factor which did not discriminate between participants and non-participants. Nor, for that matter, did it distinguish at all between minimal and continuing participants.

Years of federal service was, however, a factor which did discriminate between participants and non-participants. Examination of these patterns indicated quite clearly that executives with relatively little federal service were attracted to program participation to a much greater degree than executives with longer career tenures. Many more non-participants had thirty or more years of federal service, were near retirement age, or were in the pre-retirement age decade. Length of federal service was not, however, discriminative within the participant group, although there was a slight tendency for less
experienced executives to continue in the program. University records suggested a somewhat similar tendency.

While years of agency service did not distinguish between the sample's executives or within its participant group, analysis of occupational histories and their relationships to public service indicated some significant differences between participants and non-participants. When executives who entered public service within ten years after becoming self-supporting were compared with those who did not begin their public service careers until at least fifteen years after this stage, the former entered the program in significantly greater numbers than the latter. Although the difference was not statistically significant, the tendency existed when those beginning public service within five years were contrasted with those entering public service after ten or more years. It seemed likely, therefore, that those entering public service at later rather than earlier career stages had different kinds of occupational orientations, orientations which did not lead them in the direction of program entry. This was not merely a matter of the nature of the executive's professional or technical focus, since participants and non-participants were quite similar in this regard.

It had been assumed that occupational mobility might distinguish executives and participants. Both comparison groups were examined from the standpoints of the number of organizations served, and the number of years in position. In both instances, it was hypothesized that participating executives and continuing participants would be more mobile — in that they would have served in more organizations and would have been in their positions a fewer number of years. This was not, however, the case. An appropriate set of comparisons revealed no
differences -- between participants and non-participants -- which were statistically significant.

At the same time, however, participants were found to be more occupation-ally mobile than non-participants when occupations were categorized in terms of social class location. Those federal executives beginning their careers in lower or middle-class occupations entered the program in significantly greater numbers than their counterparts who began in upper-level career positions. This kind of a socio-occupational mobility did not distinguish between minimal and continuing participants. There was a suggestion, however, that early mobile participants tended to continue in the program.

As the final section of the chapter indicated, a number of other tests of social mobility were employed in attempts at discrimination. Social distance from paternal occupation failed to discriminate within total executive and within contrasting participant groups. Mobility in terms of national origin also failed to discriminate significantly, although there was a pronounced tendency for mobile executives in the program to be continuing rather than minimal participants. This same pronounced tendency existed when educational levels of participants and their fathers were compared -- continuing participants were more educationally mobile.
Notes

1. See the discussion in Chapter IV.

2. See the discussion in Chapter III.

3. Although staff members directing this study are now at various other locations, they were headquartered at the University of Chicago in 1958, when the study was first organized. The Chicago area was, therefore, the most natural locale for pilot studies.

4. The author is grateful to Professors W. Lloyd Warner, Normal H. Martin and Paul F. Van Ripper, and to Mr. Orvis F. Collins, the Executive Director of the Study, for making this data available.

5. See Chapter III references to the Study.

6. This reference appears in an undated form letter prepared by the Study directors in the early part of 1959.

7. This reference is taken from a short summary statement mailed to federal directors of personnel during the latter months of 1958 and the early part of 1959.

8. The techniques, as well as other aspects of the Study, are outlined in the summary of the Interagency Advisory Group's 103rd meeting, (U.S. Civil Service Commission, Washington, D.C., December 18, 1958.

9. This reference was also included in the statement referred to in note 7.

10. Seventeen of the nineteen were "certificate graduates."

11. The term agency is used herein as defined in Chapter II.

12. This term is also defined in Chapter III.

13. See the discussion in Chapter IV.

14. See the discussion in Chapter V.

15. The percentages were 68.88, 13.33 and 17.77 respectively.

16. Although Agency C participants were probably not typical in other respects, they too evidenced this kind of an educational background distribution. Of forty-five program participants in this agency, the same proportion
Almost sixty-nine percent were college graduates. A somewhat greater proportion than in the Warner-Martin-Van Piper sample (twenty-six percent as against eighteen percent) fell into the other extreme category.

17. See the discussion in Chapter V.
18. See items b) and j) of item 2 of Part II of Appendix I, the agency Administrator Questionnaire.
19. See Chapter III references to the Bendix Study.
20. The percentages were 65.21, 9.78 and 25. respectively.
21. A chi-square value of .455 with one df is significant at only the .50 level.
22. This hypothesis, the fourth in the original series of ten, was first stated in Chapter III.
23. A chi-square of 3.841 with one df is significant at the .05 level.
24. These data were, of course, only suggestive. It is quite likely that many of the respondents in the participant sample did not interpret the question to include training such as that provided in the Program of Executive Development for Federal Personnel.
25. See Chapter IV and Chapter VI discussions of Agency C.
26. The chi-squares of .507, .578 and 1.417, with one df in each instance, did not begin to approach the 3.841 value of the .05 confidence level.
27. The chi-square of 1.417 with one df falls between the .20 and .30 confidence levels.
28. The chi-squares of 1.712, .209 and 2.100, with one df in each instance, again fell below the .05 confidence level of 3.841.
29. The chi-square of 2.100 with one df falls between the .10 and .20 confidence levels.
30. See the discussion in Chapter II.
31. On this basis, the chi-square result would have been 2.488 with one df — below the .05 confidence level.
32. The percentages were 22.22, 38.46 and 51.61 respectively.
33. The percentages were 11.11, 3.64 and 6.45 respectively.
34. See the discussion in Chapter III.
35. The percentage was 14.61. Some twenty-two percent of the participants and approximately ten percent of the non-participants had such training.

36. For example, only some seven percent of the participant group had formal training in each field. The proportions among non-participants were even smaller.

37. These data were, again, taken from the University's program records.

38. The thirteen agencies involved provided over sixty percent of the employee-payment participants.

39. Seventy-nine of the ninety-five were from the same agencies as the forty-five program participants. The remaining sixteen -- from five organizations -- represented employee-payment agencies which had provided almost three percent (2.91) of the four year enrollment.

40. See hypothesis 6 in the Chapter III enumeration.

41. The Agency C and Agency D samples used in connection with test performances indicated that the converse would be true -- that employee-payment participants were at higher grade levels and were better educated than agency payment participants. See Chapter VI for summaries of these sample characteristics. A general review of the quarterly enrollments during the spring 1957-58 and autumn 1958-59 program quarter suggested that the grade and education differences would not be significant on an interagency basis.

42. The percentages were 38.29, 32.98 and 18.09 respectively.

43. Standard deviations for the samples were .96 and 1.69

44. Garrett, pp. 213-217.

45. Standard deviations were .88 and 3.38.

46. The assumption was again made that the standard deviations for the two populations were equal. With this assumption, the overall (pooled) variance and standard deviation were estimated to employ the t test.

47. A t of 2.02 with forty df is significant at the .05 level.

48. Standard deviations were 1.54 and 1.24.

49. Means for twenty-nine agency C minimal participants (11.73) and sixteen continuing participants (11.63) were also compared and found to be non-significantly different. Grade level did not, therefore, discriminate in this somewhat atypical federal organization.
50. The percentage was 82.22. This proportion, in comparison to the percent in the same group, was a larger proportion than in the Student Inventory Participant sample. The Student Inventory mean was 42.

51. The percentage was 50.53. The great proportion of the remaining executives, forty-four of almost fifty percent, were above fifty-five.

52. Standard deviations were 6.46 (for the participant sample) and 19.52 (for the non-participant sample).

53. The critical ratio obtained in means comparison was .2780.

54. The percentage was 73.07. The standard deviation was 14.02.

55. The percentage was 94.74. The standard deviation was 4.14.

56. Again, a t of 2.02 with forty df is required for the .05 level of significance.

57. Within Agency C, the tendency was not present. Eighty-three percent of a twenty-nine person minimal sample were within the forty to fifty-five range; over eighty-one percent of a sixteen person continuing sample were in the same range.

58. The percentage was 69.05.

59. The percentage was 74.39.

60. The standard deviations were 6.00 and 12.65 respectively.

61. The percentages were 19.32 and 2.22.

62. The percentage, with seventeen of forty-five executives, was 37.77.

63. Standard deviations for the two samples were 11.73 (minimal participants) and 5.82 (continuing participants).

64. As mentioned in notes 47 and 56, a t of 2.02 would be required for significance.

65. Standard deviations were 8.31 and 8.80 respectively.

66. Twenty-nine minimal participants in Agency C had an average of 18.83 service years. Sixteen continuing participants averaged 20.81 service years. The difference was, however, not significant.

67. The agencies were those in which executives were serving at the time of the Warner-Martin-Van Riper survey.
68. The percentages were 22.22 and 57.14.

69. The percentages were 29.34 and 38.46.

70. Standard deviations were 7.23 and 10.94.

71. Standard deviations were 6.38 (continuing participants) and 1.54 (minimal participants).

72. The percentage was 55.95. Of these two categories, the majority (fifty-three percent) began their public service at the five-year stage. Nineteen and twelve percents started their public service at the ten and fifteen year stages, and thirteen percent did not enter public service until their adult careers had been underway for more than fifteen years.

73. The percentage was 68.8. Within these two stages, the majority (sixty-eight percent) started public service at the five year stage. Twenty-two and two percents entered at the ten and fifteen year stages, and some five percent were not involved until after fifteen years.

74. With one df, a chi-square of 2.706 is significant at the .10 level. A value of 3.841, with the same df, is required for the .05 level of confidence.

75. See notes 72 and 73.

76. In two of the eighty-four non-participant instances, executives moved back and forth between public and private employment during the first ten years after becoming self-supporting. In these instances, the stage beginning continuous public service was counted as the entry stage.

77. With one df, a chi-square of 5.412 is significant at the .02 level. A value of 6.635 is required for the .01 level of confidence.

78. Of eleven non-participants entering public service more than fifteen years after starting their work careers, seven were over forty when they joined a federal organization for the first time. Nine were identifiable as professional or technical men -- chemists, accountants, lawyers, economists, engineers, real estate appraisers, etc.

79. Five of the remaining six minimal participants were at the ten and fifteen year entry stages; five of the remaining six continuing participants were at the ten-year entry stage.

80. These five specialties accounted for two-thirds of the non-administration areas.

81. The five comprised three-quarters of the non-administration areas.
82. The item was phrased as follows: "Where do you consider that the bulk of your governmental experience falls?" Because of its length and because, as mentioned in an early part of this chapter, there were a number of versions involved, the Warner-Martin-Van Riper questionnaire has not been reproduced in this dissertation. Those interested may request a copy from Mr. Orvis F. Collins, Executive Director, The Study of Federal Executives, c/o College of Business and Public Service, Michigan State University, Lansing, Michigan.

83. Minimal and continuing participants were classified in terms of group 5 as contrasted to the other groupings. A non-significant chi-square of .392 resulted.

84. The item was phrased as follows: "Your present position is best characterized as line or staff." Respondents checked the appropriate category.

85. If the program's grade level minimum for participation is accepted as defining "a federal executive," then all three officials who were consulted agreed that generally equivalent proportions could be assumed. The equivalence would probably be closer among the GS-13, GS-14 and GS-15 levels, those comprising the bulk of the Warner-Martin-Van Riper sample.

86. Participants were categorized as belonging to administration and general management areas, as well as to auditing (audit, control, inspection, review), fiscal management, personnel management, professional and semi-professional, and technical classifications. The fiscal management, personnel management and professional semi-professional classifications were largely staff employees. The other categories included line and staff -- but mostly line -- personnel.

87. The item was phrased as follows: "With how many government departments, independent public agencies, business firms or other government organizations have you been associated with during your career, including your present organization?"

88. A respondent was asked at what age he first assumed his present position. Since the questionnaire also provided a respondent's then current age, the number of years in position could be computed.

89. As Chapter V indicated, Student Inventory data could provide only some generalizations regarding the occupational mobility of program participants.

90. The percentage was 85.06.

91. The percentage was 92.86.

92. The percentages were 6.82 and 61.36.
93. The percentage was 48.88.

94. The chi-square was 1.143.

95. The percentages were 6.11 and 12.5.

96. Minimal participants averaged 4.62 years, continuing participants, 5.33. A t test produced the non-significant ratio of .48 with forty-two degrees of freedom.

97. While the classification system of the questionnaire could be used to yield at least a six-category grouping, the broad three-fold classification was considered satisfactory for the purposes of this inquiry and for the relatively small samples involved.

98. Most of the upper-level positions (some fifty-six percent) in the total sample were, in order of occurrence, engineers, teachers, lawyers and accountants. The great majority in the lower-middle positions (some sixty-three percent) were clerks.

99. The percentage was 60.98. About half became executives within five years after becoming self-supporting; the other half reached this level within ten years.

100. The percentages were 37.5 and 62.5.

101. A chi-square of 5.412 is significant at this level.

102. The percentages were 45.83 and 52.35.

103. A chi-square of 3.065, with one df, lies between the .10 (2.706) and .05 (3.841) confidence levels. The same kind of occupational mobility test applied to minimal and continuing participants within Agency C resulted in an even less significant chi-square of 1.577.

104. The percentages were, in order, 54.17, 25.00, 17.65 and 35.29.

105. The percentages were 76.25 (non-participants) and 75.61 (participants).

106. The chi-square was .040.

107. The percentages were 82.35 and 70.83.

108. The chi-square test produced a non-significant .392.

109. Although the paternal line was used as the variable, there was a fairly close relationship between the paternal and maternal lines. In over seventy-five percent of the cases where a parent was foreign born, both the father and the mother were foreign born. In about seventy-six percent of the cases where a grandparent was foreign born, both the
paternal and maternal grandfather were foreign born. In some eighty-one percent of the cases involving a native born paternal grandfather, both paternal and maternal grandparents were American born.

110. Only two executives within the entire sample were foreign born.

111. Statistical comparison resulted in a non-significant chi-square of .808 with one df.

112. The percentages were 26.92 (for twenty-six minimal participants) and 47.06 (for seventeen continuing participants).

113. The chi-square of 1.835 with one df was beyond the .20 confidence level of 1.642 but well below the .05 level of 3.841.

114. The non-participant sample exhibited a very similar pattern. As mentioned earlier in this chapter, about sixty-five percent of this sample's non-participants had at least a bachelor's degree. Of these, only some fourteen percent had fathers who were college graduates.

115. In the first instance an executive was considered educationally mobile if he surpassed his father's level to any degree. For example, an executive with a high school graduate father would be considered mobile whether he had some college, a bachelor's degree, or a graduate or professional degree. To be classified as highly mobile, an executive with a high school graduate father would have had to be at least a college (bachelor's degree) graduate.

116. The percentages were 65.48 and 61.82

117. The chi-square obtained was .191 with one df.

118. The chi-square obtained in this comparison was .305 with one df.

119. Samples included twenty-six minimal and eighteen continuing participants.

120. The percentage for minimal participants was 73.06.

121. The percentages were 72.22 and 53.85.
CHAPTER VIII

PERSONALITY FACTORS: THEIR RELATION TO PROGRAM PARTICIPATION

In characterizing federal executives participating in the program, agency administrators conversant with their organizations' participants were very positive. In free responses evaluating "the typical participant," terms such as able, energetic, ambitious, mature, conscientious and self-confident were frequently employed. Almost without exception, respondents ascribed positive motivations to program participants—motivations which implicitly or explicitly were tied to desireable personality characteristics. Viewing participants as above average executive, agency administrators saw program participation as primarily a personal matter—a situation wherein individual executives "participated or did not participate for good and sufficient reasons." In essence, therefore, they considered participants as capable and positively motivated executives without any clear implications that non-participants were the converse.

Agency administrators were also asked for their opinions of participants' personality traits, and for participant non-participant comparisons in terms of these traits. Excluding the comments of a single respondent, these opinions formed a very uniform, positive pattern. Participants were generally seen as mature, adjusted, energetic, ambitious, optimistic, self-reliant, responsible and conscientious. They were characterized as having positive attitudes towards others, work and success, and their own problems. While some respondents could not discriminate between participants and non-participants in these respects,
the majority emphasized the superior maturity, objectivity and positive work attitudes of participants.3

As mentioned in an earlier analysis of these opinions, agency administrators were evaluating their organizations' participants as a group. They were generalizing about personality factors applicable to the majority of the executives involved. Since their limited evaluations and possible response sets made conclusions or inferences of only general value, it was necessary to go beyond subjective opinion to an objective assessment of participants' personality characteristics, and comparison with non-participant traits.4

Questionnaire items dealing with personality traits were phrased to correspond to some differentiating characteristics obtained in previous research studies using a new and highly effective Thematic Apperception Test methodology. This methodology—Arnold's Sequence Analysis5—was selected as one most suitable to an attempt to discriminate between participating executives and their non-participating counterparts. It was uniquely suited to appraise participants and non-participants as individuals. With an appropriate sample available from the Study of the Federal Executive,6 it could be used to determine whether any personality factors existed which were relevant to program participation—whether participants and non-participants were basically different in terms of personality orientation. By reformulating the dissertation's ninth and tenth hypotheses7 to fit the very precise definitions of Sequence Analysis, the relation of participant and non-participant personality factors to program participation could be determined.

This chapter is concerned, therefore, with the results of an investigation using the Sequence Analysis methodology. After a comprehensive description of
Sequence Analysis and a summary of its use in previous research studies, the sample, methods, hypotheses, findings, and conclusions of this particular investigation are reported.

Sequence Analysis as a Discriminative TAT Method

As Arnold points out in her critique of the TAT as a projective method, it has often been assumed that the TAT, as well as other projective tests, "is a test of perception in which an ambiguous situation is perceived according to the storyteller's needs." With perception conceived of "as the 'projection' of an image produced by the individual into the outer world," it is assumed "that needs or emotions can alter such an image and that such an alteration would be an expression of personal needs, or emotions." Clinicians have also assumed that storytellers are talking about their own personal situations and, when the dynamics of the situation are considered, that the story has become a combination of perception and recall. In this context, stories as well as dreams "are thought of as a mosaic of reminiscences that have to be disentangled from irrelevant elaborations."

Arnold begins her criticism of this viewpoint as follows:

But recall is not the only psychological function that employs memory images. In imagining anything at all we necessarily use memory images, but these are no longer personal memories because they are deprived of their original setting and their temporal sequence. Any attempt to interpret a story piecemeal by dividing it into themes or by interpreting various characters as actual persons (i.e. recalled rather than imagined) is an attempt to see in the story a set of personal memories, held together by irrelevant connections and disguised in various ways. But a story or dream is a new production in which memory images are recombined often in totally unexpected and novel ways; they are not erroneous or distorted personal memories.

With the exception of very few clearly autobiographical stories, Arnold
conceives of the newly produced story as "a new creation using the materials provided by memory but using them in an entirely novel fashion." If, therefore, one takes "dreams and stories as creative productions rather than as repetitions of past situations," it is possible to identify what the story is really saying, what its import really is. The identified import makes it possible to infer attitudes toward definite situations rather than tenuous inferences about drives, needs or emotions. Taking into account the general tenor of the story, its plot and outcome, the import permits story interpretation with as much certainty as in autobiographical stories. In each instance, the story import reveals stable attitudes toward various situations.

Abstracting the import—a basic technique in Sequence Analysis—makes it unnecessary to decide with whom the storyteller identifies. It prevents wrong inferences, from past experiences to current behavior.

Arnold's notion of the TAT as a test that taps imagination rather than perception accepts the manifest content of a story in contrast to the psychoanalytically assumed latent content. Thus, to infer an individual's personality from the stories he tells, one must "assume that the story as recounted (the manifest content) means something and that this meaning can be discovered." As Arnold phrases it, "we know what the storyteller says, and what he says is the only evidence we have. That he may mean the opposite is a theoretical assumption which has never been proved."

While correct abstraction of story import is fundamental to the Sequence Analysis methodology, other related factors must be considered. The conceptions of imagination—the factors guiding the imaginative process—is particularly relevant. Arnold introduces her understanding of this process
as follows:

When a man is asked to tell a story about each TAT picture, he must take what is portrayed in the picture, interpret its meaning by recourse to his own experience and recombine past impressions in such a way that a series of actions is shaped into a connected plot and outcome. Though the individual elements have their source either in immediate perception or in past experience, the imaginative production is something new that forms an articulated structure. In imagination, we use the materials of sensation in memory images, but we are not bound by the pattern in which sensations were received. Neither are we bound to any particular sense modality but can combine visual, auditory, tactual or even olfactory sensations with action images. Imagination is different from free association in which one image recalls another in a chair of memories that have no discernible new structure, show no new action, tell no new story. Imaginative productions, whether stories, dreams, artistic creations or scientific inspiration show both intrinsic direction and novelty.22

Imagination, therefore, "deals with possibilities of action and their possible results."23 As Arnold describes the real life use of imagination, it involves identification of the present situation, comparison with similar past situations, and consideration of possible actions and their consequences so that the most favorable alternative can be chosen.24 The function of imagination—whether one is sleeping or awake—"is always to plan for action, to work out possible alternatives of action and their consequences."25

As imagination is used in telling a story, the process is directed by what Arnold terms an "action tendency."26 In the TAT the action tendency is the storyteller's attitude to the picture. And, as Arnold explains, "our attitudes are the result of earlier appraisals of people and situations, of our own and other people's actions, and even of our action impulses. These appraisals are registered as they occur and are revived whenever a similar situation is experienced."27

The rationale for Sequence Analysis argues, therefore, that a man reveals his attitudes and convictions in telling stories. "Even if the stories are
fantastic, the plot and outcome will illustrate what the storyteller thinks could or even should be done under the circumstances."28 Since he knows his characters are imaginary, he can make them act as he sees fit—revealing inevitably, however, what he thinks of their actions.29 Along these lines, Arnold comments as follows:

The stories a man tells, like the dreams he has, illustrate problems that occupy him, attitudes he has formed, convictions he has achieved. As he tells one story after another in the TAT, he may go on exploring various alternatives of action under the most diverse circumstances. Or he may be preoccupied with one problem to such an extent that he talks about it in several stories and explores possible solutions. In a series of twenty stories, as required in the TAT, there is an imaginative progression that almost amounts to a monologue about the various problems that are uppermost in the storyteller's mind. If there are no specific problems, the story will reveal the storyteller's attitudes in a variety of possible situations.30

In discussing motivation and creativity, Arnold defines the former not as a need, drive or impulse but as "something appraised as good for a particular action."31 Active from the moment when an individual has decided on the propriety of a particular action, a motive need not be aroused by a TAT picture. In Arnold's scheme, a motive resembles a set rather than an emotion.32 In contrast to emotion as a result of intuitive appraisal, a motive requires an additional reflective appraisal which, once the judgment has been made, will direct the process of imagination.33 Thus, in Arnold's rationale, "stories betray a man's attitudes (emotional and intellectual)" and in the way in which they influence him to act they reveal his motives.34 "Since motives are blueprints for action, it is possible to infer what he will do in real life from the way in which he resolves the problems he sets himself in the stories."35

From these principles, Arnold has proposed Sequence Analysis as "a method of assessing motivation that will make it possible to predict a man's
performance in whatever situation he finds himself provided only that he has the minimum necessary intelligence to handle it."36 The basic meaning of this assessment is summarized by Arnold in the following way.

This assessment is derived from the TAT stories. While 'creativity' thus enters into it, the import and the outcome of the stories, rather than the unhindered flowering of imagination exhibited in the stories, are the basis for our assessment of a man's motivational pattern. From the import and the outcome, we discover what the storyteller thinks of the action he describes, whether it leads to success or failure, and what he thinks is required for achievement and constructive human relationships. Such a procedure is based upon attitudes that have been integrated for action by the storyteller and exhibit his constructive approach to situations or the lack of it. Whatever motives are revealed in the TAT are thus revealed as positive or negative, leading to adequate or inadequate performance and so allow a direct prediction from the TAT to real situations.37

In elaborating the technique involved in using TAT Sequence Analysis, Arnold discusses both the import and the sequence as the backbone of the method of interpretation.38 Defining the import as "what could be called the 'moral' of the story,"39 she indicates how a series of imports set down in sequence provides a trend of thought which reveals the storyteller's habitual dispositions.40 Taken in sequence, story imports present a connected statement of the storyteller's principles of action, his motivational pattern.41

Mastery of the technique involves, however, a number of considerations, among them the setting aside of all theoretical preconceptions.42 Other factors include problems associated with the formulation of import statements,43 the linking of imports in sequence,44 the perception of story nuances,45 and, very importantly, the scoring of imports for positive or negative attitudes.46

Sequence Analysis and Empirical Research

Although Arnold utilized an element of sequential analysis in her earlier clinical work with the TAT,47 the methodology now constituting Sequence
Analysis has been the result of studies and investigations during her more recent professional career. A number of doctoral dissertations under her direction—particularly those completed from 1958 on—have provided part of the empirical base for the methodology and, together with graduate seminar efforts, continuing refinements of the scoring system.

As early as 1953, Snider employed this "original method of TAT research" in his study of personality factors and high school achievement. In seeking to define the personality differences existing between high achieving and low achieving high school boys, he characterized Arnold's method as one preserving the "holistic approach to personality study." At this point, however, he summarized Arnold's method as involving four steps: 1) synopsis of stories (summarizing of the content of each story in a sentence, abstracting important elements, omitting details, and noting particular phrasings); 2) situation analysis (picking out identified summarizations for more intensive study, emphasizing in the analysis the relationship between story characters); 3) analysis of attitudes (elaborating the situational analysis by recording what the subject says about people, disregarding the plot and not attaching meaning to what is said); and 4) sequential analysis (emphasizing the outcome, what the character does about the situation.

Even at this point, sequential analysis was considered the most significant element. It was described by Snider as follows:

The situation itself is concerned apart from concrete circumstances. It is, as it were, universalized as a typical kind of situation in which the subject would react in the manner indicated by the essential outcome of the story. Thus each situation with the solution of the problem it involves may be looked upon as a sample of many real life situations of like kind; and the continuous analysis of all the stories presents a reflection of a larger segment of the
personality in its totality. From this analysis, an interpretation can be made with some assurance that the desires, emotions, frustrations, conflicts, rational motivation, and so forth reflected in the stories are likewise operative in the actual life of the person.  

Since the present Sequence Analysis scoring manual had not yet been developed, Snider attempted empirical verification of his TAT data—data from twenty high achieving and twenty low achieving students matched in terms of tested intelligence—by classifying story imports in terms of categories and by testing group differences by chi-square. His broad categorizations of themes involved catastrophe, goal-directed striving, adherence to a single motive, daydreams and chance success, frustrating situations, adjustment reactions, and frustrating situations. By dichotomizing contrasting outcomes for these categories, Snider identified nineteen significant or very significant (significance at the .05 or .01 levels of confidence) factors associated with high or low academic achievement. In rephrased terms, he determined that, among other things, self-reliance, rationality, amenability to reasonable persuasion, objectively valued goals, the abilities to decide and to replan in accordance with circumstances, dominance, success in overcoming frustrating situations, receptivity to advice from father figures, and cooperation were associated—in terms of thematic outcomes—with high achievers. Conversely, the thematic outcome of low achievers concerned emotional dependence in death themes, emotion as controlling behavior, subjectively valued goals, rigidity of decision, daydreaming, contentment with dreams, success through chance or luck, and blaming others for mistakes.  

While Snider's study involved other clinical approaches and only an embryonic form of the present Sequence Analysis methodology, it provided some interesting insights into the TAT-produced personality variables relating to
achievement. In a subsequent study which was also concerned with academic achievement, McCandlish described a somewhat more extended methodology. His study attempted to validate Arnold's method of TAT sequential analysis by 1) showing that the method could discriminate between high and low academic achievers, and 2) showing that a scoring method developed from the method could predict the identity of high and low academic achievers.

Although McCandlish described the method's steps in terms different than those of Snider, his explanation also emphasized the necessity of retaining essential meaning for interpretation. He described the substance of the more refined method in these terms:

The method used in this study holds that the story must be kept intact; it is based on the assumption that the import of the story, when freed from accidental details, will indicate what the storyteller is saying about his life situation. When these statements of the import of each story are taken down in order, they will reveal the subject's outlook upon life and the way in which he plans and solves his problems.

With eighty TAT cases obtained from previous researchers—forty high academic achievers and forty low academic achievers—McCandlish divided each achievement group in half and used forty cases (twenty pairs) in a pilot study, and forty cases (twenty pairs) in a prediction study. The immediate purpose of the pilot study was differentiation between high and low achievers—through "blind" sequential analysis of their TAT's—while the ultimate aim was development of a scoring method for predictive achievement within a second sample.

From sequential analysis of the pilot cases, McCandlish emerged with six areas or categories—each category containing within it both positive and negative attitudes. His broad categories included the following:
1. Attitudes towards others;
2. attitudes toward work and success;
3. problem category;
4. attitudes toward uncontrollable external forces;
5. attitudes of self-reliance; and
6. attitudes toward duties and obligations.

With extended objective descriptions of categories, stories could be located within a given area. With some few exceptions, high and low achievers revealed attitudes which conformed systematically to the high and low elements within the various categories. As a result, McCandlish could claim that the "statistically significant use of positive categories by high achievers and negative categories by low achievers reveals that we now have an objective scoring system which clearly differentiates between high and low achievers."65

In the predictive phase of his study, McCandlish "scrambled" forty cases so that prediction was solely dependent upon his scoring system. His procedure involved: 1) sequential analysis of each case; 2) classification of each story in terms of positive or negative categories; and 3) prediction on the basis of the number of positive or negative stories within each case.66 In thirty-nine out of forty case predictions, he was correct in identifying sample members as high or low achievers.67

After more detailed analysis of outcomes, McCandlish emerged with the following general picture of the high achiever:

A quite mature personality who is deeply conscious of his duties and obligations. He relates well to others, showing a reasonable trust in his fellow man; this he carries over into his relationship to parents and other authority figures. He wants success and is aware that he must work to achieve it; he is conscious of his responsibility for failures. He is not overwhelmed with problems and seems to endeavor to find constructive solutions but explores negative or unsatisfactory ones as well. In general, the high achiever seems to be a well-rounded personality with strong positive attitudes toward life and a strong realization of duties and obligations.68
In contrast, he described the low achiever as follows:

Seems to be overburdened with problems. These problems are overwhelming and insoluble. He has difficulties in relating to people and this attitude is carried over into family relationships; it may even reach the point of external rebellion or a deeply cynical attitude of mind. He is conscious of failure but seldom blames himself for it. He is but slightly influenced by any philosophy of life and seldom approaches life or its problems from the standpoint of duties or obligations. In general, the low achiever seems to be an immature personality, deeply immersed in insoluble problems, with little consciousness of his duties and obligations. 69

A third study utilizing sequential analysis—one completed shortly after that of McCandlish—was the first to consider achievement in terms other than that of academic success. 70 Concerned with teacher effectiveness, Sister Innocentia used Arnold's developing TAT methodology to evaluate personality differences between very high rated (by pupils) and very low rated teachers. As she introduced the study, it was "a search for fundamental personality characteristics" that would "clearly discriminate" between "contrasting criterion groups"—characteristics that would "be intelligible on the basis of a logical connection between the personality of a teacher and her effect on other personalities." 71

The refined development of the Sequence Analysis methodology and its articulated rationale can be discerned in Sister Innocentia's initial discussion of the technique. Although somewhat lengthy, its utility in explaining Sequence Analysis deserves extended quotation.

This method consists essentially in abstracting from the story its full import as revealed by the plot and its outcome. Every story, as told by its author, expresses a certain orientation, a way of looking at life, self or others. The author, taken up with the details of his story, is not fully aware of this philosophy to which he is giving expression and which is actually a strong motivating power in his life. The psychologist, however, upon reading each story, can penetrate to its meaning and can set down
in a succinct statement what the writer expresses through his story plot and its outcome. The result of this analysis is not a subjective interpretation on the part of the psychologist, but merely a restatement in a generalized, abstract form of what the writer is saying in a particular, concrete situation.

It is characteristic of these generalized statements always to follow a sequence. If the abstraction is correctly done, there will appear an association among these statements from story to story, and this feature makes of the total protocol a more or less continuous, connected expression of the subject's way of looking at this world and of handling his problems. This sequential feature of the TAT protocol has been discovered empirically in hundreds of TAT analyses, and the fact of its existence has been repeatedly affirmed in subsequent discussions with the subjects concerned. While other experts in TAT analysis have likewise found a tendency in TAT stories to be related, this method of abstracting the import of the story reveals such a sequence of ideas as to be an unfailing phenomenon underlying every series of TAT stories. This does not mean that one theme is necessarily carried throughout the stories. Depending upon the number of pictures used, there may be two or more themes formed by clusters of stories and usually more or less related.

The existence of this sequence serves as a guide in the TAT analysis. It happens at times that a subject may appear to be saying several things through his story. While all he says may be true expressions of his philosophy, the one that best fits the sequence will be the most relevant to his mental set and emotional disposition at the time of writing the stories. This fact has also been repeatedly demonstrated by clinical work with the subject following a TAT analysis. 72

Like McCandlish, Sister Innocentia worked toward the development of an objectified scoring system—from an initial analysis of the TAT's of an identified sub-sample (intellectually and age-paired effective and ineffective teachers) to a scoring system which could predict achievement or non-achievement within the particular context involved. 73 In the predictive stage of the study, fifty-eight of sixty cases (cases were unidentified as to pairs or effectiveness ratings) were correctly identified as achieving (teaching effectiveness) or non-achieving (teaching ineffectiveness). The two remaining cases were the result of faulty initial sequential analysis. 74
The approach employed did, therefore, discriminate between high and low
rated teachers. Moreover, the scoring system developed was so objectified that
two independent scorers could predict with complete accuracy. The empirically-
determined categories of the scoring system comprised the following:

1. Habitual basic disposition as expressed toward success;
2. habitual basic disposition as expressed toward failure;
3. habitual basic disposition as expressed toward loss;
4. habitual basic disposition as expressed toward life and its
   obligations; and
5. habitual basic disposition as expressed toward other people.\(^75\)

While these categories differed from those constructed by McCandlish, the con-
siderable overlap is apparent. The methodology was clearly approaching the
area of general predictability.

This approach continued when still another study was completed.\(^76\)

Petrauskas identified his primary purpose as employment of "a relatively new
method of Thematic Test Analysis" in order "to investigate and describe some of
the characteristic attitudes which differentiate" the naval offender and non-
offender.\(^77\) He sought to do this by comparing the most significant positive and
negative personality characteristics of the two groups—characteristics re-
vealed by the TAT and Arnold's Sequence Analysis.\(^78\)

While Petrauskas used a somewhat different terminology in describing
Arnold's "analytic method around the sequential analysis," his discussion
paralleled that of McCandlish and Sister Innocentia. He stated the basic
assumptions of the methodology as follows:

1. Everything imagined must have been experienced before in some
   way (in real life or in thought);
2. each story with its stated outcome has a moral, proposes a
   conviction (either a casual conviction or one strongly held—
in the latter instance, more than one story will express it);
3. When the stories with their outcomes are formulated as propositions, they will give a statement of the person's philosophy of life;

4. this philosophy is a working philosophy, i.e., it indicates how people are thought to act, what actions are right or wrong, what will lead to success, what are the things to strive for, etc.; and

5. each story with its outcome contains an indication of the way in which the person handles his impulses and emotions, rather than an indication of the kind of emotions he has or their intensity.79

The study by Petrauskas involved thirty naval offenders and thirty non-offenders paired for age, classification test scores, race, length of service and, in part, for other factors.80 On the basis of initial analysis of TAT's from ten arbitrarily selected pairs, attitude categories were tentatively established.81 All sixty protocols—unidentified and mixed—were then analyzed and scored by the researcher and by two independent analysts. In an extended analysis of inter-judge reliability, Petrauskas found a high level of agreement, among the three analysts involved, in scoring stories as positive or negative. There was, however, a lesser percentage of agreement in locating stories within categories.82 With a final composite rating, Petrauskas was able to differentiate between twenty-seven of twenty-nine pairs, to validate his research hypothesis, and to make personality generalizations applicable to offenders and non-offenders.83

Since the completion of the Petrauskas' dissertation, Arnold has worked systematically toward further refinements of the Sequence Analysis scoring system. Recent studies by Quinn84 of his dissertation concerning the motivations of a group of federal executives, research and experimentation coming out of graduate seminars, and studies in progress85 have contributed, or perhaps will contribute, to full-scale elaboration of the method's scoring system.
During 1956, 1959 and 1960, both class groups and individual researchers directed by Arnold, developed four category scoring systems, with both positive and negative imports scorable at upper and lower levels. At least two general versions and a scoring system for religious novices—as well as a preliminary system used in this dissertation—employed a four-fold scoring technique. In addition to attaining greater precision in scoring, this approach made possible the development of a generalized system applicable to achievement more broadly and more generally defined.

The current result has been a monograph by Arnold describing Sequence Analysis in detail and presenting an elaborate sequential analysis scoring manual. In a summary sense, the scoring manual now includes the following categories and subcategories:

1. Achievement
   a. Goals
   b. Means taken toward goals
   c. Adaptability in relation to goals and means
   d. Advice and help from others

2. Wrong-doing and ill-intentioned action

3. Relationships with others
   a. Good relationships
   b. Bad relationships
   c. Advice and help from others
   d. Advice and help from others in relation to achievement

4. Reaction to adversity
   a. Loss, harm, danger, terror, separation, disappointment overcome by
   b. Loss, harm, danger, terror, separation, disappointment not overcome, but
   c. Loss, harm, danger, terror, separation, disappointment caused by or accompanied by

Within each subcategory, various relevant imports can be classified (and, therefore, scored) in terms of upper and lower positive and negative values.
As illustrated in this chapter and the next, the result is a detailed scoring technique permitting evaluation of subjects at varying achievement levels.

Interpretation of Federal Executive Protocols

As mentioned in the initial paragraphs of this chapter, as well as in a previous chapter, TAT's from a sample drawn from the Study of the Federal Executive were available to the author. Before discussing this sample, however, the sequential analysis technique used in this phase of the research might be demonstrated with two of the short TAT cases in the sample.

The following ten stories were written by a federal executive in the sample—an executive who, in terms of this dissertation, was a program participant.

(Card 1) A young man contemplates his violin as he mentally reviews the score of a violin sonata recently studied. He began the study of the violin at the age of four and is considered a musical genius. He will turn out to be a concert violinist.

(Card 2) A farm girl is returning home from school while her parents are busy in the field. She has just gotten off the school bus and has come out to greet her parents. She likes school very much and plans a career in nursing. She has great determination and will succeed in this venture.

(Card 3) A young woman sits despondently by the side of the bed after having attempted suicide and failing to accomplish it. The situation was brought about by unhappy marital relations and her husband's demand for a divorce. She was married too young and has not been able to adjust to maturity. She will remain unadjusted to her problems of life and will become a woman of loose moral character.

(Card 4) A wife pleads with her husband to change his way of life and stop running around with other women, gambling, etc. He has just returned in the morning from a night out. The situation will not improve, however, and she will leave him, get a job, and eventually get a divorce.

(Card 6) A young policeman has just informed an elderly kleptomaniac that she must accompany him to the police station again. She has been observed stealing or picking up various objects in a department store where she was a well-known character. She will eventually be sent to a detention home for it is believed that she is too old for rehabilitation.
(Card 7) Two law partners are discussing the case of a client in a court litigation of a civil suit. The case involves a dispute over a breach of contract, brought by the client of these two lawyers. The case will eventually be decided in favor of their client.

(Card 8) This involves the daydreams of a young boy who dreams of becoming a great surgeon some day when he is grown, and of how he will perform great operations on the battlefield, with only crude instruments and under primitive conditions. He will grow up to become a successful teacher—professor of sociology at a famous university.

(Card 14) A young man stands by an open window at night. It is too warm to sleep and he stands by the window in hopes of getting some cool air. He is leaning against the window casement with his arm against the wall, and considering some of the problems and decisions he will face at work tomorrow. As the night temperature begins to cool, he will return to his bed and go to sleep.

(Card 17) A circus aerial-trapeze performer is returning by rope to the ground after a session of practice on the trapeze prior to the afternoon performance. He spends part of each day practicing new routines to improve his act. He will continue to be a circus performer, at the top of his profession for a year or two more, but is aging and will probably not be able to continue this strenuous work for long. He is training his young daughter in this work to take over after he retires.

(Card 19) Two hunters have come to a cabin in the north woods to do some hunting. Night is coming on. A storm is coming up. A heavy snow storm has covered the ground, and the storm will bring more snow. The cabin is well lighted by the use of lanterns and the light shines brightly through the windows. These conditions will not seriously affect the hunters as they are prepared for these weather conditions and the snow will enhance the hunting conditions. They will certainly have a very enjoyable week of hunting.

It has already been made quite clear that abstracting story import—the basic technique in sequential analysis—implies setting aside all theoretical preconceptions. The analyst is not concerned with the "correctness" of the perception, the needs or drives implicit in the story, or problems of identification with story characters. As Arnold phrases the task, "all we are trying to do in the import is to discover what the storyteller is saying and put it in a form that abstracts from the individual concrete situation." On this basis, the author (of this dissertation) would abstract the following progression of imports after sequential analysis of the ten stories involved:
1. On who begins to study at an early age will be recognized and will turn out to be very skilled.

2. And, if he likes what he is doing very much and has great determination, he will have a successful career.

3. But if he acts too impulsively and in an immature way, he will fail. Despondent, he will remain maladjusted.

4. Please will not move him and eventually his impulsive actions will cause others to leave him.

5. When he has done wrong many times, he will be severely punished for others will consider him to be hopeless.

6. Those who discuss a situation in advance will eventually have things work out to their advantage.

7. And one who dreams of becoming great and of performing great things in the face of adversity will go on to at least some sort of success.

8. He will think in advance of the problems and decisions facing him in his work.

17. When he reaches the top of his profession, he will still try each day to improve. When age and the strain of work may shortly force him to stop, he will start training someone younger to take his place.

19. And so, those who are prepared will enjoy what they have set out to do. Some adverse conditions may even help them achieve their goal.

While a different analyst would phrase these imports somewhat differently, he would, if adequately trained, present the same basic generalizations. He might use different terms in stating an outcome but the essence of the outcome would be the same. Any trained analyst who uses the techniques of Sequence Analysis should construct "a series of general statements that are addressed to nobody in particular, a set of meanings that indicate a person's outlook on life." Had this particular federal executive had a basic problem, it would very likely have emerged through the imports of the TAT stores he produced.

His philosophy of life becomes apparent without reference to any tenuous inferences as to which stories "might be" somewhat autobiographical or with which
story characters he "might be identifying."

The remarks above should not, however, be taken to mean that anyone can quickly master the techniques involved in constructing appropriate imports and connecting them in correct sequence. As Arnold remarks, "the import must be formulated in such a way that it is neither a summary or a statement so general that it might apply to anybody." There are numerous considerations—too many to mention here—which Arnold discusses in her sequential analysis monograph.

The TAT stores and imports in this particular case illustrate the fundamental importance of sequence. If the ten import statements are read consecutively, they can be seen to form a continuous, connected narrative—one which succinctly presents an overview of the subject's attitudinal patterns. Without any reference to scoring for positive or negative values, the following kind of evaluation could be drawn from the subject's stories and their imports:

The subject has a consistently positive attitude towards achievement and a generally optimistic outlook on life. His philosophy of life includes beliefs in the desirability of study and other forms of preparation for life and living (story imports 1, 3, 7, 19), forethought and analysis in problem-solving (story imports 7, 14), and the conviction that wrongdoing will be punished (story imports 3, 14, 6).

His level of aspiration is probably high; it encompasses the attitude that success will come to those who deserve it—those who study (story import 1) problems (story imports 7, 14), those who continually try to improve (story import 17), and those who are foresighted enough to prepare (story import 19) for the future (story import 17). Even the belief that dreams will precede success (story import 6) may be positive in the sense that "those who succeed are those who, from an early age, have wanted success." Even uncontrollable adverse circumstances can be used to advantage (story import 19) if one is prepared.

This kind of an interpretation could not emerge unless TAT imports were correctly framed as the inherent sequence in the stories require.
If the protocol illustrated above were to be scored using one of the preliminary four-category scoring systems, the result would be as follows:

1. Import 1 - +4 - achievement because of own effort, initiative
2. Import 2 - +4 - achievement because of own effort, initiative, definite goal
3. Import 3 - +4 - failure because of lack of realistic adaptation
4. Import 4 - +4 - ill-intentioned action is punished
5. Import 5 - +4 - ill-intentioned action is punished
6. Import 6 - +2 - success in spite of vague means
7. Import 8 - +2 - success because of wanting fame or recognition
8. Import 9 - +3 - Achievement by taking thought.
9. Import 10 - +4 - Achievement because of own effort, initiative
10. Import 11 - +4 - Achievement because of realistic adaptation

In reviewing the TAT stories, import statements, and scale values of this example, another trained in sequential analysis would undoubtedly emerge with the same generally positive ratings. He might, however, using this general preliminary scoring system, assign different values to one or more of the import statements. If so, he would obtain an average value somewhat different than the 3.5 illustrated here. The scoring system used is to general that some questions could arise as to the particular values assignable to the three import statements evaluated at less than the 4 level. Problems of this sort were, of course, underlying the development of the current, more refined scoring system.

When the present system is employed, the same TAT might be scored as follows:

1. Import 1 - (+2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, personal initiative

2. Import 2 - (+2) - Achievement: means taken toward goals - the import says in effect: work is loved or brings enjoyment; successful achievement comes when one adopts definite means implying personal effort.
3. Import 3 - (+2) - Achievement: means taken toward goals—
the import says in effect: failure follows impulsive or
imprudent action; failure follows when one fails to control
emotion or to act reasonably

4. Import 4 - (+2) - Achievement: means taken toward goals—
the import says in effect: failure follows impulsive or
imprudent action

5. Import 6 - (+2) - Wrong-doing and ill-intentioned action—
the import says in effect: wrong-doing brings punishment

6. Import 7 - (-1) - Achievement: Means taken toward goals—
the import says in effect: successful achievement follows
upon vague goals or means; e.g. by passage of time with no
evident cause

7. Import 8 - (-1) - Achievement: means taken toward goals—
the import says in effect: successful achievement follows
upon vague goals or means; e.g. by "dreaming" of career and
success in your profession.

8. Import 10 - (+1) - Achievement: means taken toward goals—
the import says in effect: successful achievement follows
when one takes thought rather than acting positively; e.g.
you take a moment to dwell on plans for tomorrow

9. Import 17 - (+2) - Achievement: means taken toward goals—
the import says in effect: successful achievement comes
through active effort, adequate means; when one adopts
definite means implying personal effort, personal initiative,
control of emotion and acting reasonably

10. Import 19 - (+2) - Achievement: means taken toward goals—
the import says in effect: successful achievement comes
through active effort or adequate means; when one has
adopted definite means implying personal initiative

In this instance, the imports are evaluated at the same relative scale
points as with the general preliminary scoring system. The chances are much
greater, however, that another analyst would score all ten import statements at
the same scale levels. The elaborated categorical definitions and examples of
the present scoring system make this possible. Ultimate reliability, however,
continues to depend upon correct import abstraction and sequential connection.
As a second illustration of Sequence Analysis in the interpretation of federal executive TAT's, the following example—the protocol of a non-participating executive—may be cited. In this instance, the individual story, the import and the scoring explanation are grouped together.

(Card 1) The boy is dejected for he had planned to spend the afternoon playing baseball with the neighborhood gang. The violin is not to his liking but the desire of his parents for something they wanted. The practice session on the violin will be done, but not with the enthusiasm of a musical protege.

(Import 1) A boy will do something his parents want but, if he had other plans, he will not perform enthusiastically.

(Score 1) (-1) - Achievement: advice and help from others—the import says in effect: successful achievement follows upon doing what is legitimately commanded but resentfully or reluctantly

(Card 2) This is a scene of "Agricultural America." The family has grown up, the daughter is on her way to school to get the education never acquired by the parents. The work at the farm, representing the needs of the family, goes on. The daughter will eventually marry and live in a city; the parents will continue to be on the farm.

(Import 2) Eventually, however, he can lead his own life while they go on in their accustomed way.

(Score 2) (+1) - Achievement: advice and help from others—the import says in effect: successful achievement follows upon determining one's own work in life.

(Card 3) A dejected girl has just had a "lover's quarrel," and is suffering the pangs of a broken heart. In the time spirit of romance, everything will turn out for the best.

(Import 3) The quarreling and suffering will be over in time and everything will turn out for the best.

(Score 3) (-1) - Reaction to adversity: loss, harm danger, terror, separation, disappointment—the import says in effect: loss is overcome by passage of time or without evident cause.

(Card 4) The unwanted quarrel. The woman is attempting to prevent a fight between two men for the attention and affection of a woman. The fight will take place and the woman goes to the other man.

(Import 4) But quarrels will lead to fighting in which he might lose.

(Score 4) (-2) - Relationships with others: bad relationships—the import says in effect: bad relationships lead to no problems or go unpunished

(Card 5) The grandfather has just refused the request of her grandson for a loan of money. There is a tense feeling of animosity between the two. However, the subject is closed as far as the grandmother is concerned. The grandson is quite bitter. The result, no money and the tense feeling will continue.

(Import 5) As a result of this disappointment, he will become very bitter and relations will remain strained.
(Score 6) (-1) - Achievement: advice and help from others—the import says in effect: failure or unhappiness follows when others do not help, advise, cooperate.

(Card 7) A son is seeking the sage advice of his father. The father, an immigrant, the son, a natural-born American. The advice will not be taken, for the father still retains the thinking of the old country. This is the point at which the son leaves the close ties of old-line family and actually starts his life in the melting pot of American culture. His success will be mediocre for his thoughts are confused between the old and the new lines of thought.

(Import 7) He may not accept the advice he sought because it reflects old country thinking but, when he starts his own life, his background and his confusion will limit his success.

Score 7) (-1) - Achievement: means taken toward goals—the import says in effect: no achievement or outright failure follows because of unavoidable circumstances; due to frustration by life, fate, etc.

(Card 8) The boy, an idealist with a trend for the fine arts, was injured during a revolution or clash of the classes. The sight of the blood, death and destruction—during this formative period of his life—will have a lasting impression on his future. He is and will be convinced that the world needs cultural aspects to overcome the brutality of mankind.

(Import 6) This injury and shock at such a crucial time will, however, confirm his ideas.

(Score 8) (+1) - Reaction to Adversity: loss, harm, danger, terror, separation, disappointment—the import says in effect: this it is not overcome but is accepted with hope and resignation and without depression.

(Card 11) A man contemplating the culmination of his dreams. He is looking forward and planning in a dreamy way the fulfillment of his course of action. The future looks favorable but as far away the stars. He is ambitious and his goal high and far. If he does not yield to the complacency of life, he will be an outstanding success.

(Import 11) He will dream of a far distant favorable future. If he does not become complacent, his ambition and high goals will lead to outstanding success.

(Score 11) (-1) - Achievement: means taken toward goals—the import says in effect: Successful achievement follows upon vague goals or means, by wishing or hoping; e.g. you dream of your career and success in your profession.

(Card 17) A circus aerialist. A muscular body and the face of a gargoyle, the mind of a dreamer. He has elected the life of the flying trapeze since, in this, his face is not seen; the symmetry and the perfection of the high wire and trapeze are his only ways of attaining his goal. As yet, he still aspires for his goal and performs to the plaudits of the crowd. His goal will never be achieved but he will spend his life within the atmosphere of his dreams.

(Import 17) Even if his goal is never achieved, his dreams will always sustain him in the field he has chosen to compensate for his deficiencies.

(Score 17) (-2) - Achievement: goals—the import says in effect: achievement is doubtful but hoped for.
A child's portrait of his home during a severe winter storm. The ghosts—his outlet for the unknown fears—are all around the house. The lighted windows of the house portray his faith or strength in the home, his only proven savior. After the storm abates, the house will stand, affirming his faith that the home is indestructible.

Despite difficulties and fears, his faith and belief in his surroundings will be justified.

The sequential element in these ten stories is again most significant.

When the imports for each story are presented consecutively—in a somewhat edited form—the following narrative emerges:

A person may do what others want, but, if his own plans are different, he will not be enthusiastic about it. Eventually, however, he can do as he wishes while they go their own way. In time, the quarreling involved will stop and things will turn out for the best. But if it leads to a fight he may lose. His disappointment will make him bitter and there will be strained relations. While he can't accept others' advice—since their backgrounds are different—his confusion will limit any success he might have.

Unfavorable experiences will only confirm his original ideas. He will continue to dream of a happy future. If he doesn't become complacent, his goals and ambition could bring him great success. Even if his goals were never reached, his dreams would see him through. Despite further difficulties, his faith would turn out to be justified.

Referring to this generalization and to the original imports, the following evaluation might be made:

The subject's philosophy of life is generally negative. It involves, to varying degrees, an unenthusiastic mood (story import 1), bitterness at frustration (story import 6), and a belief in the perversity of life (story import 11). He seems to feel that, while a break is sometimes possible (story import 2), one can never really escape his circumstances (story import 7).

His rather passive attitude is tied to wishfulness as a compensating form of escape (story import 17). As long as he has his ideals (story import 8), his dreams (story imports 11 and 17), and faith in something strong and enduring (story import 19), he can survive.
If he succeeds, his goals and ideals will play a significant part (story import 14); if he fails, the same qualities will sustain him (story import 17). To the subject, this attitude is faith not mere complacency (story import 14). Faith can be believed (story import 19), particularly since action will not bring happiness or achievement (story imports 1, 4, 7).

On a number of levels, therefore, the methodology of Sequence Analysis differentiates between the two federal executives involved. The global summaries drawn from the two sequential analyses of TAT's are reflected in differential scores. On a dichotomous positive-negative basis—the method used in early research studies—the program participant's protocol yields eight positive and two negative imports and the non-participating executive's three positive and seven negative imports. One is clearly positive, the other clearly negative. The preliminary four-category scoring system results in a participant score of thirty-five (3.5 average) and a non-participating score of twenty-one (2.1 average). The present scoring system provides scores of thirteen (1.3 average for participant) and minus six (−.6 for non-participant).

Arnold's method of sequential analysis would seem, therefore, to have been very well suited to a measurement of personality factors as they related to program participation.

The Executive Sample: Hypotheses and Procedures

In preparing for their national study of the Federal Executive, Professors Warner, Martin and Van Riper conducted a number of pilot studies—in the Washington, D.C. and Chicago areas. In addition to testing of preliminary versions of their personal history questionnaire, these pilot studies included administration of the TAT to a randomly selected group of federal executives. The TAT was administered by various members of the research staff in
conjunction with a general interview. Both Washington and Chicago subjects were selected to meet the Study's executive grade-level criterion, and to obtain as broad agency representation as possible. Otherwise, the selection was random, with executives identified from the Federal Register and other sources. Those selected were contacted and asked to cooperate in the first stages of the project; all those contacted agreed to participate. There was, therefore, no volunteer bias in the resulting sample.

While over forty TAT's were obtained in this fashion, only twenty-four subjects were from the Chicago area. In checking subjects against registration files of the Center for Programs for Government Administration, the author determined that ten had participated in the Program of Executive Development for Federal Personnel. The remaining fourteen were, in terms of this dissertation's definitions, non-participants. As they did with personal history data used in the preceding chapter, the Study's directors made the TAT protocols available to the author for this dissertation's research.

The ten participants represented six different federal organizations; the fourteen non-participants came from eight different federal agencies. In selecting a ten-executive non-participant sample, six individuals from two agencies were chosen to balance five program participants from the same two agencies. The remaining four non-participants (from three different organizations) were selected because their agencies were most like those of the other five program participants. Selection of the non-participant sample was made, of course, prior to any analysis of protocols.

Since all twenty-four federal representatives were at approximately equal levels of executive responsibility, this organizational balancing was
considered the most significant element in attempting to obtain equivalent groupings. Although the author could not, of course, control the matching process beyond this point, the samples did not vary widely as far as most basic characteristics were concerned. Comparative data—drawn from the Study's detailed personal history questionnaires—are summarized in the following table.

**TABLE XIII**

**CHARACTERISTICS OF PARTICIPANT, NON-PARTICIPANT TAT SAMPLE**

<table>
<thead>
<tr>
<th></th>
<th>#Male</th>
<th>#Agencies</th>
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<th>Average</th>
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<td>Fed. Yrs.</td>
<td>Agency</td>
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<td>5</td>
<td>14.9</td>
<td>55.1</td>
<td>21.7</td>
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<table>
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<th>Percent</th>
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<th>Average</th>
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<td></td>
<td></td>
<td></td>
<td>Graduate</td>
<td>Mobile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-10</td>
<td>4</td>
<td>6</td>
<td>80</td>
<td>80</td>
<td>3.6</td>
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<td>6</td>
<td>60</td>
<td>80</td>
<td>5.1</td>
<td>4.6</td>
</tr>
</tbody>
</table>

P - Participant Sample  
NP - Non-Participant Sample

As the table indicates, all sample members were male executives at the GS-14 or GS-15 levels. The same proportions of participants and non-participants were in line and staff positions, and both groups had similar averages of years of federal service. Participant and non-participant groups averaged the identical number of years within current executive positions. While a greater percentage of participants were college graduates, the same percentage of both groups was socially mobile. Non-participants were occupationally somewhat more mobile in the sense that, on the average, they worked in more organizations during their adult careers. They had also, on the average, been in their
respective agencies less years than their participant counterparts. However, as the discussion in the previous chapter pointed out, group difference in terms of these latter two factors were not statistically significant.

It would seem, therefore, that the Study’s random selection and the self-selecting factors implicit in the federal executive’s position combined to create very well matched participant and non-participant samples. Another fortuitous factor—one beyond the author’s control—was the equal division of the ten-participant sample. Five executives were minimal program participants—by definition, those who had completed only one or two seminars in the Program of Executive Development for Federal Personnel 105 and five were participants who continued in the program to a greater degree.106 The samples made available to the author were clearly excellent for the purposes of this dissertation.

In reformulating more specific hypotheses for this phase of the dissertation’s research, at least three major factors had to be considered. These were: 1) the character of the participant population—both generally and as manifested through various research samples; 2) the findings or implications of prior research—both the author’s and that of other investigators; and 3) the differentiating aims of Sequence Analysis. All three bore upon the establishment of appropriate hypotheses.

As far as the Program of Executive Development for Federal Personnel itself is concerned, it should be remembered that, for the most part, it involved voluntary participation by executives. Although the proportions varied from year to year, a significant overall proportion during the first four program years comprised private payment enrollees—those paying their own tuition fees and related attendance costs.107 Agency administrators clearly
established the significance of self-initiation or, at least, the self-desire factor, as far as program participation was concerned. Both case interviews and broader inquiries pointed up the fact that the individual executive's desire to participate was the most important single factor influencing selection for and entry into the program. The individual's own motivations and personal predispositions were most relevant. After the initial year, agency and interagency screening and selection processes were more or less meaningless.108

The program was also designed for students who, by definition, had attained a certain level of authority and responsibility in local federal organizations. A large proportion had actually achieved executive responsibility, and the remainder were employees holding above-average-level positions in their organizations. It has already been mentioned a number of times that agency spokesmen generally held participants in high esteem. Most participants were viewed as able individuals with potential for greater responsibility—as ambitious and energetic people with generally positive orientations.109 Data obtained from the University's Student Inventory substantiated this perspective in identifying participants as mature and responsible citizens.110

As agency administrators appraised participant motivation, it was very positive "Characteristics attributed to participants were, for the most part, couched in terms of positive or desirable personality characteristics. This was done both explicitly—in reporting global characteristics—and implicitly—in reporting work-related motivations."111 Subjective responses of participants in the Student Inventory sample lent general substantiation to these expressions of opinion. Respondents evidenced a careerist attitude, a very high level of job satisfaction, and considerable optimism regarding their civil service
futures. In line with their work role satisfactions and broad occupational interests, they generally evidenced satisfactions with their life situations and a high level of optimism toward the future. \[^{112}\]

The inherent limitations of such subjective and impressionistic findings have already been discussed. This general impression of participating executives as able people was, however, somewhat reinforced through evaluation of performances on standardized intelligence and administrative judgment tests. \[^{113}\]

In broad terms, the previous chapter's descriptions of the personal history factors associated with a participant sample lent further support to the conception of the group as achieving. It should be noted again, however, that here, as elsewhere, there were relatively few differences—opinion differences or statistically significant differences—between participating and non-participating executives.

The primary emphases throughout most of this dissertation have involved two elements: 1) description of program participants and their motivations, and 2) differentiation between participants and comparable executives who have not been involved in the program. Both elements are involved in using sequential analysis with available TAT protocols. In the first instance, ten TAT's are available for descriptions of the philosophies and attitudes of a small sample of participating executives. An equivalent non-participant sample is available for comparison purposes.

Arnold's exegesis, and the explanations of previous investigators using sequential analysis, have identified the method as one valuable in assessing motivation to predict performance in various situations. In predicting achievement of one kind or another—educational, vocational, or behavioral—
other investigators have dealt with extreme groups—individuals who have clearly achieved or failed to achieve in terms of a particular discrete criterion. In this dissertation, the criterion—program participation—does not have any direct bearing upon achievement. Nor, as previous chapters have indicated, is it a discrete factor. Program participation has been determined by a complex of historical, organizational, personal, and situational factors. Among these, however, the personal factor has been shown to be most relevant.

In addition to the initial general hypothesis to the effect that "program participants, as measured by informed opinion and psychological tests, tend to be 'better than average' employees," it was originally suggested that:

1. Program participants are generally mature and average in personal adjustment, energy, and level of aspiration; and that
2. participants tend to be low in qualities such as aggressiveness and decisiveness and high in frustration and objectivity. 114

While agency administrators upheld the first statement above, and the objectivity estimate in the second statement, they disagreed strongly with the estimates of participants as unaggressive, indecisive and frustrated. Instead, they saw participants as reflecting many of the thoroughly positive attitudes reflected in the empirically determined sequential analysis scoring systems. 115

If agency administrators were correct in appraising participants in this manner, then the TAT's of a participant sample should reflect high "achievement" quotients in terms of sequential analysis scoring categories. Assuming that the previous stages of this research have correctly evaluated participants as capable, ambitious, optimistic and "achieving" executives, the original first, ninth and tenth hypotheses might be recast into a single hypothesis as follows:

Program participants tend to be "achievers" in that a majority reflect the positive personality characteristics identified by Arnold and others in studies employing Sequence Analysis.
Operationally, a majority was defined as at least eight out of the ten executives in the Warner-Martin-Van Riper TAT participant sample. A minimum average score of 3.0 on a 4 (highly positive), 3 (positive), 2 (negative), and 1 (highly negative) import scale was considered positive for purposes of the hypothesis.

A second hypothesis relating to non-participants was formulated with less confidence. Since prior findings of this research—such as agency administrator comments, from comparative testing within Agency C, and from statistical analyses of Warner-Martin-Van Riper personal history data—had indicated some superiority of participants, it might be hypothesized that non-participants were, as a group, less "achieving" than participants. Thus, a related hypothesis might be stated as follows:

Non-participating executives tend to be "less achieving" in that a majority reflect to a lesser degree than do participants the same positive personality characteristics coming from sequential analysis research.

Operationally, the hypothesis would be considered as upheld if at least six non-participants from the ten-executive sample had average scores below the 3.0 level.

In carrying out this aspect of program research, the following procedures were employed:

1. The twenty TAT's were analyzed by the author—without reference to identification of individual subjects as participants or non-participants—and scored using both the positive-negative scoring of early Sequence Analysis research, and the preliminary four-category scoring system developed early in 1959;

2. narrative evaluation summaries—similar to the two illustrations in the preceding section of this chapter—were prepared for most of the executives—fifteen of twenty—in the total sample;

3. the participant and non-participant protocols were then identified, separated, and rescored by the author using the present elaborated
Sequence Analysis scoring manual.\textsuperscript{117}

1. protocols were submitted to Arnold—without identification of participants and non-participants—for spot-checking of some analyses and some scorings; and

2. final participant and non-participant scores were used to test the two hypotheses established, and to analyze the differences obtained as they related to program participation.

Results of the TAT Inquiry

When the twenty unidentified TAT's comprising the total sample were analyzed according to a simple positive-negative scoring approach, seventeen were positive in the sense that they included more positive than negative imports. With only ten cards involved in the TAT administration\textsuperscript{118} the theoretical limits of this form of sequential analysis scoring would range from a completely positive (ten positive imports and no negative imports) to a completely negative (no positive imports and ten negative imports) protocol. Since a few respondents wrote more than one story in response to one or more cards, the actual distribution pattern was somewhat different.

When the same TAT's were scored using a preliminary four category scoring system, the average scores—within a four to one theoretical range—ranged from a high of 3.7 to a low of 1.7. Thirteen of the twenty cases were clearly positive in that they averaged at or above 3.0. Seventeen of the twenty were positive in averaging above the 2.5 mid-point between high-negative and low-positive levels. These general findings seemed to confirm the normal expectation that most individuals within the executive group would be "achievers."\textsuperscript{119} The ranked distributions under both systems of scoring were as follows:
Final rescorings with the present Sequence Analysis manual altered somewhat the scores of many of the twenty protocols. Basic positive or negative orientations did not change, however, and score rankings shifted only slightly. A lesser proportion—eleven of twenty—were positive in averaging at or above 3.0—but seventeen were still above 2.5. The results of the rescorings are summarized in the following table.

**TABLE XIV**

**SEQUENCE ANALYSIS SCORES OF PARTICIPANT, NON-PARTICIPANT SAMPLES**

<table>
<thead>
<tr>
<th>P or NP</th>
<th>#TAT Stories</th>
<th>Score</th>
<th>P or NP</th>
<th>#TAT Stories</th>
<th>Score</th>
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<tbody>
<tr>
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<td>3.30</td>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>P</td>
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</tr>
<tr>
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<td>12</td>
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<tr>
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<tr>
<td>P</td>
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</tr>
<tr>
<td>P</td>
<td>10</td>
<td>3.50</td>
<td>NP</td>
<td>10</td>
<td>2.20</td>
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<tr>
<td>P</td>
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<tr>
<td>P</td>
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<td>3.33</td>
<td>NP</td>
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<td>1.70</td>
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</tbody>
</table>
The most significant result is immediately apparent. All ten participants ranked above members of the equally sized non-participant group. All scored above the 3.0 level—the level of clearly positive orientation. While only a few non-participants tended toward clearly negative orientations, this group was markedly "less achieving" in terms of characteristics identified in sequential analysis research.

The hypothesis that program participants tend to be "achievers" was, therefore, upheld. All participants—two more than the required eight of ten—attained the operationally defined minimum average score of 3.0. The second hypothesis—that non-participants tend to be "less achieving"—was also upheld since all scored at levels below participants, and more than the required majority were below the 3.0 average.

The range of attitudes distinguishing participants from non-participants included many established as discriminating in sequential analysis research. They also included many of the differences implicit in the two narrative summaries already presented. A few additional participant and non-participant summaries should make the distinctions more apparent. The following summary, for example, was representative of those derived from the participant sample.120

The subject's attitude is positive. While his outlook is generally optimistic, his optimism is tempered by the realization that life frequently involves compromise. He seems to feel that those who suffer losses will nevertheless be able to find some compensations. His basic philosophy also involves the concept of mutual dependency in relations with others.

The subject's attitude toward success is distinct. He ties it to vigor and imagination, desire and persistence, confidence and ability, analytical ability and experience. While he sees failure as stemming from the lack of these attributes, he relates it also to self-doubt.
In contrast, the summary for a "less achieving" non-participant reads as follows:

The subject's philosophy involves a blending of optimism and pessimism. In some instances, he is optimistic; in others, he is decidedly pessimistic. Within this ambivalence, however, he makes a point of his optimism, highlighting it by emphasizing how one might just as well adopt the reverse viewpoint.

The subject sees people as immature. In his stories, they quarrel and sulk, they act hurt, or they stubbornly resist authority. A critical appraisal of people is typical of his viewpoint. When people do achieve (he feels), they do so only to a limited extent or it takes them longer than it should. More importantly (he feels) they do little on their own to achieve. They work because they are directed, they attain happiness more or less automatically, and they aspire.

The ambivalence referred to above was characteristic of other non-participants whose scores were in the middle range of 2.5 to 3.0. The following summary was also representative of these five or six non-participants.

Although his attitudes are somewhat ambivalent, the subject's outlook is more frequently positive than negative. On the positive side, his philosophy of life includes the attitudes that satisfaction derives from hard work and industry and from realistic adaptation to circumstances. Perseverance, patience and courage are seen as traits necessary to achievement, to healthy normal existence and even to survival.

At the same time, the subject exhibits certain negative characteristics. Circumstances are seen as playing a major role in human existence. Or, as he sees things, achievement may result from the advice of another or from the desire, at least in part, to please someone else. The elements of passivity or semi-passivity in the subject's stories are frequent enough to conclude that he is not basically a highly activity-oriented individual.

The tenor of the last two analyses is decidedly different than those of the positive orientations already cited, or of that within the following participants' summary.

With the exception of a single negative import reflecting wishfulness, the subject's imports indicate positive or constructive attitudes.
These include a positive attitude toward success; the ideas that hard work and struggle are essential to achievement and satisfaction; the realization that achievement may involve both struggle and frustration; and the belief that failure to fulfill an obligation merits punishment.

The subject's general optimism includes the concept of the possibility of overcoming misfortune or circumstance and attaining peace of mind. The concept includes, however, the recognition that the help of others is sometimes necessary and desirable. He sees achievement as always involving active participation by the individual. The subject's life view is, for the most part, realistic. He believes that happiness is not necessarily an absolute condition. It may involve only a measure of peace and happiness or some peace of mind. When happiness is attained to a great degree, it comes to the moderate, hardworking individual who has the initiative and foresight to act intelligently. In line with this belief in moderation, the subject disapproves of the extremist—one who is too zealous or overimpressionable.

This summary was, in turn, strikingly different than that of a non-participant with a very low sequential analysis achievement score. The following characterization was, fortunately, not representative of the total executive sample.124

The subject's basic attitudes are almost uniformly negative. They are flavored with an irony which sees life as almost ridiculously paradoxical. He believes, for example, that one will reject what others have struggled to provide—that one will not be able to accept what he should logically want very much—that things normally fail to work out in the way that one would naturally expect.

The subject's imports reveal an indifferent attitude toward others and a pessimistic attitude toward success. In the latter instance, he seems to feel that success is either achieved negatively or it is frustrated by the perversities of life, a freak accident, or the inability to learn. The subject sees people as victims of their own emotions (fear or love)—as emotionally immature individuals who avoid responsibility to seek freedom and romance.

These varying attitudinal patterns are indicative of the ways in which participants and non-participants differed. Differences were, for the most part, differences of degree. In terms of the basic categories now established
for Sequence Analysis, program participants revealed themselves as more positive and constructive than non-participants—more positive in their attitudes toward goals and the means taken to achieve goals, more adaptive and realistic, more actively involved in relating to others, more constructive in their views of failure and factors contributing to failure, and more positive in their appraisals of adversity and its effects. The differences revealed indicated, therefore, that sequential analysis could discriminate effectively between individuals who were not completely antithetical in achievement attitudes or in personality structure.

It was true, of course, that some non-participants attained what might ordinarily be considered "achieving scores." The failure of these individuals to participate in the Program of Executive Development for Federal Personnel may, therefore, have been influenced by factors other than their personality orientations. As the previous chapter's findings indicated, executives with lengthy federal service—those at or nearing retirement age—tended to stay out of the program. Two of the ten in the non-participant sample were beyond the normal retirement age at the time of TAT administration and both were beyond normal working stages during the 1954-58 program years. A third non-participant had well over thirty years of service.

Analysis of personal history questionnaires also suggested that the life stage at which the executive entered public service bore upon program participation. Those who entered government relatively early in their careers (within ten years after becoming self-supporting), entered the program to a significantly greater degree than those beginning their government careers later (fifteen or more years after becoming self-supporting). Three of the
ten TAT non-participants entered government at this relatively advanced stage.127

A third differentiating aspect discussed in the preceding chapter may also have been relevant. In analyzing occupational mobility, it was found that executives beginning their careers in lower or middle-class occupations "entered the program in significantly greater numbers than their counterparts who began in upper-level career positions."128 Six of the ten executives in the non-participant sample belonged to the latter group—those whose beginning positions were of an upper-class sort.129

These factors provide a possible explanation of why some positively oriented non-participants might have refrained from program participation. Their ages, their career orientations, or their professional orientations may have been such that program participation did not seem relevant.130 These are, of course, speculations which cannot be proven as influencing executives in individual cases. The primary fact of differential personality orientation remains.

In psychological terms, it was also quite possible that some non-participants in this sample had already met the significant levels of achievement which they had defined for themselves earlier in their careers. The fact that their TAT protocols indicated modest positive levels at the time of testing, does not necessarily imply that they would have always reflected such orientations. Had these non-participants already reached their realistically anticipated levels of career achievement, they might then have been satisfied with more modest goals.

Within the ten-participant sample, the scores of "minimal" and "continuing" participants were randomly distributed with no pronounced
patterns distinguishing the two sub-groups. Although two or three program
"graduates" scored at the upper levels of the sequential analysis distribution,
the same number of "minimal" participants were at the same levels. It would
seem, therefore, that personality orientation was not a factor in determining
the individual executive's degree of program participation. This was
apparently due to the individual's satisfaction or dissatisfaction with his
initial program experience, with a very particularized kind of motive, or with
the personal history elements discussed in Chapter VII.

Summary and Conclusions

In order to go beyond the subjective estimates of agency administrators,
it seemed necessary to assess objectively the personality traits of program
participants. This assessment also involved some comparisons with non-
participants in terms of the measurements involved. The original agency
administrator questionnaire had included items similar to some of the dif-
ferentiating personality characteristics obtained through research using a
particular TAT methodology—Arnold's Sequence Analysis. For this reason but,
more importantly, because of its proven values, sequential analysis was used
with the TAT's of an appropriate sample drawn from the Warner-Martin-Van Riper
Study of the Federal Executive.

Arnold's method of Sequence Analysis has been built upon both a thoroughly
developed rationale and a still growing body of empirical research. In the
former instance, the method has been described as one which, by assessing
motivation, makes it possible to predict performance (or achievement) in a wide
variety of situations. The assessment is derived through processes and
interpretive techniques which abstract from TAT stories the essential habitual
attitudes of the individual storyteller. In the latter instance, research has involved studies of educational achievement, teaching ability, conduct, and success in religious vocation. In addition to this dissertation, still further research studies are in progress.

After illustrations of the application of Sequence Analysis to federal executive protocols, it was possible to establish new research hypotheses for analysis of the ten participant and ten non-participant cases within the Warner-Martin-Van Riper sample. Since the sub-samples were generally quite equivalent, and since the implications of previous chapters related well to "achievement" characteristics of sequential analysis research, it was hypothesized that participants would be more "achieving" than non-participants. Operational definitions were established in connection with both of the hypotheses tested.

The results of the TAT inquiry clearly supported both hypotheses. Both simple and more complex scoring procedures differentiated between participants and non-participants. Participants were "achievers" and were "more achieving" than non-participants. A further series of examples illustrated the personality differences involved. In terms of the basic categories now used for the Sequence Analysis methodology, participants were more constructively positive than non-participants.
Notes

1. See the discussion in Chapter IV.

2. See items p) through v) of question 2 in Part II of Appendix I, Agency Administrator Questionnaire. See also the section following question 2 and preceding question 3.

3. See the section preceding question 3 of the Agency Administrator Questionnaire.

4. See the discussion in Chapter IV.

5. The Sequence Analysis or, as it has also been referred to, Sequential Analysis, is a method originated and developed by Dr. Magda B. Arnold of the Department of Psychology at Loyola University, Chicago.

6. See the Chapter VII reference to this Study.

7. See the initial enumeration of hypotheses in Chapter III.

8. Magda B. Arnold, "The T.A.T. Sequence Analysis," (Chicago, n.d.), p.1. This is a manuscript version of a monograph in process—a monograph in which the rationale and technique of Sequence Analysis are presented within the framework of a critical evaluation of the TAT. The published version will also describe the method's scoring system and the research upon which the method has been validated. Unless otherwise indicated, subsequent references to Arnold are to the manuscript version of this monograph.


10. Idem.

11. Idem.

12. Ibid., pp 1-2.

13. Ibid., p.2. Here, as elsewhere, Arnold extends both criticism and exposition with illustrative comment and examples. The series of citations used in this chapter constitute an attempt to summarize the gist of Sequence Analysis.

21. Illustrations of import abstraction are given in subsequent sections of this chapter.

22. Arnold, p.9


25. Ibid., p. 10.

26. Ibid., p. 13

27. Ibid., pp. 13-14

28. Ibid., p.15

29. Ibid., pp. 15-16

30. Ibid., p.16

31. Ibid., p.18

32. Idem.

33. Ibid., p.19

34. Ibid., p.20

35. Idem.

36. Ibid., p.21

37. Idem.

38. Ibid., p.31

39. Ibid., p.22
40. Ibid., pp. 22-34
41. Ibid., p. 22
42. Ibid., p. 23
43. Ibid., pp. 24-25, 31-32
44. Ibid., pp. 32-34
45. Ibid., p. 34
46. Ibid., pp. 35-43
49. Ibid., pp. 1-4
50. Ibid., pp. 4-5
51. Ibid., pp. 130-133.
52. Ibid., p. 133
53. Idem.
54. Ibid., p. 50.
55. As Snider pointed out, (pp. 138-139), statistical analysis of initial categories—themes without reference to outcomes—revealed no significant group differences. As a result, categories of thematic material were set up and analyzed with particular attention to the outcomes of stories. For example, if death of a parent were the category, then stories with this theme were analyzed for successful or unsuccessful adjustment, for self-reliance or dependence in time of catastrophe.
57. Idem.
58. Idem.

60. McCandlish, p. 3.

61. Ibid., p. 2.


63. Ibid., pp. 40-41. The methodology of the pilot study involved three distinct steps: 1) sequential analysis of forty cases, global personality assessment of each case, and judgment regarding achievement status; 2) verification of judgments and development of categories allowing objective scoring; and 3) the application of the objective scoring system to cases to determine the statistical significance of the scoring system. This total process provided data necessary for hypothesis formulation.

64. McCandlish, pp. 49-55.

65. Ibid., pp. 56-58.

66. Ibid., p. 60.

67. Ibid. As McCandlish points out, the "achiever" in the one inaccurate prediction was subsequently evaluated by a psychiatrist and two independent TAT analysts as an individual with "a fully developed clinical syndrome."

68. McCandlish, p. 70.

69. Ibid., pp. 70-71.


72. Ibid., pp. 27-28.

73. Ibid., pp. 60-61.

74. Ibid., pp 63. Considering the twelve hundred stories in the study's one hundred protocols, there was 97.2% and 96.6% agreement between the author and the two judge-scorers.

75. Ibid., pp. 67-73.

Petrauskas, p. 1. In terms of the study, the offender was the enlisted naval offender, and the non-offender was the enlisted man who had never been subjected to legal disciplinary action either in the Navy or before enlistment.

Petrauskas, pp. 2-3.

Ibid., pp. 15-16. Here, as elsewhere in this Chapter section on Sequence Analysis and Empirical Research, the researcher's comments about Sequence Analysis are quoted to help provide a basic understanding of the method.

Two-thirds of each group were equated for educational level. To the degree possible, urban-rural residence was considered in pairing.

The five categories (attitudes toward others and self, attitudes toward work and success, attitudes toward a problem, attitudes toward external forces, and attitudes toward duties and obligations) were broad enough to comprehend those established by McCandlish and Sister Innocentia.

In the first instance, there was 70% agreement among the three analysts in scoring stories as positive or negative. In the second instance, there was 36% agreement.

Petrauskas, pp. 34-45.


An April 1961 conversation with Dr. Arnold indicated three relevant dissertation studies in process. One (by Vassiliou) deals with differences between normals and abnormals. Another (by Sister Rosaire) deals with leadership qualities in novices and other religious. A third (by Flaherty) concerns the selection of naval recruits for special duty assignment. The studies are in varying stages of progress. In addition to these, the author of this dissertation has begun a study of public administration interns and trainees in the civil service of New York State.
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86. As indicated in the preceding paragraphs, the earlier researches using the sequential analysis method dichotomised imports into positive or negative.

87. Arnold, no pagination. The scoring manual appended to the manuscript version of the monograph includes a seven-page summary section and a many paged provisory manual.

88. Scores of +2 (very positive), +1 (positive), -1 (negative), and -2 (very negative) represent the various values.

89. Arnold, p. 23.

90. He might, for example, frame his import statements in the second person. As Arnold points out (p. 24), "the import can also be formulated in the second person, to read as a monologue."

91. For example, one of the many other ways in which the import for story 1 might be stated is: One who starts studying very early will have his ability recognised and will become skilled in his profession. The substance of the import remains the same.

92. Arnold, p. 21

93. Ibid., p. 31. For example, the story 1 import might easily be made overly specific as follows: A young man who starts studying the violin very early will have his genius recognised and will end up as a skilled violinist. This is a summary not an import. The same story import might also be overgeneralised as follows: A man who starts to do something early enough will turn out to be successful. These are, of course, somewhat exaggerated examples.

94. Ibid., pp. 31-44.

95. The scoring system illustrated here is a preliminary version developed early in 1959. This version used a 4 (very positive), 3 (positive), 2 (negative), and 1 (very negative) scale.

96. Using the simple positive-negative dichotomies of earlier scoring categories, the protocol would be scored as at least 8 positive and 2 negative. Even here, there might be some question as to whether the negative import 7 might not be scored 3 as "achievement" by taking thought? In any event, however, the case would clearly be a positive one and the subject could be predicted to be an achiever.
97. This TAT illustration points up again the significance of sequence. For example, the successful achievement element in import 14 is not stated—in the story itself or in the import. It is, however, implicit in the sequence established in the imports of stories 7 through 19.

98. Stories 1, 2 and 3 present an initial sequence and the remainder two related sequences.

99. The editing involves a somewhat greater level of generalization.

100. See the discussion in Chapter VII.

101. The interview, conducted prior to administration of the TAT, dealt with a number of items from the personal history schedule. Procedural information was obtained by the author during the course of a number of interviews with Mr. Orvis F. Collins, the Study's Executive Director.

102. All TAT subjects were at the GS-14, GS-15 or above levels—the levels identified by the Study's directors as constituting the executive levels within the federal service.

103. The great majority were either directors or assistant directors of their organizations' regional offices.

104. For this classification index, executives were considered socially mobile if they had both 1) achieved a significantly higher level of education than their fathers', and 2) come from families where fathers were laborers, blue-collar workers, or clerks, etc. See Chapter VII for a discussion of these two mobility factors.

105. Of the five, four had completed a single seminar, and one two seminars.

106. All five "graduated" in the sense of completing the series of seminars required for certification.

107. See the discussion in Chapter II.

108. See the discussion in Chapter IV.

109. This agency administrator perspective is discussed throughout most of Chapter IV.

110. See Chapter V.

111. See Chapter IV discussion

112. See the Chapter V discussion.

113. See the discussion in Chapter VI.
114. See items 1, 9 and 10 in the Chapter III enumeration of hypotheses.

115. See Chapter IV.

116. The 3.0 scale average was chosen as a valid measure of positive orientation since, to achieve this level, the executive would have had to have either 1) a consistent pattern of attitudes at the lower positive (3) scale level, or a number of highly positive (4) attitudes to cancel out any negative (2 or 1) imports within the TAT.

117. Although the manual was used, the $+2, +1, -1$ and $-2$ values were converted to 4, 3, 2 and 1 for better averaging in drawing comparisons.

118. The $M$ pictures 1, 2, 3, 4, 6, 7, 8, 14, 17 and 19 from Murray's TAT set were used during administration. For purposes of sequential analysis, the complete set of twenty $M$ cards would have been more desirable.

119. They also tended to confirm the informed opinion of "agency administrators" and of Agency C raters that non-participating executives were also generally able individuals.

120. The example is that of an "achieving participant" with an average score of 3.6.

121. The example is that of a non-participant with an average score of 2.75.

122. The example is that of a non-participant with a score of 2.87.

123. The example is that of a participant with a score of 3.7.

124. The example is that of a non-participant with a score of 1.7, the lowest score within the total sample.

125. One was seventy years old and the other sixty-eight. Both had over forty years of federal service at the time of program initiation.

126. See Chapter VII.

127. One was fifty-two, one was forty-four, and one was thirty-nine.

128. See Chapter VII.

129. Three were engineers, two were chemists and one was a lawyer.

130. Another factor might have had some relation to lack of program participation. While all ten participants were career civil servants, three of the ten non-participants were political executives appointed through party affiliations. They may have conceived of themselves as "political executives" rather than as "federal administrators."
CHAPTER IX

WORK ORIENTATIONS AND PROGRAM PARTICIPATION

As the preceding chapter demonstrated, objective assessment of the personality characteristics of participants substantiated the opinions of agency administrators. The method of Sequence Analysis—as applied to the TAT's of an interagency sample of federal executives—discriminated between participants and non-participants. While both groups were, for the most part, "achieving" in evidencing positive attitudes and characteristics, the participant group was clearly superior. Executives who chose to enter the program were more constructively positive in their orientations to achievement, adversity, ill-intentioned action, and relationships with others.

The sample used was, of course, small. It was also drawn from a number of federal organizations in the Chicago area. Both the size and the nature of the sample, therefore, might give rise to questions of the generalizability of the findings. One might ask, for example, whether the findings would hold true for executives within a single federal organization. In this kind of a situation, would participating executives tend to be "achieving" and would they tend to be more "achieving" than their non-participating counterparts? Since agency climate has been shown to influence program participation, would a given climate either reinforce or inhibit these tendencies? Would the results of the TAT inquiry be supported in a study of executives at somewhat lower grade levels—executives who were careerists but who were not yet at retirement or near
retirement ages? Would the results obtained with the Warner-Martin-Van Riper sample be supported if personality analyses were focused on the work environment?

In order to answer these questions—at least in part—and to test the applicability of the TAT study's findings, a separate investigation was carried out. A somewhat larger total sample was drawn from a single federal organization; generally matched participant and non-participant groups were established; a projective test focusing on the work environment was administered; the same hypotheses as with the TAT inquiry were used; protocols were interpreted, scored, and validated in terms of Sequence Analysis methodology; and the findings were analyzed and compared to those of the first personality investigation.

This chapter discusses the results of this second inquiry. The section immediately following describes the particular projective test employed—Nelson's Survey of Management Perception—and demonstrates the applicability of Sequence Analysis. Subsequent sections are concerned with the sample and hypotheses, and the results of the investigation.

The Survey of Management Perception

In describing the motivations of program participants, many agency administrators emphasized the work factor. While personal characteristics were clearly seen as being involved, such characteristics were usually referred to within the framework of work-related viewpoints, motivations or ambitions. Viewpoints of participants were identified as general rather than specific—as reflecting desires for job-related education rather than, more narrowly, for job skills or techniques. To about the same degree, agency administrators gave work-related reasons for the failure of eligible executives to enter the
program. Although they were not able to make very sharp distinctions between the motivations and characteristics of participants and non-participants, the area of work attitudes was one of the few differentials which were stressed.\(^1\)

Although the exact degree of participants' satisfactions with their work roles could not be determined, their general levels of career orientation and ambition were very high. More importantly, however, the executives involved saw participation as a means of increasing vocational competence—as an educational opportunity which might contribute to their growth and development in their chosen careers. If the majority were really satisfied with their life situations, in which their work played an important part, most participants should have viewed the problems associated with their work as optimistically and constructively as they perceived broader areas of life.\(^2\)

While subjective perceptions of administrators and participants were not completely conclusive, they did suggest a very close tie between general personality characteristics and attitudes, and work orientations—a tie most relevant to program participation. For this reason, therefore, a projective test concentrating upon work areas should have revealed positive and negative attitudes of executives in the same manner as the TAT suggested their larger life perspectives.

The Survey of Management Perception developed by Nelson\(^3\) is a projective test of this sort. Nelson has described the test in the following terms:

The Survey of Management Perception is a projective test built around pictures of problem situations and issues that are typical of everyday management experiences. Unlike the Thematic Apperception Test, these pictures are familiar scenes that management must deal with as it problem-solves. We analyze these not in terms of internal dynamics but rather in terms of 'What does this executive see in a situation and how does he go about his problem-solving.'
In his own use of the ten-picture series comprising the Survey, Nelson has been concerned with assessing the individual executive's style and capacity in terms of the four organizational forces he characterizes as bureaucratic, technocratic, idiocratic and democratic. He has used SMF protocols in an integrative sense, together with other self-analysis, personal history, and objective measurement tools of his own construction.

Since the Survey provides scenes of problems familiar to managers, it should have elicited stories which, through sequential analysis, would allow an evaluation of basic attitudes toward work-related situations. As Arnold has pointed out in discussing the technique of Sequence Analysis, "the pictures themselves do not matter." The imaginative person can tell good stories—those providing good imports and sequences—about almost anything. She contends that "pictures that illustrate a dramatic situation are a decided help." While the situations of the Survey are "familiar" rather than "dramatic," they could and did provide the action, plot and outcome required for sequential analysis.

The applicability of Sequence Analysis to protocols derived from the Survey of Management Perception can be illustrated through the following stories of a program participant.

(Picture 1) A young and promising junior executive is working alone in the office after the rest of the staff has gone home. He is working on the report of a major project for which he alone is responsible. The project is extremely complex. It involves problems both of policy and procedure. The young man knows what he is going to do as far as the outcome of the project is concerned. He is only considering how best to phrase a particular key idea. The young man is a staff technician. He is trying to develop a particular personnel program which will be acceptable both to his superiors and to the operating officials who will be affected by the program. He is quite confident that he will be able to deal with the situation. After a thorough analysis of the problem, he finds he is 'on the right track.' He has broken through and the rest will be fairly simple. His report is completed before much longer. It is accepted by his superiors and praised highly by them.
A young man is entering the office of a senior executive whom he has come to interview. He has with him a rather involved questionnaire which he hopes to have completed. He is somewhat concerned about the time this will require. The executive has asked him to come in but he has also indicated in a number of ways that he is very busy. The senior executive is prepared to cooperate but he has his own definition of cooperation. The young man is a professional researcher. He is cautiously confident. He feels he will get what he wants but he knows he will have to be careful. He handles the matter skillfully. He explains the significance of the interview so well that the senior executive forgets how busy he is and gives all the information needed.

A production foreman has entered the plant manager's office. He is holding a broken machine part and has indicated that a major line is not operating because of a breakdown. The foreman wants to know what to do. No replacement part is available and none can be obtained until the next day. The plant manager has said that he will take care of things. While the foreman is quite excited, the plant manager has remained quite calm. He is a little perturbed that the other is so upset. The manager decides to divert the idle workers to other production lines. He calls the other foremen to tell them what to expect. He then makes sure that the needed part will be on hand the next day.

An ambitious, hard-working young man has arrived home rather late. There are a few items he is trying to clear up for the next day. His son has been talking to him while his wife has been out. The young man has been carrying on a conversation with his son while checking some information. Fortunately, the work he is doing is quite routine. He is eager to get it out of the way. He is somewhat irritated by the fact that his wife has not returned as soon as he had expected. He does not, however, take it out on his son. Now that his wife is back, she takes over and gets the child ready for bed. The young man soon completes his work and is able to relax.

Two workers in a machine shop are standing off to the side while their foreman is angrily talking to a plant engineer. He is blaming a machine breakdown on the carelessness of one of the workers. The foreman is going on in this vein while the engineer is listening carefully. The workers are also talking about the situation. They do not feel that any careless action was involved. The engineer is paying little attention to the details of what the foreman is saying. He is thinking instead of the machine. When the foreman has talked himself out, the engineer suggests a method for repairing the machine temporarily. The next day he returns and suggests a machine attachment which will prevent further accidents of the type which caused the breakdown.

A young mechanical engineer is supervising the installation of a new machine. The shop foreman and plant supervisor are standing in the background observing and talking. The engineer is working from his chart on a step-by-step basis. The worker installing the machine is not really listening. He is going ahead, relying on his knowledge of machines to guide him in what he is doing. The machine operator is dozing while he waits. He does not care how the machine is put together. His job is to operate the machine. The shirt-sleeved
foreman in the background is talking about what the machine will do. When the
installation is completed, the young engineer checks thoroughly to make sure
everything is working. He returns periodically for spot-checks and the
installation is successful. No complications develop.

(Picture 7) Four old-timers are sitting in the company cafeteria while another
worker is sitting alone eating his lunch. He is reading the paper. The group
is involved in run-of-the-mill company conversation. All five perform the same
kind of stock work. The worker who is alone is not really conscious of the
others. He is preoccupied with himself and his own interests. The four friends
are aware of his presence. They do not dislike him but they rather distrust his
serious manner and habits. Nothing immediately significant happens. In later
years, however, the serious and aloof worker is promoted a number of times. The
other workers continue as stock men.

(Picture 10) A young man is sitting in his office trying to clean up a host of
details before leaving on a business trip. Some of the matters with which he is
concerned must be taken care of. Others are not too significant. The young man
is systematically working through the day item by item. He is somewhat concerned because some things will have to be postponed until he returns from his trip. He decides to take some work with him. By the end of the day, he has completed all the significant matters and some of the miscellaneous things. He has organized the remainder well and completes it without too much difficulty during the course of his trip.

As with the TAT case illustrations of the preceding chapter, abstracting
of each story's import and placement of imports in sequence yields the follow-
ing progression:

1. When working alone at a complex task, you may be quite confident that you
know what to do, but you will still have to consider the best approach to
your problem. Your thorough analysis will allow you to complete the job
most successfully.

2. Although you are confident that you can solve a problem, you realize that
you have to be careful when dealing with people. Your skill in handling a
touchy situation leads to success.

3. If you remain calm—particularly when others are excited—and act logically,
you will decide a problem satisfactorily.

4. Sometimes there will be irritations but, if you control yourself, you will
finish your work and be able to relax.

5. If you concentrate upon the basic problem and ignore irrelevant details,
you will be able to deal with a difficult situation.
6. Though others may not be interested, you can still attain your goal by care, thoroughness, and checking in doing your own job.

7. Your fellow workers may not trust you but, if you are serious about your work, you will succeed in the long run while they fail.

10. It's all a matter of work, system, and organization. If you organize your work and complete it satisfactorily, you will have little difficulty.

The set of meanings implicit in this subject's Survey stories can be combined to form the following summary evaluation:

The subject has a consistently positive attitude toward success and achievement within the work context. He equates job success with problem analysis (story import 1), concentration upon essential elements of a situation (story import 5), care and thoroughness (story import 6), and a serious concern for his job responsibilities (story imports 1, 6, 7). Emphasizing calm and logical activity (story imports 3, 4, 6), he ties achievement in a final sense to work, system, and organization (story import 10).

While clearly manifesting confidence (story imports 1, 2, 6, 7), he is not overconfident. The subject emphasizes the need to find the best approach to a complex problem (story import 1) and the need for self-control (story imports 3, 4). In a number of instances (story imports 1, 3, 4), he stresses the need to carry through a task or problem to the point of completion or decision. Although he is able to remain aloof from others in the sense of maintaining his independence (story imports 3, 6, 7), he recognizes the necessity of working with others in an appropriate way (story import 2).

In view of the constructive self-sufficiency of this executive, it is not surprising that he would be rated as a highly "achieving" individual under any of the sequential analysis scoring methods which have been developed. If the imports were evaluated dichotomously—in terms of positive or negative valuation—all would be clearly positive. In terms of the same preliminary four-category scoring system illustrated in the preceding chapter, the protocol could be evaluated as follows:
1. Import 1 - +3 - success by taking thought
2. Import 2 - +1 - success because of realistic adaptation
3. Import 3 - +1 - success because of realistic adaptation
4. Import 4 - +1 - success because of realistic adaptation
5. Import 5 - +3 - success by taking thought
6. Import 6 - +1 - success because of own effort, initiative, definite means
7. Import 7 - +1 - success because of own effort, initiative
8. Import 8 - +1 - success because of own effort, definite means
9. Import 9 - +1 - success because of own effort, definite means

With this scoring technique, the protocol would reflect an average import value of 3.75 on a scale ranging from 1.0 to 4.0. The present elaborated Sequence Analysis scoring system results in the following:

1. Import 1 - (+2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, personal initiative.
2. Import 2 - (+2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, control of emotion and acting reasonably.
3. Import 3 - (+2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying control of emotion and reasonable action.
4. Import 4 - (+2) - Reaction to Adversity: loss, harm, danger, terror, separation, disappointment - the import says in effect: that it is overcome by positive action
5. Import 5 - (+2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, personal initiative, control of emotion and reasonable action.
6. Import 6 - (+2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, personal initiative, reasonable action.
7. Import 7 - (+2) - Relationships with others: bad relationships—the import says in effect: bad relationships can be prevented or corrected by positive action; actions are not unduly influenced by the advice or opinions of others

10. Import 10 - (+2) - Achievement: means taken toward goals—the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, personal initiative, control of emotions and acting reasonably

The refined scoring system provides, therefore, an even higher rating. On a scale ranging from -2.0 to +2.0 (on a converted basis, from 1.0 to +1.0), this participant would score at the highest possible "achieving" level of +2. His converted score of 4.0 is, therefore, even higher than the 3.75 obtained with the earlier scoring system. Other analysts trained in the sequential analysis methodology would undoubtedly rate this subject at the same absolute "achieving" level. Within the more limited work context, he is clearly as "achieving" as the first participant cited in the preceding chapter.

In the same manner, the ability of Sequence Analysis to demonstrate a lesser level of "achievement" may be illustrated with the SMP protocol of a non-participating executive. The following example groups together each SMP story, its import statement, and its valuation within the current scoring method.

(Picture 1) The president's son is sitting at a desk thinking about what he did last night or what he is going to do the coming evening. Virtually clean desk, cigarette on tray and coffee cup on desk indicate he probably is not too concerned about the affairs of the company. The son probably has a good title and a good salary but few duties. The single sheet of paper has probably been sitting on his desk for a week and is of no consequence. He will probably continue thinking pleasant thoughts until lunch. Probably his father is out of town so no formal coffee break. His secretary probably made coffee for him in her office. She is probably a nice looking girl.

(Import 1) When you are sitting pretty, you can think pleasant thoughts instead of working—particularly when the big boss is not around.

(Score 1) (-2) - Achievement: means taken toward goals—the import says in effect: successful achievement follows upon lack of interest; active effort is
avoided because of laziness

(Picture 2) An IBM salesman is entering an office to sell new type of equipment to the Board. The girl in the office is someone's secretary sorting the morning's mail and has yet not looked up. The salesman is well dressed and as soon as he takes his hand off the doorknob he will take off his hat and say "good morning" to the girl. She appears to be a middle-aged woman who has been around a long time. He will probably be told to sit down and after awhile will get to see one of the Board executives. Then he will be sent down to talk to the electronics group.

(Import 2) And, when people come to talk business, you can always send them to someone else.

(Score 2) (-2) - Achievement: means taken toward goals—the import says in effect: successful achievement follows upon lack of interest; active effort is avoided because of laziness

(Picture 3) A production foreman has entered his supervisor's office to compliment the boss. The foreman is showing his boss the product which a new machine is producing twice as fast as what an obsolete machine required. Production foreman is holding the product and saying good things about it to his boss who has a small private office in the shop with a production chart on the wall. After some small talk, they will agree that the boss made a good move in acquiring the new type of production machine.

(Import 3) When you have made a profitable decision, people will compliment you.

(Score 3) (+1) - Achievement: means taken toward goals—the import says in effect: successful achievement follows when one takes thought

(Picture 4) Dad is trying to figure out his income tax but his little boy wants to play. Mama is going to her lady's club, she appears to be putting on her coat. The father is giving the boy some attention and trying to figure out how he could get the little boy to play by himself so he could complete the tax form. Mother is going out to visit her girl friends while papa watches junior and finishes up his personal business. Maybe in addition to his tax return, he may have some office work which is in the brief case. Papa will probably play with junior awhile, put him to bed, complete his tax return and lie down on the sofa to day dream and cat nap about when he was single before mama. He will do all this before mama gets back from her gossip session.

(Import 4) But when you have to work among difficulties and distractions, you dream of the days when you had no responsibilities.

(Score 4) (-2) - Achievement: means taken toward goals—the import says in effect: active effort is avoided because of difficulties or unpleasantness

(Picture 5) A couple of executives touring the factory notice a couple of workers loafering. One executive is pointing to the loafers and telling the other one that something should be done about this "feather bedding". Two men are executives, well dressed, well paid, and concerned about production costs. Two men are production workers, not too concerned about efficiency or keeping the place clean. The shop foreman will be told to keep a sharpier watch on his employees and if there is no improvement, he will be among the first to go.
People working without any great responsibilities can loaf if they want to. There are always those, however, who have to keep them in line or suffer the consequences along with the loafers.

(Achievement) (±2) - Achievement: means taken toward goals - the import says in effect: successful achievement comes through active effort, adequate means; when one adopts definite means implying personal effort, personal initiative

(Picture 6) Construction crew working on a new building. Two men in background are unemployed spectators. The engineer (in white shirt) is explaining how a particular part of the job should be done to two workers. One of the workers is disgusted with the engineer's meddling. Two laborers doing the work while the engineer with the blueprint trying to supervise the job. One of the workers is sitting down thinking that he had been doing this type of work for 25 years and does not need such a young punk just out of school to tell him what to do. After the young engineer departs, the workers will do things their own way and say what they always think about their young college kids think they have been doing for the past 25 years.

(Achievement) (±1) - Achievement: means taken toward goals - the import says in effect: actions rely heavily on understanding, acceptance or sympathy of others

(Picture 7) Factory lunch room for employees only. Four employees at one table just finished eating and are talking about the White Sox chances of finishing in the first division. The fifth worker still eating and reading a newspaper. Four factory workers who always eat together are sitting and talking. A fifth factory worker is by himself. His friends had finished lunch and took a walk around the building. In ten minutes, all five workers will be back at their punch presser, trying to make as many items as possible because they are on piece rate.

(Achievement) (±1) - Achievement: means taken toward goals - the import says in effect: no achievement follows because of unavoidable circumstances

(Picture 10) January 1961 - The Board receives its electronic machine. Board officials find that they were far too optimistic about how early the conversion from conventional to electronic equipment could be made. Jim Manning and Frank McRenna meet to discuss the budget. Despite the new type machine, administrative costs are estimated by the BMSR to be 10% higher for the next fiscal year. After much discussion, it is agreed that overtime will be necessary on both conventional and electronic equipment to make the conversion properly and at the same time do the current work.

(Achievement) (±1) - Achievement: means taken toward goals - the import says in effect: It's still necessary to work more than usual.
In this instance, the present Sequence Analysis Scoring system results in an average import value of -.75. Conversion to a 1.0 to 4.0 scale yields a score of 2.0. Since this contrasts sharply with the 4.0 score of the previous participant example, the differential level of "achievement" is very apparent. While extreme examples have been used to heighten the contrasts involved, the cases demonstrate the applicability of Sequence Analysis to Survey of Management Perception protocols.

The non-participant of this illustration reveals a rather consistently negative pattern of characteristic work attitudes. While his goals are evidently self-centered, the means he chooses involve avoidance of responsibility—avoidance of work, responsible action, and the difficulties or unpleasantness associated with responsibility. Within the more specific context of work, he evidences the same generally unenthusiastic mood, reaction to frustration, reliance on circumstances, and wishfulness as the first (non-participating executive) TAT example of the preceding chapter.

The SMP Sample: Hypotheses and Procedures

In seeking an SMP sample from a single federal organization, a number of considerations were involved. The first stages of dissertation research had suggested the possible effects of agency climate upon program participation. In general terms, agency patterns of program promotion and support resulted in what might be called supportive, neutral, or non-supportive climates. Although the differential effects of these climates could not be immediately particularized, subsequent research demonstrated that significant differences between program participants and non-participants were contingent upon agency climate. In a non-supportive environment, participants were clearly superior to non-participants
in certain intellectual and administrative judgment abilities. There were no significant differences in these abilities as far as participants and non-participants within a supportive agency were concerned. In effect, a certain kind of climate influenced relatively superior executives in terms of their program entry.\textsuperscript{12}

While differences of this kind might have washed out in a broader population of participants, the effects of agency climate were not apparent, or not involved, in comparing the TAT-determined personality characteristics of participants and non-participants.\textsuperscript{13} If, therefore, Sequence Analysis were able to differentiate between TAT protocols of participants and non-participants without regard to their organizational affiliations, and if, as demonstrated above, Sequence Analysis were able to discriminate between SMP protocols, then the method should logically be able to differentiate the SMP personality characteristics of participants and non-participants within both supportive and non-supportive agencies.\textsuperscript{14}

Since two agencies, one with a highly supportive climate and the other with a clearly non-supportive climate, were most accessible to the author, the latter was selected. This was the Agency C described in previous chapters\textsuperscript{15}—an agency where program participation was most clearly a matter of individual interest and decision, with individual choice the primary factor, participant non-participant differences should have been maximized and SMP protocols from each group should have differentiated personality characteristics.

For the SMP inquiry, half of the original samples (of twenty participants and twenty non-participants) used in the previous Agency C research were augmented by ten additional executives. The resultant SMP sample of thirty
executives comprised fifteen participants and fifteen non-participants. As with the original sample, participants attending only during the initial academic year—when the agency vigorously supported the program—were excluded. And again, participants from two or three organizational units where directing officials had a positive or negative program bias were also excluded. The non-participant sample of fifteen was selected from the same organizational units as participants, and an attempt was made to balance personal characteristics and other relevant organizational factors. Comparisons between the two groups are summarized in the following table.

**TABLE XV**

**CHARACTERISTICS OF PARTICIPANT, NON-PARTICIPANT SMP SAMPLE**

<table>
<thead>
<tr>
<th>#Agency #20 Service #15 Service #10 or less</th>
<th>#Male</th>
<th>#Female</th>
<th>Units</th>
<th>Years</th>
<th>Years</th>
<th>Service Yrs.</th>
<th>#Staff</th>
<th>#Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>P -15</td>
<td>14</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>NP-15</td>
<td>14</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GS</th>
<th>9-12</th>
<th>13-15</th>
<th>Graduate</th>
<th>Bachelor's</th>
<th>College</th>
<th>High School</th>
<th>Age</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>P -15</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>NP-15</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

P       - Participant Sample  
NP      - Non-Participant Sample

As the table indicates, all but two sample members were male executives in a broad range of grade levels. Participant and non-participant samples were drawn from the same number of organizational units—drawn, in fact, from the
same units in the same proportions. In both instances, the majority had served fifteen or more years in the federal civil service. Both groups were almost equally balanced with line and staff executives. A majority of both groups had college degrees. Both groups were generally balanced in terms of broad age groupings.

While the overall sample approximated the character of the initial Agency C sample, it represented a different kind of sample than that used in the TAT inquiry. The majority of SMP sample members were at lower grade levels and had less years in the federal service. A lesser percentage of the sample was at the college graduate level of educational achievement. As with the TAT sample, however, sample members were not aware of the basic research criterion (program participation) of this dissertation. 17

In order to test for participant non-participant personality differences, it was again necessary to reformulate the original dissertation hypotheses to fit the measurement focus of Sequence Analysis. Since participants from Agency C could be evaluated in the same general terms as the participant population, the same hypothesis was appropriate. 18 As previously stated, this hypothesis held that:

Program participants tend to be "achievers" in that a majority reflect the positive personality characteristics identified by Arnold and others in studies employing Sequence Analysis.

Within the SMP sample, a majority was defined to include at least twelve out of the fifteen Agency C participants. A minimum average score of 3.0 on a 4 (highly positive), 3 (positive), 2 (negative) and 1 (highly negative) import scale was again considered necessary to classify a participant as an "achiever."
Since that TAT inquiry showed an interagency sample of non-participants to be "less-achieving," the same hypothesis was considered appropriate to the Agency C non-participant sample. This second Sequence Analysis hypothesis was stated as follows:

Non-participating executives tend to be "less achieving" in that a majority reflect to a lesser degree than do participants the same personality characteristics coming from sequential analysis research.

Operationally, the hypothesis was to be considered upheld if at least eight non-participants from the Agency C SMP sample had average scores below the 3.0 level. For both hypotheses to be upheld, therefore, the following conditions had to be met.

1. A minimum of twelve participants had to score at or above the 3.0 level. As many as three participants could score at any level below 3.0.
2. A minimum of eight non-participants had to score below the 3.0 level. As many as seven non-participants could score at 3.0, or at any level above that point.

If these conditions were met at the minimum levels, nineteen of the total sample of thirty would have scored at or above 3.0, and eleven would have scored below that level.

In carrying out this phase of program research, the following procedures were employed:

1. The total group of thirty SMP's were analyzed to the author—without reference to identification of individual subjects as participants or non-participants—and scored using both the positive-negative scoring of early Sequence Analysis research, and the preliminary four-category scoring system developed early in 1959;
2. all protocols were submitted to Arnold—without identification of participants and non-participants—for spot checking by her; 19
3. the participant and non-participant protocols were then identified, separated and rescored by the author using the present elaborated Sequence Analysis scoring manual;
4. the final participant and non-participant scores were used to test the two hypotheses established and to analyze the differences obtained as they related to program participation; and
5. narrative evaluation summaries—including the illustration cited in the preceding section of this chapter—were prepared for some executive cases to illustrate contrasting patterns.

Although the order of procedure varied somewhat from that of the preceding TAT investigation, the substance was very similar.

**Results of the SMP Inquiry**

When the thirty unidentified SMP's comprising the total Agency C sample were analyzed according to a general positive-negative classification, twenty protocols were positive in that they included more positive than negative imports. With eight pictures used in SMP administration, the theoretical limits of this form of scoring ranged from a completely positive (eight positive imports and no negative imports), to a completely negative (no positive imports and eight negative imports), protocol. The actual distribution included nine completely positive protocols, five which were almost completely positive, and six which were predominantly positive. While there were no completely negative protocols, seven were almost completely negative, and three were predominantly negative.

When the same SMP's were scored using the preliminary four-category scoring system, average scores—within a range of 4.0 to 1.0—ranged from a high of 3.75 to a low of 1.88. Seventeen of the thirty cases were clearly positive in averaging above the 2.5 mid-point between high-negative and low-positive levels. As with the interagency TAT sample, this confirmed the expectation that a majority of executives would be "achievers" to at least some degree. The ranked distributions under both scoring methods were as follows:
Final rescore—following upon spot checking by Arnold—altered the scores of a majority of the thirty SMP protocols. With the exception of two cases, the basic positive or negative classifications did not change. In about half the cases, rankings were shifted. A larger proportion—twenty-two of thirty—were positive in averaging at or above 3.0, and twenty-four were above 2.5. The results of this rescore are summarized in the following table.
TABLE XVI
SEQUENCE ANALYSIS SCORES OF AGENCY C SAMPLE

<table>
<thead>
<tr>
<th>P or NP</th>
<th># SMP Stories</th>
<th>Score</th>
<th>P or NP</th>
<th># SMP Stories</th>
<th>Score</th>
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<tr>
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<td>8</td>
<td>4.0</td>
<td>P</td>
<td>8</td>
<td>3.13</td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>4.0</td>
<td>P</td>
<td>8</td>
<td>3.13</td>
</tr>
<tr>
<td>NP</td>
<td>8</td>
<td>3.75</td>
<td>NP</td>
<td>8</td>
<td>3.13</td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>3.63</td>
<td>P</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>NP</td>
<td>8</td>
<td>3.63</td>
<td>P</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>3.50</td>
<td>P</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>P</td>
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<td>3.50</td>
<td>NP</td>
<td>8</td>
<td>2.75</td>
</tr>
<tr>
<td>NP</td>
<td>8</td>
<td>3.50</td>
<td>NP</td>
<td>8</td>
<td>2.63</td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>3.38</td>
<td>NP</td>
<td>8</td>
<td>2.38</td>
</tr>
<tr>
<td>P</td>
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<tr>
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<td>2.38</td>
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<td>8</td>
<td>3.38</td>
<td>NP</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>3.25</td>
<td>NP</td>
<td>8</td>
<td>1.88</td>
</tr>
</tbody>
</table>

The effect of the revised scoring upon the two hypotheses was not immediately apparent. Inspection of participant scores revealed, however, that all fifteen scored at or above the 3.0 level, with the majority (eight) at or above 3.38. With a minimum average of 3.0 operationally defined as "achieving" and twelve of fifteen hypothetically required for a majority, the first hypothesis—that program participants tend to be "achievers"—was upheld. Thus, the original TAT sample finding was substantiated.

SMP scores of non-participants were more widely scattered throughout the distribution. With a solid block of eight concentrated at the lower end of the scale, the remaining seven scores were distributed at various positive levels above 3.0. Since, however, a majority had been defined as including at least
eight non-participants, the second hypothesis—that non-participants tend to be "less achieving"—was also upheld.

The range of attitudes distinguishing participants and non-participants was illustrated through the two cases presented in the preceding section of this chapter. Two additional summaries based on sequential analysis interpretation should reinforce the extreme contrasts derived from the SMP inquiry. The following summary, for example, is representative of participants scoring at the upper (highly positive) end of the distribution.

The subject indicates a consistently positive approach to problems inherent in working in a large-scale organization. In appraising job-related problems, he emphasizes both the need for a logical and well-organized kind of analysis and the need for decisive action based upon rational personal decisions. He sees organized work habits and the ability to work creatively and independently as requisite to an effective relationship with superiors.

While he stresses the need for independent action, he is aware of the needs of others, emphasizing both the essential interdependence of people who work together in an organization and consideration for all who are involved in a project. He also emphasizes the desirability of maintaining emotional control—particularly when normal organizational frustrations are involved.

In contrast to this kind of a perspective, the summary for a representative non-participant scoring at the lower (highly negative) end of the distribution reads as follows:

In estimating the factors relevant to executive success in an organization, the subject exhibits consistently negative concepts. Among these is the belief that most people cannot be worked with—that they are basically self-centered, short-sighted, irritating, and uncooperative. As a result of this kind of an estimate, he ridicules creative and constructive activity as worthless.

His "positive" views emphasize the need for conformity and acceptably orthodox ideas and activities. "Giving people what they are looking for" under any circumstances is, in his opinion, requisite to success. If this can be done manipulatively to gain personal ends at the same time, so much the better. In most instances, the subject is not even
"constructively pessimistic." He demonstrates a consistently defeatist viewpoint.

While the goals of both executives were probably similar—the generalized goals of all executives in the sample might well be successful achievement in their organizations or career fields—the means they saw as necessary to reaching these goals were very different. For the "achieving" executive—including the two participant cases cited—there was an emphasis upon positive and constructive action. The emphasis—consistent in the case of the "highly achieving" individual—involves logical, analytical and careful definition and planning, system and organization, a serious concern for responsibilities, an activity or decision orientation based upon personal or independent conclusions, self-control, a reasonable consideration of others, and a generally cooperative spirit. For the executive who was clearly "less achieving," the converse was true. In most instances, his negativism embraced lethargic or pessimistic attitudes towards work and his prospects for success, a critical and sometimes hostile attitude toward others, an emotional or non-rational view of the work environment, and tendencies toward both conformity and dependent behavior.

These were, of course, the same "achieving" and "non-achieving" characteristics demonstrated in the whole of sequential analysis research—the same tendencies which differentiated between participants and non-participants in the previous TAT inquiry. As the analysis derived from that inquiry pointed out, the executive who was somewhat "less achieving"—in contrast to one who was clearly "less achieving"—demonstrated ambivalent attitudes. The following SMP summary is illustrative of Agency C executives in this middle group.
While the subject's attitudes are generally positive, he demonstrates a considerable degree of dependency upon others. He stresses the desirability of seeking help from others who are better qualified when a problem is beyond his own abilities. At the same time, he would tend to rely on others—particularly superiors—in situations which are very trying or particularly difficult. Although he would work independently when circumstances so required, he would probably prefer not to do so.

The subject is only moderately active in his approach to work problems. In his emphasis upon the need to proceed thoughtfully and carefully and the difficult circumstances of his work environment, he evidences a cautious and somewhat hesitant point of view.

Here again, these attitudes were implicit in the imports of the subject's SMP stories. As arranged in the following sequence, they provide a final illustration of the methodology used in this research. 25

1. If you have a task to accomplish—a decision to reach—you will think out a solution.

2. And, if you handle the details of your job carefully and systematically, everything will proceed in order.

3. When, however, you need help in reaching a decision, you will seek advice from those who are better qualified.

4. For sometimes you have to try to do your work under difficult circumstances.

5. When things go wrong, others will help you deal with both the immediate situation and the long-range problem.

6. But if you can't deal with the problem yourself, you'll have to call in an expert. He will take care of the situation.

7. You may not be able to join with others—you may have to proceed alone—because your work schedules are different.

10. But when your situation is really very difficult, you can ask your superiors for help. They will arrange things and everybody will be happy.

In comparing the findings of the TAT and SMP investigations, certain differences were immediately apparent. In the TAT inquiry, all executives within the participant sample scored at levels above members of the non-participant sample. 26 In the SMP inquiry, a considerable proportion of the
non-participant sample scored at various levels equivalent to participant score levels. While such a result suggested differences between the two overall samples, it also pointed up the situation of many non-participants within Agency C being at clearly "achieving" levels.

As originally mentioned, the Agency C sample comprised executives at somewhat lower grade levels than the executives in the Warner-Martin-Van Riper federal sample. It was possible, therefore, that Agency C executives did not feel compelled to set an example for their organizational subordinates—a compulsion which might have influenced at least some of the executives in the latter group. Agency considerations may have influenced this group's participation—in a positive and very different way than would the non-supportive climate of Agency C. As members of the central executive groups in their organizations, some might have felt "officially required" to participate. Since, however, this should also have influenced non-participants within the Warner-Martin-Van Riper sample to the same degree, the matter remains entirely speculative.

Even granting that Agency C executives would not have felt so influenced, it seemed more likely that other, more personal factors might have prevented clearly "achieving" Agency C non-participants from entering the program. Other speculative factors that might have inhibited "achieving" non-participants in the TAT sample—age, career or professional orientation—were not relevant within Agency C. None of the Agency C non-participants were at or near retirement age; virtually all—thirteen of fifteen—had entered government early in their adult working careers; and most—eleven of fifteen—had begun their careers in lower or middle-class occupations.
In order to gain some possible insights into the situation, each of the seven Agency C non-participants who scored above 3.0 was interviewed. Each was asked why he had not applied for entry into the Program of Executive Development for Federal Personnel. The highest scoring non-participant indicated that he lacked sufficient time because of his continuing enrollment in a graduate accounting program at another local university. The second highest non-participant expressed an interest in the program but indicated poor health as the basic reason for non-participation. A third non-participant—one scoring at 3.5—felt inhibited by the responsibilities of a very large family and an extended commuting distance.

Two of the remaining four non-participants pleaded lack of free time due to a continuing need to work overtime on their jobs. The sixth non-participant—an individual lacking any collegiate training—felt that the kind of "academic" training involved would probably not benefit him. The seventh and final interviewee expressed a kind of defensive modesty in doubting whether he was really an "executive" in the sense of the program's intent.

While these explanations seemed rational, and while the concrete reasons given were factually correct, most of the participants were also affected by one or more of the same factors—enrollment in other university programs, poor health, family responsibilities, commuting distance, overtime work or subordinate executive positions. At least one of these factors was clearly applicable to nine of the fifteen participants. Although none of the seven non-participants who were interviewed mentioned the agency's non-supportive attitude toward the program, it was still quite possible that they were influenced by this factor.

Without a more intensive investigation it was not possible to draw any
conclusive inferences. The following conclusions were, therefore, outcomes of the SMP inquiry:

1. All participating executives within Agency C were clearly "achieving" in terms of Sequence Analysis criteria;
2. the majority of non-participating executives were either "less achieving" or clearly "non-achieving" in terms of the same criteria; and
3. the "achieving" non-participants may have been inhibited as a result of personal considerations or the agency's non-supportive climate.

The TAT inquiry had revealed no apparent personality differences between "minimal" and "continuing" program participants. As the following table indicates, there were also no apparent differences within Agency C.

<table>
<thead>
<tr>
<th>Score</th>
<th>Participant Category</th>
<th>Score</th>
<th>Participant Category</th>
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<tbody>
<tr>
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<td>Continuing</td>
<td>3.25</td>
<td>Continuing</td>
</tr>
<tr>
<td>4.0</td>
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<td>3.13</td>
<td>Continuing</td>
</tr>
<tr>
<td>3.63</td>
<td>Continuing</td>
<td>3.13</td>
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<tr>
<td>3.50</td>
<td>Minimal</td>
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<tr>
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<td>3.0</td>
<td>Continuing</td>
</tr>
<tr>
<td>3.38</td>
<td>Minimal</td>
<td>3.0</td>
<td>Minimal</td>
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<tr>
<td>3.38</td>
<td>Minimal</td>
<td>3.0</td>
<td>Minimal</td>
</tr>
<tr>
<td>3.38</td>
<td>Continuing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here again, the pattern seemed random with both program "graduates" and "minimal" participants scattered throughout the distribution. About the same proportions of each participant category were in the upper and lower "halves" of the distribution.

The seven minimally participating executives within this sample were also interviewed. While three of the seven mentioned the difficulties of commuting...
none expressed dissatisfaction with the program's courses. Six of the seven, however, indicated dissatisfaction with the agency's point of view toward the program. In varying terms, they seemed to be saying that they felt their time and effort was not worthwhile when the organization saw so little of value in program participation. While the evidence was purely subjective, it suggested again the possible effect of agency climate upon at least some executives—participants as well as non-participants.

Summary and Conclusions

In order to "test" the findings of the preceding TAT study of an inter-agency federal executive sample, a second personality investigation was carried out. In this instance, a somewhat larger sample was drawn from a single federal organization. Executives were at lower grade levels and their characteristics were such that factors which might have influenced participation in the TAT study were not readily apparent. A different projective test—Nelson's Survey of Management Perception—was used in this second personality investigation. As a number of illustrations demonstrated, the techniques and scoring methods of Sequence Analysis were as applicable to the SMP as they had been to the TAT.

Agency C—an organization previously identified as having a non-supportive program climate—was selected because of its accessibility, and the findings of an earlier agency study which differentiated between participants and non-participants. The other agency which was also accessible to the author might have been atypical in providing too much of a supportive climate—one which might have obliterated any possible differences in personality orientations of its participants and non-participants. In any event, a thirty executive Agency C sample—fifteen participants and an equal number of non-participants—was
selected as carefully as circumstances would permit.

In establishing hypotheses, the same two which were supported by the TAT study's findings were restated. In terms of personality characteristics obtained through Sequence Analysis research, it was hypothesized that a majority of participants would be "achievers" and that a majority of non-participants would be "less achieving." The same operational definitions were used as in the TAT study.

The results of the SMP inquiry also supported both hypotheses. Program participants within Agency C were "achievers" and a majority of the non-participants were "less achieving." As a number of summary analyses demonstrated, the differences were of the same kind as those distinguishing "achievers" and "non-achievers" in the TAT study and in earlier sequential analysis research.

In Agency C, however, a large minority of non-participants were clearly "achieving" in terms of Sequence Analysis criteria. While Agency C executives may not have been subject to the same participation influences as executives in the Warner-Martín-Van Riper sample, it is also possible that they had personally valid reasons for not entering the program. At the same time, however, most of Agency C's participants were subject to the same personal considerations.

Although interviewing did not bring it out, it was also possible that the agency's non-supportive climate was a conditioning factor. Interviewing of "minimal" participants suggested that this climate might have affected their dropping out of the program after completion of one or two courses.
Notes

1. See this discussion in Chapter IV.

2. See the discussion in Chapter V.

3. Charles W. Nelson is presently Executive Director of his own Chicago consulting firm, Management Research Associates. The Survey of Management Perception was originally developed while he was Associate Professor of Sociology at the University of Chicago. The author is grateful for Dr. Nelson's permission to use the Survey.


5. Although Nelson has not formally described the pictures constituting the Survey of Management Perception, they include individuals, pairs and small groups, as well as scenes in offices, shops, conference rooms, etc. The tenth picture asks the subject to "tell a story that could happen in your company." See Appendix III for the author's description of the Survey's pictures.


7. Arnold, p. 22.

8. Idem.

9. The nature of this sample will be discussed in the next section.

10. The analysis method used by Nelson would result in an assessment of this executive as highly "technocratic"—as one who sees his primary source of strength within himself and the personal skills and abilities he possesses. This would not imply, however, any inability to work effectively in organizational context, or with both other individuals and groups. Other tools of analysis would be needed to determine the relative balance of other orientations, as well as the individual's capacities for action.
11. See the discussion in Chapter IV.

12. See the discussion in Chapter VI.

13. On the other hand, personal characteristics which were discriminating might have been influenced to some degree by agency factors. See the discussion in Chapter VII.

14. This logic would be valid only if an agency were "typically supportive." Agency D which was discussed in Chapter VI may, for example, have been somewhat atypical in the kind of very vigorous support and encouragement it gave to program participation. In this instance, there may have been little or no personality differences (as far as Sequence Analysis "achievement levels are concerned) between participating or non-participating executives. If program participation were general enough to include the very great majority of eligible executives, then no real differences should be apparent. Differences of the kind obtained in the TAT investigation should, however, be expected in agencies with neutral or non-supportive climates.

15. See Chapter IV and Chapter VI references. Since the conclusion of this dissertation, the author has obtained a small number of TAT's from the other agency, the Agency D referred to in Chapter VI. As indicated in the concluding Chapter, these materials, ten participant and ten non-participant protocols, may be used in a subsequent investigation.

16. See the Chapter VI discussion of Agency C "climate."

17. The situation was, however, different than the Agency C situation described in Chapter VI. In this instance, the SMP was administered to sample members during an in-service management training course. The author had organized the course for those selected as his research sample. The SMP was administered on a group basis, using the standard directions suggested for the TAT and Nelson's story outline sheets. The outline sheet provides four headings—Setting, Characters, Plot, Outcome—around which the story may be written. The four headings include individual questions: "Describe what's going on in this picture?" "Describe the characters and their occupations. What are they thinking and feeling?" "How are they dealing with the situation? What are they saying and doing?" "How does the story come out?" Eight of the Survey's ten pictures were used. Pictures 8 and 9 were omitted.

18. See the discussion of hypotheses in Chapter VIII.

19. In this instance, seven protocols were scored according to the present refined criteria; most of the remainder were generally checked and roughly scored by identifying imports as positive or negative. As mentioned in the preceding Chapter, the Sequence Analysis technique is now considered objective enough for reliance on one trained scorer.
Operational definitions were uniform in both the TAT and SMP investigations. As far as the first hypothesis was concerned, 80% of the sample was posited in each case (eight of ten and twelve of fifteen) as necessary to establish the "achieving" tendency of participants. A clear majority was required in both instances. On the assumption that there would be a natural tendency for executives to be achieving—apart from the factor of program participation—only simple majorities (six of ten and eight of fifteen) were considered necessary to establish the "less achieving" tendency of non-participants.

The example is that of an "achieving participant" with an average score of 3.63.

The example is that of a "non-achieving non-participant" with an average score of 2.13.

See the discussion in Chapter VIII.

The example is that of a non-participating executive with an average score of 3.0.

On the four point scale of the present Sequence Analysis scoring method, all eight imports would be evaluated at the second positive level—at 1 on a 2, 1, -1, -2 scale, or at 3 on a converted 4, 3, 2, 1 scale.

See Table XIV in Chapter VIII.

Even within Agency C, the head of the organization participated during the initial program years.

See the discussion in Chapter VIII.

While interviews were held individually and in private, they were by no means elaborate. During a five to ten minute discussion period, each executive was told of the author's interest in program motivations and asked why he, as an eligible executive, had not participated in the program.

See this discussion in Chapter VIII.

Individual interviews were again brief and to the point. Each executive was told of the author's interest in program motivations and asked why he, as a participating executive, had not continued in the program.

As far as the remaining eight non-participants are concerned, they may have been influenced by the same kind of considerations. Or, as "less achieving" or "non-achieving" executives, they may have developed more modest orientations (as discussed in Chapter VIII) after reaching a certain level of anticipated career achievement.
CHAPTER X

SUMMARY AND CONCLUSIONS

In this tenth and final chapter, an attempt will be made to summarize the various phases of inquiry and research completed, and to restate the conclusions which have been drawn. The initial section reviews the purpose and scope of the dissertation. Subsequent sections discuss hypotheses and the results of research designed to test original and/or reformulated hypotheses. A concluding section outlines areas for subsequent research.

Purpose and Scope

As pointed out initially, the dissertation's primary concern was with federal executives participating in an organized university executive development program. More particularly, it involved an assessment of the personal characteristics of these executives—in general terms but also, more importantly, as these various characteristics related to motivation for participation. A secondary aspect of the dissertation—one designed to set an appropriate context for the primary consideration—involved a review of executive development programming and its relation to continuing education for federal executives.\(^1\) Review of relevant research was involved at a number of different points in the total dissertation project.

Chapter I presented an introductory survey of continuing education for private and public executives. Discussing the growth of executive development
activity as a phenomenon of our post-World War II era, it emphasized the degree to which American organizations have accepted formal programs designed to provide their executives with the skills and insights considered relevant to their tasks and positions. For the most part, organizations have concentrated upon the various development programs offered by colleges and universities throughout the country. Although most of these programs have involved generally similar management curricula, one separate stream of programming has focused upon liberal education approaches. Although a number of criticisms have been voiced, the majority of organizations have evidenced a continuing interest in the formal executive or management development programs provided by educational or professional sources.

As Chapter I made clear in reviewing governmental interest in executive education, the federal service has overcome its historical time lag, and has demonstrated growing interest and increased activity in executive development. While there has been more of an emphasis upon internal programming, there has also been an increasing tendency to follow the lead of business and industry in looking toward external sources for executive training and education. While the classification of sources considered appropriate for federal executive training is rather loose, a number of external programs for federal executives have been identified. Chapter I categorized these programs and outlined some of the approaches, curricula, similarities, differences and purposes involved.

Proceeding from this survey, Chapter II described a particular external source providing training and education for federal executives—the University of Chicago's Center for Programs in Government Administration. Although the Center's activities have broadened since 1954 to include different programs for
various governmental clienteles, its original activity, the Program of Executive Development for Federal Personnel, was the one chosen for purposes of this dissertation. Chapter II provided a brief history of the program and basic data regarding its operation, curriculum and student population. This review suggested a number of personal and organizational factors which might have influenced federal executives in entering the program, but it did not indicate any very specific motivations. It was these potential motivational factors with which the empirical research of the dissertation was to be primarily concerned.

Prior to identifying specific problems for research, Chapter III reviewed related research concerned with executive characteristics and the executive personality, and with university and federal programs. In the former instance, major studies of the business executive and a few surveys of the federal executive were summarized. In the latter instance, the Brookings and Wayne State studies of their program participants were discussed—with the Wayne program findings discussed in some detail. This Chapter also discussed the objectives and values of the dissertation's research into the Chicago program, the methods and hypotheses involved, and the general problems to be considered in the subsequent six chapters.

Chapter IV, as well as succeeding chapters, was concerned with one or more of the hypotheses established. It reported on an initial attempt to assess some personal and motivational characteristics of participants—an attempt based on a questionnaire survey of officials from those Chicago federal agencies contributing participants to the program. "Agency administrators"—officials having the most intimate knowledge of their agencies' relationships to the program—provided data about promotion of the program, as well as subjective
opinion about both participating and non-participating executives. Although both interviews and questionnaire data clearly indicated differences in agencies' support of the program, respondents provided a generally uniform estimate of participants' characteristics and motivations.

Chapter V was also concerned with subjective opinion in reporting the results of a questionnaire administered to a sample of executive participants. In this instance, an elaborate questionnaire—one prepared for students in the University of Chicago's evening programs—was employed. In addition to basic personal data—age, marital status, citizenship, income, religious and organizational affiliations, etc.—and information regarding personal activities, this Student Inventory provided data which related directly or inferentially to a number of hypotheses. Since the questionnaire was one used with the larger evening student body, some comparisons of federal executives, with somewhat comparable groups, were possible.

In Chapter VI, the first of a series of objective appraisals of participant characteristics—as these characteristics related to program participation—was reported upon. The manner in which the participant and non-participant groups of two contrasting federal agencies differed—in terms of tested intellectual and judgmental abilities—was discussed. The factor of differential agency climate and its relation to the total program population provided an interpretative thread for discussion of test results. Test data bore directly upon two of the dissertation's initial hypotheses.

Chapter VII evaluated data drawn from an interagency sample of participating and non-participating executives. Utilizing personal history questionnaires collected by researchers directing the large-scale Study of the Federal
Executive, various personal history factors had been related to program participation. This Chapter detailed the degree to which formal education, occupational factors, and social mobility affected participation in the Program of Executive Development for Federal Personnel. These various factors were considered both generally, and as they pertained to three of the original hypotheses.

Chapters VIII and IX were closely related in that both considered personality characteristics of participants and non-participants. Moreover, both chapters—each based upon a separate investigation—involved the use of a very specific interpretative technique, Sequence Analysis, which built upon a well-developed and empirically-substantiated rationale. Chapter VIII reported on the attempt to discriminate between an interagency sample of participants and non-participants on the basis of analysis of Thematic Apperception Test protocols. Chapter IX reported on an attempt to discriminate within a single agency sample. In this instance, a focused projective test, the Survey of Management Perception, was used. The specific methods used required, in both investigations, a more precise reformulation of some initial general hypotheses.

The Hypotheses

It was made clear that the initial hypotheses established for the dissertation were formulated subjectively—on the basis of personal impressions of the author and of others professionally concerned with educational programming for federal executives. Although a very large number might have been identified, the ten selected were considered to be most significant. Together with unanticipated collateral findings, they were designed to provide a
comprehensive picture of the characteristics and motivations of federal executives participating in the Chicago program.

The first hypothesis—one "tested" through a number of different approaches—held that participants were "better than average" executives. Designed to assume the competency and generally superior abilities of these executives, the hypothesis was stated originally as follows:

Program participants, as measured by informed opinion and psychological tests, tend to be "better than average" employees.

As was mentioned at a number of points during the preceding chapters, the criterion of informed opinion clearly upheld this hypothesis. "Agency administrators" in providing data about program operations and participants within their organizations, described participants in thoroughly positive terms. The characteristics and motivations which virtually all respondents mentioned in their "free" questionnaire comment clearly implied that generally superior executives were involved in the program. It was hardly surprising, therefore, that almost all administrators answered affirmatively in responding to the direct question implicit in the statement of the hypothesis.²

The informed opinion criterion was involved somewhat incidentally in a separate investigation within a single federal organization. As part of an assessment of this organization's participant sample, three top-level administrators evaluated the general job performances of agency executives whose participant or non-participant status was not identified. These evaluations re-confirmed the subjective impression that program participants tended to be "better than average" employees.³

The principal psychological tests used to test the first hypothesis were the American Council on Education's Psychological Examination and the U.S. Civil
Service Commission's Test No. 56 A. In these instances, non-participant samples and participant samples of other programs were used to provide comparisons with various executive participant samples. Although the implications are discussed in the following section of this summary chapter, it can be stated that the tests used upheld the hypothesis only in part. Both agency climate and the nature of specific comparison groups were determinants in evaluating participants as "better than average." As will be noted later, still other psychological tests—the Thematic Apperception Test and the Survey of Management Perception—considered the first hypothesis in combination with two other hypotheses dealing with participants' personality characteristics.

The second hypothesis of the dissertation—one closely related to the first in meaning and modes of verification—was stated as follows:

A majority of participants, as measured by informed opinion and the U.S. Civil Service Commission's Administrative Judgment Test, have executive potential.

Here again, the informed opinion of "agency administrators" upheld the hypothesis. As with the first hypothesis, their general portrayals of their agencies' participants were descriptive of individuals whose traits were clearly those desirable for executives. In responding directly to the relevant questionnaire item, most administrators agreed that participants had executive potential.

Since Mandell's Administrative Judgment Test has been used widely throughout the federal service as an element in executive appraisal and/or selection, it was chosen as most appropriate for the testing of this hypothesis. It was used with participant and non-participant samples in two contrasting agencies. Then the grade-level norms recommended for the Test were employed, less than a majority of the participants in both agencies attained the minimum scores.
suggested for their grades and positions. When performances of participating executives were compared to those of non-participating groups, the results varied on the basis of agency climate. In one instance, participants were significantly better; in another, there were no significant participant non-participant differences in ability. As will be noted later, some data from the Student Inventory—the questionnaire provided by an interagency participant sample—bore indirectly on this and the first hypothesis.

The third hypothesis—the first to consider a specific aspect of participants' backgrounds—assumed that prior education would affect program participation in two basic ways. It presupposed that both highly educated and relatively little educated executives would be about equally disposed to program participation—the former because of a familiarity with academic activities, the latter to compensate for academic deficiencies. The hypothesis was, therefore, stated as follows:

The educational backgrounds of participants run to extremes; the majority of participants have either college degrees or little or no college training.

Evaluating the situations within their own individual organizations, "agency administrators" rejected this hypothesis. The majority of questionnaire respondents felt that the educational backgrounds of participants were generally similar—that these backgrounds did not run to extremes.

Since such individual responses did not imply homogeneity across agency lines, the hypothesis was tested with two different interagency samples. Assuming an approximately equal distribution of extreme groups (college graduates and those with little or no college training) as necessary for upholding of the hypothesis, the backgrounds of participants completing the Student
Inventory were reviewed. The hypothesis was not upheld. While a majority had college degrees and a large majority had a significant amount of college training, relatively few were in the "little or no college training" category. When data from a higher-level participant sample were analyzed in the same terms, the same general results were obtained. With educational backgrounds of an agency participant group evidencing a very similar pattern, the hypothesis was clearly one which could be rejected.

A related hypothesis—the fourth—assumed that the degree of program participation would relate to the level of educational achievement of participants. This was stated as follows:

Participants with more formal educational backgrounds tend to participate in the program to a greater degree than those with less formal training.

This hypothesis was tested with data drawn from a small interagency sample—with college graduation the discriminating variable. Since college graduation did not discriminate between minimally participating executives and more persevering executives, the hypothesis was at first rejected. When different variables—baccalaureate, and graduate or professional degree levels—were used with the same sample, a significant difference resulted. Participants with advanced degrees were found to continue in the program to a greater extent than participants who had not proceeded beyond the bachelor's degree. Since this particular finding was not borne out with another sample, and since other factors may reasonably have been influencing continuing participation, the hypothesis was not accepted. At best, the matter remained inconclusive.

The dissertation's fifth hypothesis—one with somewhat lesser significance—sought to test the rather common assumption that formal development programs were
most attractive to staff executives. The hypothesis read as follows:

A large number of program participants are in staff rather than line positions.

Relying on an expert judgment that line and staff executive positions were about equally represented within the Chicago federal population, three participant samples were analyzed. The first, an interagency sample, revealed an almost equal line-staff division. The second, a sample drawn from a single agency, demonstrated an identical proportion. The third, a very large interagency sample based on the University's program records, indicated most conclusively that staff executives were not disproportionately involved as program participants. The fifth hypothesis was, therefore, unequivocally rejected.

Since it had been originally assumed that the payment factor—agency or individual—would be significant in discriminating between participants, a sixth hypothesis had been formulated as follows:

Participants whose program fees are paid for by their agencies are at higher grade levels and have more formal education than participants paying their own fees.

The extremely small number of agency-payment participants in the only inter-agency sample available, made it impossible to test this particular hypothesis. A general check of program records indicated that neither grade nor education would be very likely to differentiate the two payment categories.

Hypotheses seven and eight were both concerned with the manner in which participants might view the values of the program. They were stated, in order, as follows:

A majority of participants tend to relate the program to promotional opportunities.

A majority of participants believe the program provides an opportunity to learn practical executive skills.
In both instances, the questionnaire responses of "agency administrators" and participants were used to "test" hypotheses. Agency administrators agreed with the first (seventh) and disagreed with the second (eighth) hypothesis. A majority held that participants viewed the program primarily as an activity which would help their chances for promotion, but a large minority disagreed. There was more general consensus that participants did not see the program as an opportunity to learn practical executive skills.

Agency administrators believed, instead, that participants viewed the program more broadly, as a self-development opportunity. This was somewhat substantiated—although indirectly—by participants themselves. The degree to which they expressed desires to increase vocational competence and to benefit from intellectual stimulation indicated broad and general rather than narrow and specific objectives. As a result, therefore, the seventh hypothesis was accepted—albeit tentatively—and the eighth hypothesis was rejected—in this instance with more confidence.

The dissertation's ninth and tenth hypotheses were also concerned with parallel considerations—with personality characteristics of participating executives. They were stated, in order, as follows:

Program participants are generally mature and average in personal adjustment, energy, and level of aspiration.

Participants tend to be low in qualities such as aggressiveness and decisiveness and high in frustration and objectivity.

In view of the generally positive traits which agency administrators had attributed to participants, it was not at all surprising that they unanimously substantiated the first (ninth) of the two hypotheses. Although the majority described participants as highly objective, they disagreed—in many cases very
strongly—with the tenth hypothesis' suggestions that participants might be somewhat frustrated people, low in aggressiveness and decisiveness. On the basis of informed opinion, therefore, the ninth hypothesis was upheld and the tenth was rejected.

As mentioned previously, the ninth and tenth hypotheses were combined—in a reformulated way—with the first hypothesis that participants were "better than average" employees. The reformulation—in terms of the sequential analysis technique developed by Arnold—was first stated as follows:

Program participants tend to be "achievers" in that a majority reflect the positive personality traits identified by Arnold and others in studies employing Sequence Analysis.

This hypothesis was clearly upheld through analysis of Thematic Apperception Test protocols drawn from an interagency sample of participants. Although the results were less dramatically conclusive, analysis of Survey of Management Perception protocols from an agency participant sample also substantiated the validity of the hypothesis. As a result of these reformulated hypotheses, the original first and ninth hypotheses were upheld on the basis of empirical evidence, and the tenth hypothesis was again rejected.

The various studies and investigations relating to the total group of hypotheses produced still other findings relevant to an understanding of participants' characteristics and motivations. More importantly, they contrasted participants at many points with their non-participating counterparts—eligible executives who chose not to enter the program. These data have been incorporated in the following discussion of the dissertation's findings.
Discussion of Findings

Although the University of Chicago's Program of Executive Development for Federal Personnel clearly fits within the general category of university management development programs, it has, of course, its own unique features. In some instances, these features reflect the government official's somewhat different executive role. In other instances, the program's own basic organization and its curriculum rationale are distinctive. As described in Chapter II, the program comprises a non-credit multiple-course series for executives of Chicago-area federal agencies. While its curriculum has been reorganized on a number of occasions and while its application-selection-entry procedures have changed, it has remained essentially a voluntary program for executives who, for one reason or another, have wished to participate. Although a large proportion of the participants have been subsidized in whole or in part by their agencies, this factor has had little or no effect upon the individual executive's decision to participate. Since compulsion was, for the most part, lacking, the motivations of the individual had become the prime determinant.

The findings of this research are, therefore, conditioned by these factors. One could not, for example, assume the same kind of motivations for executives who were more systematically screened, selected, sponsored and "enrolled" by their organizations in a management development program. Nor could they be assumed for programs where more obvious sanctions or rewards for participation might be involved.

The executive population studied is also a limiting factor. Since it differed somewhat from other federal samples which have been surveyed or researched, the findings, while relevant, cannot be assumed to apply uniformly
to the total federal executive group. With our extremely limited knowledge of the relationships between government and private executives, generalizations to executives in business or industry would have even less significance. Further research would be necessary to apply the findings of this dissertation to other adult groups involved voluntarily in continuing education programs, or in similar self-development activities.

As was originally mentioned, therefore, the outcomes of this research are most directly relevant to those involved with the Chicago federal executive program or with present or future programs of a quite similar sort. At the same time, however, its implications are relevant, in varying degrees, to those concerned with executive development, university programs, executive personality, and adult education programming.

Although there may be good reason for questioning the estimates of agency administrators regarding the personalities and motivations of participants, there is much less reason for challenging their broader descriptions of agency programs and participants. As their responses clearly indicated, agencies can and do differ in the manner in which they approach, accept, and promote a formal development program. While these influences can be expected to affect executives in various agencies in different ways, they should affect executives within the same organization in the same manner, and to about the same degree. Program analysis becomes, therefore, two-dimensional. The characteristics and motivations of program participants can be looked at broadly—in terms of the whole population. At the same time, the possible effects of the organization's influences must be kept in mind.

As an executive group, participants were generally experienced
individuals—career administrators who had considerable background in the federal service. However, they usually brought to the program the specific technical, professional or operating backgrounds of their particular agencies. Primarily a male group, they generally comprised management people in their middle adult years. Married to their original spouses, native born, home owners for the most part, they represented the typical middle-class executive with an interest in home and family, church membership, organizational activities, and community service work. Reflecting the values which Henry has ascribed to the successful executive, they seemed also to typify some of Rosen's characterizations of the American executive's life orientations.

Individual participants varied widely as far as their educational backgrounds were concerned. As a group, however, the majority were college graduates and an even larger proportion was college trained. In terms of comparisons with their parents, they were socially mobile. Although their occupational movement could not be determined to any exact degree, they probably reflected the limited mobility attributed by others to federal executives. While participants represented a particular population of federal executives, the group was not atypical. In general terms, participants approximated both the executive characteristics identified by other researchers and the federal executive samples described by other investigators.

Activities outside of the work environment were more difficult to evaluate since really comparable reference points were not available. While participants reflected the middle class patterns of the Chicago community, their interests may or may not have typified those of federal executives, or executives, more generally. A safe generalization might be that participants indicated a
satisfactory and perhaps even a high level of achievement as far as attainment of normal middle class role interests were concerned. More clearly, however, they followed the upper-middle class pattern of our society in deriving primary satisfactions from their work roles. Participants were clearly careerists who evidenced both a very high level of job satisfaction and considerable optimism towards the future. 15

While characteristics of participants differed to some degree from those of other federal and other executive program groups at the University of Chicago, the more significant questions were those concerning the manner in which such characteristics might have motivated them toward program participation. If certain personal history factors within the participant group were found to be significantly different than those of a comparable non-participant group—Chicago federal executives eligible for but not participating in the program—then, inferentially, such factors must be motivating.

Among participants, the great majority were college trained, most had degrees, and very few had little or no college training. A number of analyses bore this out. At the same time, however, non-participants revealed a very similar pattern of educational achievement. Although there was some tendency toward greater program entry of executives with graduate or professional degrees, the tendency was not significant.

Participants were probably non-mobile as far as occupational movement was concerned. In this regard, however, they were generally not distinct from non-participants. In terms of a number of occupational factors—grade level, age, years in agency, years in executive position, and the number of organizations served in—they were not in any way unique. The differences which probably did
discriminate between participants and non-participants were those concerned with
the former's career orientations. As career executives, participants tended to
be those who had begun their federal service at earlier rather than later
stages of their adult vocational lives. Since they seemed also to have served
less years, on the average, than non-participants, they were usually those
whose careers were still at a mid-point. In general terms, therefore,
participation was probably more attractive to executives who had entered federal
service early enough to acquire a career orientation, but who had not yet passed
the peaks of their careers. On this basis, participants would naturally tend
to be very optimistic as they viewed their occupational futures.

The manner in which participants attained their executive positions also
differed markedly from the experience of non-participants. They were people
who, in contrast to the bulk of the non-participant group, had attained the
executive level after beginning their adult working careers in lower or middle-
level occupations. While both participants and non-participants were socially
mobile, this seems to have been the only social mobility factor—one within the
context of the participant's own work experience—differentiating the two groups.

Since relatively few personal history characteristics discriminated
between participants and non-participants, it was not surprising that even fewer
differences existed within the participant group. From the earliest program
years, a pattern was established whereby a minority of participants continued
throughout the program while the majority dropped out after completion of one
or two seminars. Agency administrators could offer little explanation as to why
participants dropped out beyond suggesting dissatisfaction with the program or
its courses. This was, of course, a possible explanation for the actions of
many participants. In view, however, of the general level of program satisfaction expressed by participants,\textsuperscript{17} this would seem to be somewhat of an oversimplification. It is possible that some minimal participants who dropped out after completing one or two seminars had different entry motivations than participants who continued.

While participants holding graduate or professional degrees tended to continue in the program to a greater degree than those with bachelor's degrees, the agency in which the executive worked or the level of the position he held may have been just as influential. Grade level was clearly not a factor. Nor were age, occupational area, or any of a number of factors associated with occupational mobility. While social factors suggested that continuing participants might really be more mobile than minimal participants, the evidence was in no way conclusive.\textsuperscript{18}

Although the data did not permit investigation of the possibility, the climate for program support in various agencies may have affected participants negatively as well as positively. While virtually all federal organizations contributing participants had "supportive" climates, the precise nature of this "support" varied both from agency to agency and, over time, within the same organization.\textsuperscript{19} As a number of investigations revealed, extreme differences in agency climate resulted in participants who differed in general abilities.\textsuperscript{20} In an agency where the climate was quite non-supportive, participants were superior to non-participants in both general learning abilities and understandings of administrative problems. These participant non-participant differences did not exist in an agency where the support was both highly positive and very pronounced. Among superior participants, however, we find the same tendency
for some to continue while others drop out of the program. Although the evidence was fragmentary, there was some to suggest that even able, well-motivated participants could be affected—in this case, influenced to drop out—by the negative program attitude of their organization. 21

It is logical to suspect that a participant's particular program expectations might have influenced his continuation in the program. Agency administrators believed that participants viewed the program as university administrators had consistently described it—as a broadly developmental rather than as a narrowly skill-oriented program. Participants themselves seemed to support this view in emphasizing broad purposes in entering the program. 22 While virtually all wanted to increase their "vocational competence," it would be most surprising if participants had not varied widely in their interpretations of this term. Some minimal participants may, therefore, have had needs or expectations which were not met during their one or two quarters of program attendance. It should be remembered also that some agency administrators attributed specific motivations to the majority of their participants—most importantly, the belief that the program would help their chances for promotion. The desires to learn practical job skills, to enter for status reasons or because it seemed like "the thing to do," to "feel like an executive" or to impress superiors, were all motivations which minority opinion felt were relevant. 23

If this minority opinion were correct, the failure of the program and/or the agency to fulfill such specific expectations would certainly have caused some participants to drop out. At the same time, however, agency administrators were emphatic in characterizing the majority of their participants as executives
with broadly positive motivations for participation. More importantly, their descriptions of typical participants and their motivations emphasized positive and highly desirable personality characteristics. Their disposition to view participants as mature, well adjusted, self-reliant, responsible, conscientious, ambitious, energetic, objective and optimistic people was substantiated, although inferentially, from the information participants themselves supplied. More significantly, it was upheld by objective analyses and measurements of participants' personality orientations.

Both broadly—across agencies—and more specifically—within a single agency—program participants were positive and constructive in their attitudes toward achievement or success and the factors associated with it. In terms of the assessments of agency administrators, they had positive attitudes towards others, towards their problems, and towards work and success. In the more precise terms of Sequence Analysis, their motivations, or sets, were positive and constructive. Within the work environment and in their broader life orientations, participants were positive in their attitudes towards goals and means; they were adaptive and realistic, actively involved in relating to others, constructive in their views of failure and its contributing factors, and positive in their appraisals of adversity and its effects.21

Participants evidenced these personality traits to a greater degree than did non-participants. They were "clearly achieving" in their attitudes while the majority of non-participants were "less achieving"—more passive, ambivalent and dependent in their conceptions of life (or work) and its problems. Very few non-participants were extremely negatively oriented. As one would expect, most were positively oriented. As executives, they had reached a certain level of
achievement. Since motivations are not static, however, it seems likely that they no longer had the level of drive or impulse towards highly constructive action which might once have characterized their behavior.

There were, of course, some "highly achieving" non-participants—executives whose attitudinal patterns were as positive and constructive as the majority of participants. Since most in this category worked in an agency with a non-supportive program climate, they may have been influenced by this factor. They may also have been inhibited by personal considerations, or they may have found constructive outlets other than program participation. The fact remains that participants—subject to the same range of organizational and personal influences—were consistent in their positive attitudes and orientations.

While participants were all constructively oriented, this orientation was apparently not a factor in determining the degree of participation. As far as the data could indicate, this was due to the individual's satisfaction with the program, his particular motives for participation, personal history factors, positive or negative influences within his agency, personal inhibiting factors, the degree of other constructive activity with which he was involved or, perhaps, combinations of one or more of these factors.

There are, therefore, a great many problems with which those administering the Chicago executive program—or one of a similar nature—should be concerned. Apart from all the considerations implicit in a heterogeneous student body, they should be particularly concerned with the organizations "associated with" the program, the organizations contributing participants to it. If the attitudes of the organizations and their top executives are as important as they seem to be, then the sponsoring institution must work very closely with the
administrators directing the participating organizations. If both educational and organizational administrators can really agree upon the aims and values of a program and its relation to the participants' normal job roles, then the expectations of participants should be both more accurate and more realistic. Needless to say, such cooperative definition is a continuing rather than merely an initial responsibility.

Where numerous participating organizations are involved, it is not likely that program definitions will be constant. Program administrators should, therefore, continue to communicate directly with participants—and potential participants—at as many stages as possible. Continuing contact—prior to program entry and during and after participation—is necessary if expectations are to be accurate and if programming itself is to be adjusted and improved.

If an activity such as that conducted by the Center for Programs in Government Administration is to be broadly educational, it cannot bear too much of a relationship to an organization's specific executive training and development needs. It would be much better, therefore, if participating organizations were to conceive of the program as educational and, as a result, were to promote it to eligibles for what it is, a voluntary program providing a broadening educational experience. If it were to be "promoted" uniformly and "supported" so that participation was encouraged without any specific relationship to the participant's organizational status, the chances are that the participant group would consist of well-motivated individuals, qualified by education and/or experience to benefit from the program, and predisposed to do so.

If there is good reason to believe that the participant group is well
motivated and has appropriate expectations, then the program's administrators can turn to the very important secondary problems of providing the most effective possible curriculum and instruction. At the same time, they should continue to seek additional insights into the problems, needs, attitudes and motivations of participants. As far as the Program of Executive Development for Federal Personnel is concerned, it is hoped that this dissertation has provided both basic insights and an appropriate framework for subsequent inquiry.

Areas for Subsequent Research

Within the context of this kind of a program, there are numerous avenues of potential research. In addition to those concerned with opening up new areas for analysis, opportunities exist for replication of parts of the Chicago executive study. In the author's opinion, the latter approach may be more fruitful than the former.

As mentioned in an earlier note, the author has already begun a new study involving "potential" executives within the civil service of New York State. As part of the State's public administration training program, both interns—promising employees recruited from both undergraduate and graduate schools—and employee trainees—selected men and women already in State service—are brought together in an annual training program. As an adjunct to the various kinds of training conducted during normal employment hours, interns and trainees are encouraged to continue their academic work by enrolling for courses in the Albany Graduate Program in Public Administration, or in comparable undergraduate or graduate programs and courses. While they are under no compulsion to do so, they are specifically encouraged through a State tuition assistance plan designed for them as a special group. Since the program is administered by a
single agency, the State's Department of Civil Service, the diverse effects of agency climate are minimized and held quite constant.

On the basis of this dissertation's findings, those interns or trainees who voluntarily take advantage of the partial tuition reimbursement plan available to them, should be more "achieving" than their counterparts who do not. The Survey of Management Perception—the projective test described in Chapter IX—has already been administered to all interns and trainees (twenty-seven of the former and thirty of the latter) in the State's 1961-62 training program. If at all possible, TAT protocols will be obtained from most individuals in each group. Interpretation and scoring of one or both sets of protocols, in terms of Arnold's Sequence Analysis, will permit comparison of the "achievement" levels of those employees who voluntarily continue their academic work and those who do not.

Although the Chicago and New York groups differ somewhat—an "actual" executive group in contrast to a "potential" executive group—and although the programs are not identical—one is a non-credit adult "development" program while the other represents a regular degree program—the general situations are quite analogous. Both situations involve voluntary participation by public employees in a "development" program sanctioned and generally supported by government organizations. The history of the State's Partial Tuition Reimbursement Plan—in effect since January of 1956—indicates that only a minority of the eligibles have participated. As in the Chicago executive program, participation seems to have been a matter for individual decision. In essence, therefore, the projected New York study replicates parts of the author's Chicago study.
Since the State's reimbursement plan involves tuition assistance over time—for up to four courses over a three-year period—the projected study will permit another attempt to differentiate between "minimal" and "continuing" program participants. It provides, as a result, another opportunity to investigate the factors influencing those who start and then drop out of a program. With both supervisory ratings of participants' progress and participants' evaluations of the program's values available, these factors can also be related to the actions of the various groups involved. 28

Should further inquiries along the same lines be desirable, the Albany Graduate Program in Public Administration provides another potential population. 29 Of the many hundreds of students who have been enrolled in this degree program since its 1967 inception, the overwhelming majority have been employees—supervisors, managers, executives—of the State service. Since program participants have come from many different departments and agencies of State Government, this area of research could again involve the element of agency climate.

As indicated, however, in an earlier note, additional inquiries can still be made within the executive population of the Chicago program. In using Sequence Analysis within a single agency, a sample was chosen from Agency C, a clearly non-supportive organization where the effect of the individual's decision to participate might be maximized. It was hypothesized at the time that participant non-participant orientations would not be so pronounced in a very supportive agency—in particular, in Agency D. Although protocols from Agency D were not available at the time data were being collected, TAT's from small participant and non-participant samples have now been obtained. When time
and circumstances permit, this other hypothesis regarding agency climate can be tested.

As far as "achieving" executives in the dissertation's samples were concerned, Sequence Analysis identified them as reflecting a series of positive, constructive attitudes and orientations. With some exceptions, these characteristics reflect the traits attributed to successful or typical executives by Abbglen, Henry, Gardner, Rosen and other psychologists mentioned in Chapter III. In their terms, executives were variously described as independent, autonomous, realistic, work-oriented, dominating, self-directing, active, decisive, self-controlled, needing achievement, and highly positive in their attitudes to others and to obligations and responsibilities. While a few of the dynamic traits mentioned by these clinical researchers do not equate with the "achievement" criteria of Sequence Analysis, the great majority of their suggested characteristics do agree with the empirically determined findings of Sequence Analysis research.

Since the executive samples of this dissertation were localized and particularized, questions of the more general relationships of sequential analysis to executive achievement become relevant. The author hopes to research this question through future analyses of occupationally achieving executives in New York State Government. More immediately, he will use Sequence Analysis to differentiate between some of the achieving and less achieving (mobile and non-mobile) business executives studied by Abbglen. This will permit a comparison of characteristics derived through sequential analysis with traits inferred from an analysis using Murray's need variables.
Notes

1. See the introductory section of Chapter I.

2. Chapter IV discusses informed opinion of these agency respondents.

3. This inquiry is reported on in Chapter VI.

4. The test comparisons involved are also discussed in detail in Chapter VI.

5. This first hypothesis test is discussed in Chapter V.

6. See Chapter VII.


8. This too is discussed in Chapter VII.

9. See Chapter VII for this brief analysis.

10. See Chapter IV.

11. See Chapter V.

12. See Chapter IV.

13. See the discussion of reformulated hypotheses in Chapter VIII.

14. See Chapter IX.

15. Chapter V profiles the executives involved in the program.

16. See Chapter IV.

17. See Chapter V.

18. Personal history factors distinguishing participants and non-participants, and minimal and continuing participants, are discussed throughout Chapter VII.

19. See the first discussions in Chapter I.

20. See Chapter VI.

21. See the terminal discussion in Chapter IX.
22. See Chapter V.

23. See Chapter IV and Appendix I.

24. See Chapters VIII and IX.

25. See the discussion in Chapter IX.


28. Both the projective materials and other test data will also be related to other achievement criteria—to written and oral examination scores involved in selection procedures, to various superior ratings within the training program year, and, longitudinally, to the work progress of those who remain in State service.

29. For a description of this program, see The Albany Graduate Program in Public Administration, Bulletin for 1961-62 (Albany, N.Y., n.d.).

30. See the reference to Abbeglen's Study in Chapter III.
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APPENDIX I

AGENCY ADMINISTRATOR QUESTIONNAIRE

University College  The Center for Programs in
The University of Chicago  Government Administration

EXECUTIVE JUDGMENT RESEARCH STUDY

The Program of Executive Development for Federal Personnel has been in operation now for four years, since 1954. As you may already know, University of Chicago officials directing the program are sponsoring a research study which is designed: 1) to find out more about the Federal executives who have been participating and 2) to estimate the effectiveness of the program itself.

This questionnaire composes an important preliminary step in the research plan. In order to construct the best machinery for research, it is first necessary to find out exactly how the Program of Executive Development for Federal Personnel operates within each agency.

Your agency position is such that your familiarity with the internal workings of the program and your knowledge of the participants should be most comprehensive. You are, therefore, being asked for both factual information and personal opinions about the functioning of the executive development program within your own agency. Your responses will be kept completely confidential. They will be seen only by University of Chicago research personnel; no official use will be made of them. The information you supply will be used solely for research purposes. Neither you as an individual nor your agency will be identified in any research report.

Please complete this questionnaire as soon as possible and return it in the enclosed addressed envelope. Thank you for your cooperation.
Name

Position Title

Agency

Check applicable statement: Employee has paid program costs
Agency has paid program costs

The majority of items in this questionnaire are most applicable to agencies in which employees have paid their own program costs. If your agency has paid program costs for participating employees, modify your answers accordingly; answer only the pertinent parts of each question.

The following questions seek to obtain information about agency methods relating to the Program of Executive Development for Federal Personnel. In answering each question, please try to distinguish between theory and practice. The latter—how the program actually works in practice—is more important to our research objectives.
PART I

1. How are eligible employees informed of the program's availability? How is information about the program (application and registration procedures, schedule, special events, etc.) circulated among employees? Please discuss.

To what extent are the following used in informing eligible employees? Please check.

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Distribution of program announcements</td>
<td>16</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2-0</td>
<td>1-0</td>
</tr>
<tr>
<td>b) Memoranda or other forms of direct written communication</td>
<td>11</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>4-0</td>
<td>1-2</td>
</tr>
<tr>
<td>c) Announcements in agency newspaper, bulletin, magazine</td>
<td>5</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>3-2</td>
<td>1-5</td>
</tr>
<tr>
<td>d) Group meetings of eligible employees</td>
<td>2</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6-1</td>
<td>4-3</td>
</tr>
<tr>
<td>e) Talks by University of Chicago officials</td>
<td>1</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3-5</td>
<td>8-2</td>
</tr>
<tr>
<td>f) Direct counseling of employees</td>
<td>5</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>7-5</td>
<td>1-1</td>
</tr>
</tbody>
</table>

Which of the above have proved most effective? Mention any other methods used.
2. Is the agency's attitude neutral or are eligible employees actively encouraged to participate in the program? In what ways is participation encouraged? In practice, is there any discouragement of employees? If so, what form does it take? Please discuss.

To what extent are the following significant in promoting participation in the program? Please check those applicable.

<table>
<thead>
<tr>
<th></th>
<th>Very Significant</th>
<th>Significant</th>
<th>Not Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Agency policy regarding the program</td>
<td>5</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1-1</td>
<td>5-3</td>
<td>2-4</td>
</tr>
<tr>
<td>b) Agency policy regarding executive development in general</td>
<td>9</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7-2</td>
<td>3-4</td>
<td>1-2</td>
</tr>
<tr>
<td>c) Active personal support of agency head</td>
<td>7</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5-2</td>
<td>5-4</td>
<td>1-2</td>
</tr>
<tr>
<td>d) Support and personal encouragement of top officials</td>
<td>7</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6-1</td>
<td>1-4</td>
<td>1-3</td>
</tr>
<tr>
<td>e) Participation in program by top officials</td>
<td>10</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5-5</td>
<td>1-2</td>
<td>2-1</td>
</tr>
</tbody>
</table>

Which of the above have proved most significant?
3. How do eligible employees enter the program? Are applications solicited? What screening process is used in deciding which employees should be nominated? Who actually decides whether a particular employee should be nominated? Please discuss.

To what extent are the following significant in nominating employees for participation in the program? Please check those applicable.

<table>
<thead>
<tr>
<th></th>
<th>Very Significant</th>
<th>Significant</th>
<th>Not Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Eligibility criteria established by University</td>
<td>8</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>b) Formal selection criteria established by agency</td>
<td>2</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>c) Decision of agency head</td>
<td>4</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>d) Recommendations of individual supervisors</td>
<td>7</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>e) Recommendations of agency committee</td>
<td>4</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>f) Desire of individual employees to enter program</td>
<td>16</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>g) Grade level of applicant</td>
<td>8</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>h) Job responsibilities of applicants</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>i) Potential and promotion prospects of applicants</td>
<td>6</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

In practice, which of the above is the most significant? Which is next in order of significance?
4. How will the Government Employees Training Act (Public Law 85-507) affect your Agency's participation in the Program of Executive Development for Federal Personnel? If it has not been able to do so previously, will your agency now pay tuition costs for program participants? If so, on what basis? If it is still too early to predict the law's effects, what do you feel is likely to happen? Please discuss.

5. Ideally, how do you believe a Federal agency should organize and operate a program of this sort? What approach do you think would be most effective?
The following questions seek to obtain information and opinion about employees from your agency who have participated in the Program of Executive Development for Federal Personnel. In answering each question, please try to think of these employees as a group. Although participants will naturally differ, they should have a number of common characteristics. Consider, therefore, the degree to which each question applies to the majority of your program participants.
PART II

1. What type (or types) of employee in your agency has been attracted to the program? What are participants' general characteristics? Do the majority of participants fit into any pattern? Is there a typical participant? Please discuss.

2. The following statements deal primarily with opinion about program participants. They may or may not apply to the majority of your agency's participants. Please read each statement carefully and then check the appropriate column to indicate your opinion, the extent of your agreement or disagreement with each statement. "They" in the statements applies to the majority of your agency's participants.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Generally Agree</th>
<th>Generally Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>
| a) They have backgrounds of education and experience
  in technical or professional areas | 5 | 10 | 2 | 2 |
<p>| b) Their formal educational backgrounds seem to run to extremes, very little or very much | 2 | 3 | 12 | 2 |
| c) They have more than ten years experience in Federal service | 8 | 11 | | |
| d) They view the program primarily as something which will help their chances for promotion | 2 | 9 | 6 | 2 |
| e) They view the program primarily as a self-development opportunity | 7 | 6 | 5 | 1 |
| f) They feel they will learn practical job skills from the program | 1 | 3 | 10 | 5 |</p>
<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Generally Agree</th>
<th>Generally Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>g)</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>h)</td>
<td>2-0</td>
<td>1-3</td>
<td>5-3</td>
<td>1-1</td>
</tr>
<tr>
<td>i)</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>j)</td>
<td>1-0</td>
<td>2-3</td>
<td>1-1</td>
<td>1-1</td>
</tr>
<tr>
<td>k)</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>3-3</td>
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<td>l)</td>
<td>10</td>
<td>7-3</td>
<td>2-3</td>
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<td>m)</td>
<td>6</td>
<td>12</td>
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<td>n)</td>
<td>2</td>
<td>0-2</td>
<td>7</td>
<td>9</td>
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<td>o)</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>11</td>
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<tr>
<td>p)</td>
<td>1-0</td>
<td>0-1</td>
<td>2-3</td>
<td>7-6</td>
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<td>q)</td>
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<tr>
<td>r)</td>
<td>1</td>
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<td>6</td>
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<tr>
<td>s)</td>
<td>3-1</td>
<td>6-6</td>
<td>1-1</td>
<td>-</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>Generally Agree</td>
<td>Generally Disagree</td>
<td>Strongly Disagree</td>
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<tr>
<td>s) They have a positive attitude towards their problems; e.g. they view problems calmly rather than emotionally, bear up well under strain, and try to solve their own problems</td>
<td>2</td>
<td>16</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>t) They are generally optimistic in their outlook on life</td>
<td>1-1</td>
<td>8-6</td>
<td>1-1</td>
<td></td>
</tr>
<tr>
<td>u) They are generally self-reliant and responsible people who tend to accept their responsibilities and are conscientious about their duties and obligations</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>v) They think of themselves as leaders; e.g. as strong and dominant types who have initiative, think independently, are fair-minded, responsible and straightforward in their dealings with others</td>
<td>3</td>
<td>13</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-2</td>
<td>8-5</td>
<td>1-1</td>
<td></td>
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</tbody>
</table>
Please review once again items a through v on the preceding pages. On the spaces below, place a singly check ( ) for each item which applies more to participants in your agency than it does to eligible employees who have not participated. Place two checks ( ) for an item which applies much more to participants. Leave spaces blank where there are no differences or where the item applies less to participants than to non-participants.

Note: If it is more convenient, you may place single or double checks before the letter introducing each statement.

a) 3-4 (7)    g) 1-4 (5)    n) 7-5 (12)    r) 8-5 (13)
b) 1-2 (3)    h) 2-3 (5)    n) 2-0 (2)    s) 3-3 (6)
c) 4-4 (8)    i) 1-3 (4)    o) 2-0 (2)    t) 2-5 (7)
d) 1-6 (10)    j) 3-2 (5)    p) 6-5 (11)    u) 1-4 (8)
e) 2-6 (15)    k) 8-3 (11)    q) b-3 (7)    v) b-4 (8)
f) b-1 (5)    l) 5-3 (8)

3. Officials directing the program have noted that most participants either attend one or two seminars and stop, or they complete four or five seminars in the program and obtain a certificate. Are there any apparent differences between these two types of participants within your agency? Please discuss.

4. The three questions above have dealt with program participants in your agency. Why, in your opinion, do other eligibles in your agency stay out of the program? Have non-participants given any reason or expressed any attitudes which would explain their failure to participate? Please discuss.
PART III

1. Does your agency have any records (summaries, survey results, participant evaluations, analyses, etc.) relating to the Program of Executive Development for Federal Personnel? If so, on what basis would they be available to University of Chicago research personnel?

2. What one change would you most like to see made in the Program of Executive Development for Federal Personnel? What other changes might be desirable?

3. Would you permit yourself to be interviewed regarding information in this questionnaire?
APPENDIX II

PARTICIPANT, NON-PARTICIPANT SAMPLE SCORES

1. The Administrative Judgment Test — Agency C Samples

<table>
<thead>
<tr>
<th>Raw Scores - Participants</th>
<th>Raw Scores - Non-Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td>40</td>
<td>32</td>
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<td>39</td>
<td>32</td>
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<td>38</td>
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<td>36</td>
<td>24</td>
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<tr>
<td>36</td>
<td>21</td>
</tr>
</tbody>
</table>

N = 20

M = 33.65

SD = 5.72

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<table>
<thead>
<tr>
<th>Raw Scores - Participants</th>
<th>Raw Scores - Non-Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>28</td>
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<tr>
<td>36</td>
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<td>30</td>
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<td>30</td>
<td>18</td>
</tr>
<tr>
<td>30</td>
<td>15</td>
</tr>
</tbody>
</table>

N = 20

M = 27.5

SD = 6.9
## 2. The Administrative Judgment Test - Agency D Samples

<table>
<thead>
<tr>
<th>Raw Scores - Participants</th>
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</tr>
</thead>
<tbody>
<tr>
<td>40</td>
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<tr>
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M = 30.0  
SD = 6.38  

M = 30.1  
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3. The ACF Examination — Agency C Samples

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\[ N = 20 \]

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\[ SD = 17.57 \quad SD = 7.64 \quad SD = 13.73 \]

\[ N = 20 \]

\[ M = -119.2 \quad M = 3.15 \quad M = 75.75 \]

\[ SD = 22.17 \quad SD = 9.97 \quad SD = 13.80 \]
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SD = 7.97
5. Test 56A  Agency D Samples

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N = 39                           N = 147
M = 36.23                       M = 34.04
SD = 17.35                      SD = 32.65
6. **Administrator Ratings** — Agency C Samples

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N = 20  
M = 5.95  
SD = 2.47

N = 20  
M = 5  
SD = 2.13
APPENDIX III

SURVEY OF MANAGEMENT PERCEPTION PICTURES

Picture 1 - A young man, white-collar worker, sitting in an office—seated at desk with partially written-on papers in front of him and cup of liquid and burning cigarette at his right—office contains four drawer filing cabinet, a filled-up waste paper basket, and an unidentifiable object on desk top—door to office is ajar and young man is inactive at desk, holding pen or pencil in his mouth.

Picture 2 - Man is seated at his office desk with a small group of papers in front of him as another man, dressed also in a business suit, is entering the office—the man entering has his hat on and is carrying a brief case under his arm—the seated man may or may not be aware of the other's presence—his desk contains an ordinary range of objects.

Picture 3 - A male blue-collar worker is standing next to an open door in front of the desk of a seated man wearing a business suit—the worker has a tool-like object in his right hand and has extended that hand toward the other—the seated man has his left hand slightly above a telephone on his desk—a graph on the wall behind him indicates a descending line.

Picture 4 - A man is seated at a desk in a room which may be an office or a home study—his coat is off and is hung on the back of his chair, two sheets of paper are visible to his left, and an open brief case is on the floor at his right side and is holding out a toy-like object with his left hand—a woman with hat on and coat partially off is standing to their rear and is watching—two toys are on the floor in front of her.

Picture 5 - Four men are standing in the machine area of a shop or factory—two dressed in machine shop clothing are standing at the rear, next to a machine, and one has his left hand on the other’s shoulder—two other men are in the foreground—one dressed in a foremen's jacket is gesturing over his shoulder at the two in the rear while talking to a man wearing glasses and business clothing—a metal-like object is on the floor between the two pairs of men.

Picture 6 - Five men are in the machine area of a shop or factory—two men,
one in tie with rolled-up shirt sleeves and the other in full business dress, are standing apart and to the rear of the others who are grouped together in front of a machine—the oldest of the three is dressed in work clothes and is crouched in front of the machine with his hands inside the machine and three tools or machine parts on the floor around him—a younger man in bow tie and rolled-up shirt sleeves is standing to his right rear, holding an unfolded roll of paper in his left hand and pointing with his right hand to the lower front of the machine—a second man in work clothes, younger than the first, is seated on a box to their rear, with legs crossed and eyes closed—he is holding a cigar or cigarette in his right hand and cupping his chin with his left palm.

Picture 7 — Five men are in a lunch-room or cafeteria area for employees—four of the five are seated together at a table to the left—alone at a table to the right is another employee with his back to the group—with his lunch pail and thermos in front of him, he is holding a sandwich in his right hand while looking at a large blank paper held in his left hand—one of the group of four at the other table is pointing at the lone employee—two of the others are looking at the gesturer while the third is glancing sideways at the lone employee.

Picture 8 — Six men and a young woman are in a conference room area—an older man with his outer coat on is standing behind the head chair placing or removing papers in or from a brief-case—the others are seated around an oval table—the woman is sitting inactively with a note pad open on her lap—two men, one young and one older, are inactive near the head of the table—the younger is holding a sheet of paper in his right hand while the older is holding a pen or pencil in his mouth—the remaining three men are actively talking at the end of the table, two to the right and one to the left—one of the two on the right is holding up a small model of an object in his right hand and pointing to it with his left—the other to his right rear has his hand on the shoulder of the man holding the model—the man across from them is wearing a uniform while all the other men are in business suits—he is holding a cigarette in his left hand while he is gesturing with his right.

Picture 9 — Two men in business clothes are standing in an office—the older has his back turned and is looking out a large window into a yard below—the yard, a gate entry point in an industrial plant area, is occupied by ten figures—two of the ten are standing near a small shed-like building inside the gate, while the others are standing outside the gate entrance—the second somewhat younger man in the office is looking at the other.
Picture 10 - A black and white sheet with reverse letterings reading
Now Tell A Story That Could Happen In Your Company.
Approval Sheet

The dissertation submitted by Frank X. Steggert has been read and approved by a board of five members of the Department of Education.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the dissertation is now given final approval with reference to content, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the Degree of Doctor of Education.

______________________________  ________________________________
Date                                   Signature of Adviser