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MODERN MANAGEMENT CONCEPTS AND THE
NAVY ENLISTED ADVANCEMENT SYSTEM

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and
RICHARD D. VAN ANTWERP
MODERN MANAGEMENT CONCEPTS
AND
THE NAVY ENLISTED ADVANCEMENT SYSTEM

*****

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and
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THE NAVY ENLISTED ADVANCEMENT SYSTEM

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Submitted in partial fulfillment of
the requirements for the degree of
MASTER OF SCIENCE
IN
MANAGEMENT
United States Naval Postgraduate School
Monterey, California
1964
MODERN MANAGEMENT CONCEPTS

AND

THE NAVY ENLISTED ADVANCEMENT SYSTEM

by

James M. Webster

and

Richard D. Van Antwerp

This work is accepted as fulfilling
the research requirements for the degree of

MASTER OF SCIENCE

IN

MANAGEMENT

from the

United States Naval Postgraduate School
ABSTRACT

The Navy Enlisted Advancement System was reprinted in 1950. The unilateral promotional authority of the Commanding Officer was replaced by a centrally administered fleet wide promotion system. Much emphasis is being placed on human relations for the development and promotion of workers in industry. In order to attract personnel to remain in the Navy in competition with the civilian personnel pool, the Navy advancement system must adopt some of the modern management concepts and their tools which would complement or supplement present Navy policy.
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PREFACE

The effective identification, selection, and advancement of competent, deserving men to fulfill the increasingly complex man-power requirements is a continuing problem for the Navy as well as any military, government, or civilian organization. Within the military, the technological development of the means of waging war has brought with it increasing demands for individual specialization and assumption of responsibility not known in the days of wooden ships and iron men. The task of determining those who are best qualified, in terms of technical and leadership ability, to operate our modern war/defense machines is one of the most important and difficult functions of military personnel administration.
CHAPTER I
THE PROBLEM AND ITS SCOPE

1. The Problem

The studies of scientific management in the early 1900's, followed by studies of the effect of environment and intrapersonal relationships on the individual, have brought forth certain changes in our concepts of the effective evaluation, indentification, and selection of individuals in modern personnel administration. Advances in industrial technology and the social influences of trade unions have slowly enhanced the relative status of the worker in an increasingly decentralized industrial complex. The relationships between the worker and the middle management strata downward is becoming of increasing importance.

Concurrently, the Navy has felt the tremendous impact of technological advances, particularly since the early 1950's, or in other words, since within a few years after the inception of the present system of enlisted advancement and rate structure. A problem which would seem to be of great import is the concern whether or not the present advancement system in the Navy is being administered in the light of the new and enlightened management concepts involving human relations and the individual.

Accordingly, the purpose of this research study is to analyze the present Navy enlisted advancement system in an attempt to discern whether or not contemporary management concepts surrounding the relationships between the individual and his human environment, generally affecting motivation, are being exploited by Navy personnel management practices.
2. Need for the Study

In 1950, Admiral Arleigh Burke, USN, made the following remarks in his study of discipline in the U. S. Navy.¹

"...A successful Navy requires a unique and close relationship between officer and man. The officers have been thoroughly conversant in that relationship and were therefore well prepared to fulfill their responsibilities to their subordinates. 

But officers are not paying quite the attention to this paramount duty that they did before and during the war.

The results showed up in a survey made by BuPers of the opinions of separatees about the Navy and were confirmed by the large number of people who wanted to get out as a result of ALNAV 117 of 27 December, 1949. A surprisingly large number, both petty officers and non-rated men, felt that the officers and, to a lesser extent, their senior petty officers, were not interested in their personal problems or welfare. They also felt that their jobs were not very important and that their seniors did not recognize their qualifications...or for that matter their minor short-comings.

These men leaving the Navy have complained that their officers did not make adequate use of their skills and training. Officers were not aware of the men's capabilities and potentialities, what contributions they could make to the Navy or to their ship. They felt that the officers made no effort to identify their men with their ship or with the Navy.

This is an indictment whether the men were right or not. That's the way they felt...and that's wrong.

"...Stability of promotion and advancement has also been a cross under which the discipline of organizations has been broken." 

"Heretofore written advancement examinations have been the most important factor in evaluating the relative worth of individual]. with some attention being given to the evaluation of the man's work on the job. Written tests, however, are only one measure of a man's effectiveness. They do not necessarily give a man's true aptitudes, qualifications, or achievements."

(Comment of petty officer evaluation reports) "These, like any other system in which men mark other men, will be valuable in proportion to the conscientiousness with which the marking seniors act. Here again, it is necessary that rigid adherence to high standards be maintained to assure that the men who actually reach those high standards are not discriminated against by less qualified men receiving high marks which they do not justly deserve."

The fact that the above comments can be and are still being made by naval officers and enlisted personnel indicates that such problems in personnel administration are still with us and require study and remedies by both the policy makers in personnel administration as well as the individuals in the organization.

3. Definitions

By usage in the Navy, "advancement" is applied to increase in grade for enlisted personnel while "promotion" is applied to increase in grade for officers. Accordingly, the term "advancement" will be used in this study to denote enlisted increase in grade.

A "rating" is a name given to an occupation which requires basically related aptitudes, training, experience, knowledge, and skills.2

A "pay grade" is a subdivision of a rating for pay purposes. A rating normally is composed of four pay grades chief petty officer; petty officer first class; petty officer second class; and petty officer third class.3

A "rate" identifies personnel by both occupation and pay grade. Thus, "electronics technician first class" is a rate.4


3Ibid.

4Ibid.
A "critical rating" is defined as a rating which: a) requires long periods of specialized schooling or inservice training; b) require special technical or leadership aptitudes; c) has low first term reenlistment rates; and d) has a shortage of career petty officers as related to requirements.\(^5\)

The term "career personnel" will be used to denote those personnel who have served on active duty for a period of seven years or longer, or personnel whose present enlistment or extension of enlistment will accrue at least seven or more years active service.\(^6\)

4. **Sources of Research Material**

   The facilities of the Human Research Laboratory, U. S. Army, Presidio, Monterey, including their library and interviews with research personnel in this field; the U. S. Naval Postgraduate School; interviews with various line officers and personnel administration officers in civilian industry were utilized.

5. **Previous Research**

   Previous studies in the area proposed by this paper can generally be placed in three categories, i.e., motivation studies, evaluation of performance and abilities studies, and studies on promotion (advancement) procedures. Although there is considerable information available concerning the interaction of evaluation and promotion procedures, there is very little information or research material avail-

\(^5\)Enlisted Proficiency Pay Program for Fiscal Year 1960, Bureau of Naval Personnel Instruction 1430, 12(A), 1959.

\(^6\)Ibid.
able on the interaction of motivation with promotion and evaluation procedures. Therefore, this paper will attempt to analyze the present system of advancement by comparison of the current state of the art in these three categories and their interactions.

6. Limitations of the Study

The above statements concerning source material and previous research indicate the obvious limitations of this paper. In addition, caution must be exercised in the interpretation of certain studies and material applicable to civilian industry as applied to the military environment. Certain attitudes and needs of the civilian worker may be the Navy's unique occupational environment.

7. Summary

To summarize, this study is an attempt to analyze the Navy's advancement system in comparison with the present state of the art in personnel administration. The critical need for having the best possible system in our threshold era of "push button warfare" is obvious. If nothing more, this study will attempt to highlight the areas where possible improvement may be made as indicated by our accelerating quest for knowledge in the personnel management field. However, as previously indicated, certain limitations on the breadth and depth of this paper have been imposed primarily due to lack of source material directly applicable to the Navy. In addition, the views expressed in this paper represent a line officer's point of view with limited experience on small combatant ships vice that of a research psychologist. This may be an advantage, as the problem is never more acute than with junior officers on an overworked destroyer.
1. **Background**

Prior to 1949, advancement of enlisted personnel was, for the most part, a prerogative and function of the local command. Specifically, the Chief of Naval Personnel would authorize commanding officers to effect advancements in rating of enlisted personnel under the command:

- To fill vacancies on the ship or station concerned when specifically permitted to do so by effective general instructions.
- In accordance with Bureau of Naval Personnel letters to commanding officers concerning individuals.
- By assignment of quotas to specific administrative or organizational commands.

Essentially, the vast majority of enlisted advancements under the above system were made by the command to fill vacancies or, as a result of mobilization during World War II, to fill new quotas assigned by the Bureau of Naval Personnel. Although the Bureau of Naval Personnel Manual and its predecessor, the "Circular Letters" gave general requirements for advancement, lack of time and/or interest often resulted in the fulfillment of such requirements being made by a yeoman merely making a service record entry of qualification. In addition, the commanding officer was generally required to fill the vacancies (petty officers) from these personnel within his command.

By 1949 the requirements for enlisted advancement, although administered and determined at the local command level, were as follows:¹

¹*The Blue Jackets*' Manual (The United States Naval Institute, Annapolis, Maryland, 1950), pp. 242-243.
a) Have met certain specific requirements as to length of service in pay grade.

b) Have met certain specific requirements as to marks in proficiency in rating and conduct.

c) Have completed satisfactorily the naval training course, where a suitable course is available, for the rate for which the candidate is preparing for advancement.

d) Have completed satisfactorily a course of instruction at a service school, when such is required.

e) Have qualified fully in the practical factors and examination subjects for the rate for which the candidate is preparing, as prescribed in the then current "Manual of Qualifications for Advancement in Rating" (NAVPER 18068).

f) Have been considered by senior petty officers (if any) and officers as capable of performing the duties of the higher rate, and have been recommended by the commanding officer.

g) Have passed satisfactorily a professional examination for the rate involved as prescribed in the then current "Manual of Qualifications for Advancement in Rating."

In summary, the system to 1949 had evolved from one wherein the commanding officer had complete freedom to advance personnel to fill vacancies using such methods as he saw fit, to a system wherein specific qualifications and standard examinations were specified by BuPers, but administered wholly within the command.

2. **Principles of Present System**

During World War II, the rapid expansion of the Navy caused the emphasis in personnel administration to be placed on training with little attention being given or required for career motivation and methods of selection for advancement on a Navy wide basis. As has been noted previously, advancement was a local command function; how-
ever, subsequent to World War II it soon became evident that local command selection was not doing the job properly in terms of identification and uniformity in advancing those that were best qualified to meet the increased skills required. Specifically, complaints were made that one was advanced on the basis of "who you knew" and by "being in the right spot at the right time," rather than advancement of those best qualified first.

In view of the foregoing, the following basic principles were incorporated into the present system:

. Only those fully qualified to hold a higher rate should be advanced.

. Each man should have recurring opportunities to compete with others in his rate for advancement.

. The best qualified men should be advanced first.

In meeting these requirements, the Bureau of Naval Personnel Manual states the following:

"Personnel should be recommended for advancement in rate or rating only if and when they are in all respects fully qualified to hold the higher rate to which advancement is to be effected. Advancements should not be made in the nature of rewards for faithful or extended service or simply because the minimum service requirements have been fulfilled, without regard to the actual qualifications of the individual. It is poor personnel administration to advance a person in rate or rating or recommend a person for change in rate or rating to a position for which he is not fully qualified."

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# TABLE I

**Paths of Enlisted Advancement**

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<tr>
<th>Rates</th>
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<tbody>
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<td>E-1</td>
</tr>
<tr>
<td>Seaman Apprentice (SA)</td>
<td>E-2</td>
</tr>
<tr>
<td>Seaman (SN)</td>
<td>E-3</td>
</tr>
<tr>
<td>Petty Officer, third class (P03)</td>
<td>E-4</td>
</tr>
<tr>
<td>Petty Officer, second class (P02)</td>
<td>E-5</td>
</tr>
<tr>
<td>Petty Officer, first class (P01)</td>
<td>E-6</td>
</tr>
<tr>
<td>Chief Petty Officer (CPO)</td>
<td>E-7</td>
</tr>
<tr>
<td>Senior Chief Petty Officer</td>
<td>E-8</td>
</tr>
<tr>
<td>Master Chief Petty Officer</td>
<td>E-9</td>
</tr>
</tbody>
</table>
3. **Mechanics of the Present System**

The current policy of service-wide examinations and centralized control of advancements with service-wide competition encompassing all factors of advancement, was announced by the Navy Department in January of 1950.\(^3\) The first service-wide competitive examinations for advancement to the petty officer grades of first, second and third class were given in July, 1950. The present system of a simple, service-wide competitive examination for advancement to each of the petty officer rates in a specific occupation classification places all candidates on an equal basis. For example, a third class quartermaster will compete on the same date with all other third class quartermasters for the second class billets available.

Basically, the current system provides for the determination and computation of a numerically weighted "score" assigned to the factors of past performance, practical and theoretical knowledge, seniority, and commendations and medals. The mechanics of the system will be examined in some detail in the remaining portion of this section. Suffice to note at this point that the system adopted in 1950 provides for centralized control and Navy-wide competition, which was accomplished by removing the commanding officer's unilateral authority to advance enlisted personnel.

---

4. Criteria for Advancement

In order to gain an advancement in rate, certain requirements must first be met by the enlisted man. These requirements are specified for each grade and rate and are as follows:

a) Meet minimum requirements as to time in grade/length of service:

- To E-4: 6 months as an E-3
- To E-5: 12 months as an E-4
- To E-6: 24 months as an E-5
- To E-7: 36 months as an E-6
- To E-8: 48 months as an E-7 and minimum total service of 11 years
- To E-9: 24 months as E-8, and a minimum total service of 13 years.

Thus the total minimum service required to reach the top of the enlisted rates is 13 years.

b) Complete satisfactorily the Navy training course for the next higher rate, when such a course is made available by BuPers.

c) Complete, satisfactorily, a course of instruction at one or more of the following types of schools, when such is required:

Class A schools, located at various major Navy installations around the country, which are, in general, designed to provide the basic knowledge and skills needed to prepare an enlisted man for a specific rate as a petty officer third or second class. Students for these schools come directly from boot camp or the fleet.

Class B schools which are designed to provide the advance technical knowledges and skills required for pro-

---

motion to the higher petty officer rates, i.e. second, first, and chief petty officers.

Class C schools train men in a particular skill or technique which, in general, is not peculiar to any one rating.

Class P schools, which are few in number, give training at a preparatory level usually for a broad field - aviation, or electricity combined with electronics, for example.

d) Qualify fully in the practical factors prescribed for the next higher rate. An example of such practical factors are: typing for the yeoman, Morse code for the radioman, boiler maintenance for the boilerman. It should also be noted that qualification for practical factors is a continuing process incorporated into a command training program. For example, a second class radioman will ideally commence working on the required practical factors for first class radioman as soon as he makes second class. The specific minimum practical factors for first class radioman are contained in Qualifications Manual and as the radioman becomes qualified in a required factor by demonstrating this ability, he is certified as qualified by his division officer or department head.

e) Be considered by senior petty officers, division and department officers as capable of performing the duties of the next higher rate, and be formally recommended for advancement by the commanding officer.

f) Pass, satisfactorily, a written examination encompassing at least six subject matter areas covering the professional qualifications of the candidate's rate, plus one section covering general military qualifications.
cally, the Enlisted Qualifications Manual outlines the minimum standards of both professional and military skills and knowledge an enlisted man is going to need to perform the duties of his rate.

The cycle of preparation of an examination (exams are revised at least once yearly) commences with the chief petty officer developing the exam questions based on the current Qualification Manual requirements, the prescribed bibliography, and their past experience. After the chiefs have made up the questions (one hundred twenty on the technical specialty and thirty on military requirements) in their own words, they go to the civilian exam-writing experts who advise the chiefs as to possible better ways of stating the questions so that the wording will not trip or tip the examinees. The questions are written so that only one choice (four possible choices) is correct, although each "distractor" contains an element of truth. In addition, each section of the exam is weighted insofar as total score is computed. The weighting is accomplished by unequal numbers of questions in each section. One section may contain only twelve questions while another may have sixteen or eighteen questions. The basis of this weighting is that undoubtedly one phase of a specialty is more important than another. However, the candidate is not told beforehand of the weighting on the theory that he should study equally for all phases of his specialty.

Thus, through the use of fleet "operator" personnel and professionals in the education field, with continuous "feedback" and evaluation from the fleet, reliability and validity of the exams is claimed to be quite high. One of the most difficult problems which has not
yet been solved is that of an accurate measure or test of the claimed validity, i.e. comparison, of exam results with performance/practical knowledge retained.

Research techniques to attempt validation could include practical on-the-job testing (practical demonstration of knowledge scored by an expert rater) similar to our current practical factors exams as conducted, peer rating, ranking by a panel of highly qualified professionals, or attempting to correlate with our current petty-officer evaluation reports.

Finally, the examinations are not made up to flunk any one individual, but are designed to indicate the best qualified, or as actually utilized, to provide a means for "quota" selection for the available manpower pool.

6. Performance Appraisal

Performance appraisal of enlisted personnel is accomplished semi-annually by the use of NAVPERS 792 (Rev. 6-59) Report of Enlisted Performance Evaluation. Insofar as advancement is concerned, only that portion evaluating the traits of professional performance, military behavior, leadership and supervisory ability, military appearance, and adaptability is considered as an advancement factor. The five traits are evaluated and marked by the subordinate's seniors (senior petty officers, division officer, department head, executive officer, and in some instances, commanding officer) utilizing the graphic scale technique provided. The marks are later quantified by the command with each trait receiving a mark from 4.0 to 0.0. All five factors are then
averaged and a score for that reporting period is established. The advancement score is then an average of all scores for the reports encompassing the period that the enlisted man has held his current rate.

The "evaluation of performance" section is designed primarily for use in detailing. This is a word picture of the man as a whole and uses the technique of "free written rating" or may be used as a critical incident report. In addition to personal data such as current billet assigned, schools attended, and other special qualifications, a section is provided for the explanation of any factors which result in marking a man unsatisfactory or outstanding in any of the five traits listed in the graphic scale.

7. Weights Assigned to Promotion Factors

As stated before, the written examination is only one of the factors which determines who will be promoted. The actual determination for promotion is based on five factors: exam score, enlisted performance evaluations during the time required in grade for advancement, time in service, time in grade, and medals and commendations. Each of these five factors is turned into a certain number of points, and these points in turn are summed to give a "Final multiple" (individual promotion score). The weighting is computed as follows, with a maximum of 180 points allowed:

\[
\text{exam score} - \text{the raw score on the exam is converted into a standard score, the highest possible being 80.0 points.}
\]

enlisted performance - the 4.0 scale is converted to points on a 0 to 50 scale. Thus a 4.0 average on all reports would be 50 points. However, due to the "bunching" and "halo" effect, this scale is not linear. An average of 3.0 is worth only 20 points, with the difference, say, between 3.84 and 3.24 being 18 points.

time in grade - 2 points for every year in grade to a maximum of 20 points.

time in service - one point for each year of Naval service to a maximum of 20 points.

awards - up to a total of 10 points with specified points for each type of medal or award.

commendations - two points each for certain personal letters or commendations.

8. Computation of Scores and Promotion Determination

Examinations are given on the same date, Navy wide, either once or twice yearly, dependent upon the grade. The actual examination is administered by the local command. Prior to the examination, the multiple scores for the factors of length of service, time in grade, performance evaluations, and award multiples are compiled by the command. Upon completion of the ungraded examination, the exams plus the multiples compiled by the command are forwarded to the Naval Examining Center. The Center grades the examination, computes the final multiple, and then rank orders by grade and rate all of the candidates.

The first determination, after the exams are graded is whether or not the candidates passed the exam. The "pass-fail" cut score varies with each grade, but generally, E-7 must be in the "high average,"

Ibid.
E-6 between "high average," E-5 average," E-4 "average and below average" in each category of the exam. It may be noted that directly, this determination is not a factor of quota control. The "pass-fail" determination is based on the minimum acceptable knowledge required for advancement in rate in comparison to all candidates participating in the exam. The theory that there are good first class petty officers who would make poor chief petty officers is expressed in this determination.

The second determination is made by the Bureau of Naval Personnel in stating the quota for advancement in each grade and rate. Using the rank order of final multiples of those who passed the examination, the determination for promotion is made. Currently, BuPers is utilizing a two quota system, i.e. the initial quote is made up with the best estimate of fleet requirements during the forthcoming year or six months. Two months later a revised quota is made up reflecting better estimates of requirements of a certain grade or rate. The two quota system has provided more quotas, in that during the two month period additional information is available as to how many of those personnel whose advancement was initially authorized will actually be promoted. It should be noted, at this point, that although a candidate's promotion may be authorized by the Naval Examining Center based on the final multiple, the final decision rests with the candidate's commanding officer. Even though the commanding officer initially recommended the candidate for promotion, this recommendation can be withdrawn at any time for justifiable reason.
An important additional function of the Naval Examining Center is to provide "feedback" to those applicants who fail the examination or those who pass but are not sufficiently high enough in the rank order to obtain one of the vacant billets. This "feedback" is accomplished by the use of profile cards sent to each unsuccessful candidate. The profile cards indicate the candidate's score in each of the examination categories as compared to all others' score in their grade and rate.

9. Star and Score Programs

There are two additional programs open to certain qualified enlisted personnel which are worth mentioning at this point although the majority of personnel follow the normal advancement pattern.

The STAR program is probably the Navy's most successful program in terms of enticing qualified, first-cruise personnel to re-enlist and make the Navy a career. Any regular Navy man or Reservist on active duty can qualify for the STAR program if he:

a) Has had at least one year, but not more than three years of active duty.

b) Has above-average potential for career service.

c) Is recommended by his Commanding Officer.

d) Re-enlists for six years.

e) Has Bureau of Naval Personnel approval.

The enlisted man who is selected for the STAR program will be guaranteed assignment to an appropriate school in his specialty and

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automatic advancement in rate or a substantially better chance for advancement. In addition, he is paid his re-enlistment bonus. For example, an E-3 will go to class "A" school and be automatically advanced to third-class petty officer if he obtains at least average grades. An E-4 who enters the STAR program will go to a class "B" or "C" school and be automatically advanced to second class, subject to the same requirements of an E-3 in the program. An E-5, however, will not be advanced automatically to first class upon completion of "B" or "C" school, but the school will give him a better chance to advance under the normal advancement procedures.

Another highly successful program is SCORE, which stands for Selective Conversion and Retention Program. SCORE permits highly qualified enlisted men to shift ratings to a highly critical rating wherein advancement is faster.

Eligibility for SCORE is as follows:

a) Minimum of two years active Naval Service and less than twelve years of active military service.

b) Meet requirements of Class "A" school for the rating to which the man is converting.

c) Recommendation by the commanding officer.

SCORE guarantees the qualified man class "A" school and then, following one year on-the-job training, class "B" school. In addition, the program guarantees automatic promotion from E-3 to E-4 upon graduation from class "A" school if the man's marks are better than average.

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8 Bureau of Naval Personnel, Selective Conversion and Retention Program (BUPERSINST. 1440.27, 27 July 1962)
Also, automatic advancement from E-4 to E-5 is afforded the man upon his completion of "B" school if his grades are better than average.

In summary, both the STAR and SCORE programs provide automatic promotion and schooling to those qualified personnel who might very well leave naval service if they were required to take their chances in the normal advancement system. Specifically, these programs provide for faster than normal advancement and guaranteed schools in their specialty.
CHAPTER III

MODERN MANAGEMENT CONCEPTS

1. Introduction

Impressive gains in the technology involved in modern industry have emphasized the need for qualification both on the part of management and the individual employee. Keen competition among organizations in their respective fields requires that maximum efficiency be realized both from machinery and man. The implication here is that both employer and employee are under constant pressures of various sorts in the conduct of their routine employment.

The employer, hereafter considered in the role of manager, must constantly be alert to: (a) changing personnel requirements, (b) the availability of qualified personnel and (c) policies relating to recruitment.¹ As a rule, most organizations prefer to fill billets from internal sources via departmental transfers, promotions, or re-hiring of persons previously laid-off. In so doing, a factor of known value and the utilization of previous investment has been used.

The employee is vulnerable to the great demands of job responsibility which in turn have been acquired as a result of societal pressures. These are identifiable with status, ambition and family influence upon the worker.

Studies of employee's attitudes in their work habitat, such as the classic Hawthorne series pioneered by Elton Mayo and his asso-

ciates (37), have added considerably to the practical and theoretical knowledge of interpersonal relationships and communicative structure affecting the individual's role in the organization. For example, theory was reinforced through the discovery that worker-supervisor relationships have more influence on output than environment and that informal group associations tend to stabilize level of work output.

The study of work groups and development of theory of job attitudes has been relatively thorough and, incidently, has been approached from complementary viewpoints. Kurt Lewin and C. C. Homans (29), among others, have contributed from the fields of psychology and sociology respectively, approaching the field of industry from the point of view of group relationship. Chris Argyris, on the other hand has focused on the individual with his emphasis on maintaining a semblance of self-esteem concurrent with the effects of teamwork required by organizational pressures as evidenced in group studies. (1)

Of primary importance to this report is the fact that an individual is affected and motivated by his position within a group and consequently, by his interpersonal relationships with the group members. The group structure, in turn, is affected by the lines of communication and by the paths of influence and authority. 3

3 Ibid.
2. **A Motivation Concept**

The basic tenets of the present Navy advancement system discussed in the preceding chapter date back to 1949. At that time the Electronic Data Computer was non-existent, but look at the change that EDP has wrought on society since its inception in 1951. Such technological advance surely has had a tremendous impact on industry collectively as well as on the individual employee. This would seem to imply that managerial principles should have altered accordingly to conform with accompanying changes in the theory of human behavior.

Douglas McGregor, Professor of Industrial Management at M.I.T., has explained at length a modern concept of management which he has labeled "Theory Y", in contrast to the present day "Theory X" concept in popular use. (38) Realistically, the author has considered his Theory Y in the broader context of the next few decades during which period of time he envisions the most drastic changes in social history yet experienced. The primary value of such a new concept of thought lies not in the hope that it will be accepted in toto, but rather, that present traditional assumptions concerning human relations be challenged and gradually modified. By continually changing assumptions on which management principles are based, the impact of future technological changes on the individual will be drastically lessened.⁴

Theory X is characterized by the following premises:

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Human beings will avoid work whenever possible by reason of inherent laziness.

People will work as desired by their employer only through strict control motivated by fear of punishment or deprivation.

The average human is lacking in ambition and the desire for responsibility. In addition he requires continual direction and wants security.

Theory Y is based on the following assumptions which, incidently, are receiving constant reinforcement from contemporary motivational and psychological research:\(^5\)

- Physical and mental effort in work are normal attributes.
- Coercion and threat are not the only methods of goal attainment.
- People are capable of self-direction toward desired objectives.
- The rewards involved in goal attainment serve as direct incentives in pursuing a course of action.
- The population is widely endowed with such traits as originality and initiative.
- In the proper atmosphere, the average person will seek out responsibility.
- Only a portion of the intellectual ability of the individual is challenged in the face of modern industrial conditions.

In light of the philosophy of Theory Y, then, a practical application by management would tend more to teach and train the individual employees and control the organizational process only, not the people involved.\(^6\)


\(^6\) Kureloff, loc. cit.
The theoretical demands above can be supported by a psychological theory of human needs proposed by Abraham H. Maslow. (36) Based on the functionalist tradition of James and Dewey, gestalt psychology, the holism of Wertheimer and dynamicism of Freud and Adler, Maslow has called it a holistic - dynamic theory. The underlying concept of the theory is based on the attempted fulfillment of five basic needs of the human:

a) **Physiological needs.** Those needs to perpetuate homed-stasis in the body and satisfy organic demands of the body.

b) **Safety needs.** Needs to be free from unmanageable situations, physical danger, harshness or terror. (The normal adult is normally satisfied in his safety needs.)

c) **Social needs.** Actually known by Maslow as "belonging-ness and love needs", they represent hunger for affectionate relationships with society in general. Frustration of these needs are found to be the basis of psychopathology and maladjustment.

d) **Esteem needs.** All well adjusted people in our society have a desire for a stable and reasonable evaluation of themselves, in the sense of egoism. This need category encompasses competence, confidence and independence plus

7 The Study of organic response in relation to psychological and physiological events rather than atomistic analysis. (The properties of a unit are not derived from the sum of its parts.)

8 A doctrine according to which a whole cannot be analyzed without being reduced to discrete elements.

9 A doctrine which explains the interplay of forces in the universe as irreducible to matter and motion.
status or attention. More or less overlooked by Freud, this category of needs has been emphasized by Adler. Discouragement and neurotic trends sometimes result from thwarting of these needs.

e) Self-Actualization needs. The simplest explanation here is that a person will develop a feeling of restlessness, even with the previously mentioned needs fulfilled, unless he is able to partake of that activity for which he is most aptly suited. This is in reality the need of self-fulfillment and usually emerges only when all other needs are predominately satisfied.\(^1\)

This hierarchy of needs is not to be visualized as occurring in such a rigid pattern as presented but more naturally as less or greater potency characterizes them individually. However, the general principle of operation relies on the satisfaction of a set of needs lower in the hierarchy, allowing the less potent need to emerge. Complete satisfaction of those needs of greater potency (i.e., lower in the rank structure) is not necessary before allowing higher needs to emerge and attain partial fulfillment. In fact, a closer description of the degree of need fulfillment would possibly be a diminishing percentage of satisfaction in ascending the structure of prepotency.

Here we have gotten an insight into some of the basic phenomena which figure in part in the drive reaction of the person enmeshed in

the pressure and the demands of our present day society.

3. **A Concept of Authority**

The following thoughts are from the seventeenth century works of Thomas Hobbes, noted English philosopher. The passage expresses a concept of authority, the power of which is rooted in the acceptance of directives from an incumbent leader through an informed awareness and the ability to decide, by the subjects of that authority.

And covenants without the sword, are but words, and of no strength to secure a man at all...everyone, as well he that voted for it, as he that voted against it, shall authorize all the actions and judgments, of that man, or assembly of men, in the same manner, as if they were his own, to the end, to live peaceably amongst themselves, and be protected against other men. From this institution of a commonwealth are derived all the rights, and faculties of him, or them, on whom the sovereign power is conferred by the consent of the people assembled.

Borrowing again from a reference to the seventeenth century as quoted from the writings of Dr. Reinhold Niebuhr:

The confidence that the welfare of the community could be maintained on the principle of the "consent of the governed" was justified by the long history of parliamentary power, at least sharing the authority of the king in representing the community. It was justified "rationally" by the idea that the king ruled only as long as he obeyed the covenant of justice, which presupposes a previous covenant between the community and the king. In the words of a Puritan preacher, Andrew Perne, "If a nation consent together and choose a king to reign over them, the people will fight for him as long as he keeps the agreement between them...."

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11 Ibid.


In an attempt to define authority, popular distortions are fostered by current usage of derivations such as "authoritarian". The so-called "authoritarian personality" carries the following connotation:
(a) rigid conformist, (b) highly prejudiced, (c) worshipper of authority and (d) critical of the democratic process. The "acceptance concept of authority" will be further explained by several definitive examples in an effort to clarify the basic theory of source of authority.

Authority is the capacity for exercising ascendency over a group and is created and maintained by public opinion. Although in many instances, authority is accepted based on coercion alone, the acceptance may be carried off with temporary indifference in recognition of its seeming inescapability, or with a feeling of impending good.

Military authority, is the right to proceed in the fulfillment of one's military duties. The path of this authority in our society, is traced from the people as the source, through their elected representatives, the Congress, and on to the various military departments. Throughout the entire hierarchy, permissiveness must prevail. Authority must not be thought of as a quality ascribed to an individual, rather it is an association between persons involving social control. The relationship is enhanced by agreement and harmony implied by the

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original acknowledgment of the basic precepts of the society upon which the command decisions must be based. The captain of a ship has authority over his men just so long as they voluntarily submit to his control. Consequently, he has no authority over a mutinous crew. 17

Try to visualize authority as a rapport within a hierarchy traveling from the bottom upwards rather than emanating from a group of inanimate symbols placed on a formal organization chart. Optimum authority is sufficiently extensive for all to obey voluntarily and it ends when voluntary assent ends. 18

Authority is the right to command or to act. Thus a person having the right not only to act himself, but also to expect action of others. But what is the source of this right? In practice, authority appears to originate at the top of a structural hierarchy - under private enterprise, with the owners - and to flow from owners to their representatives, the managers, and from superior managers to their subordinates. Hereafter, in this presentation, authority, when viewed in this customary manner will be referred to as formal authority. 19

This definition of authority, apparently at odds with the acceptance theory is subsequently modified as is shown by an excerpt from the companion article published three months later by Tannenbaum.

In the preceding article it was stated that authority is commonly viewed as originating at the top of an organizational hierarchy and flowing downward therein through the process of delegation. When viewed in this way, it was called "formal authority". In reality, effective authority does not originate in this manner.


The real source of the authority possessed by an individual lies in the acceptance of its exercise by those who are subject to it. It is the subordinates of an individual who determine the authority. It becomes real only when it is accepted.\(^{20}\)

Now, consider authority as a latent decision which becomes an interpersonal relationship between subordinate and superior when accepted by the subordinate. The implication is that the subordinate is faced with a choice between accepting and not accepting. He will make a positive decision that a submission will effect good or at least the submission is inevitable, or should he feel the disadvantages too great, he can decide in the negative.

In any case, a discussion of some advantages which, as determinants, form the cornerstone of the acceptance theory, includes such results of acceptance as:

a) Strengthening of a goal of the enterprise, which goal was originally good in his eyes. Identification of a person with overall organizational goals is an important subject to be enlarged upon later.

b) Enrichment of physiological needs. Pay increases may appeal to an unfulfilled security need, or advancement may fulfill the need of self-esteem or ego.

c) Compliance merely to satisfy a particular code of ethics. Although somewhat singular, some individuals believe it morally obligatory to observe the wishes of authenticated positions in the chain of command.

d) Obtaining the sanction and recognition of fellow workers.

e) Passing the mantle of responsibility through acceptance of a decision.\(^ {21}\) This may consist of one or two patterns of reasoning, either unwillingness to take the chance of being proven wrong, or simply refusing to accept responsibility, sometimes known as "escape from freedom".\(^ {22}\)

A proponent of the acceptance theory of authority was the late C. I. Barnard. In his discussions on authority he lists four conditions which must be fulfilled in order that an individual accept a directive in recognition of authority.\(^ {23}\) Although two of the four conditions are for all practical purposes synonymous with advantages listed in the preceding paragraph, all should be discussed separately for a more comprehensive understanding of the concept.

The first condition states that the communication shall be capable of being understood. This means that the lowest stratum in the chain of recipients must be able to interpret the meaning, otherwise, there is in fact, nothing which requires compliance.

The second condition requires that the communication be consistent with the goals of the organization at the time a decision is required of the member. Here, an overlap with a previously listed advantage exists,

\(^ {21}\)Ibid. pp. 28-29.


but the importance of this requirement is basic. It embodies a concept of group dynamics which experimental studies of the past two decades have enlightened and expanded to be recognized and accepted in psychology and sociology. Lewin has defined the group as an interdependent "dynamic whole" implying that a change in state of any subpart affects any other subpart, lending the connotation of "dynamic vice static" in relation to goals and ideology.\(^\text{24}\) Frustration in the form of conflicting orders would paralyze action on the part of the recipient. If there are to be issued orders which in any way appear to be contrary to organizational goals, sufficient advance information of the illusion must be made to all persons in the chain of authority. Neglect of this action will assuredly result in improperly executed, if not unexecuted, orders.

Third, the recipient must be convinced that the communication is compatible with his own goals. An individual becomes a member of a group in order to satisfy some specified want, be it a basic physiological need or a psychologically descriptive goal. By the token that an individual is a member of a particular organization, the possibility of friction between personal goals, group goals and organizational decisions is lessened.\(^\text{25}\) Minor differences are certain to arise, but authority is of absolute importance primarily to those goals which are necessary for continued operation and effective functioning.


\(^{25}\) Krech, op. cit. p. 398.
The last condition simply requires that the person be physically able to comply. Ordered to do the impossible, authority cannot be accepted.

Overlapping areas in the advantages and conditions discussed above lie in goals of the individual and overall enterprise purpose. The problem is coordination of effort among the various levels of management to induce cooperation throughout the structure. Involved in the attainment of this end is a legitimately "stacked deck". Executive experience unofficially recognizes that a communication which will not be obeyed, shall not be issued.\(^{26}\) Additionally, group opinion has a collective effect on the individual and can orient his opinion in a direction sympathetic to authority requirements.

A final condition necessary to maintain authority is a distance, or separation, either physical or social, between the grantors of authority and those who command. A symbol of some form is usually displayed as a reminder of the influence of that authority which the masses have given. The preservation of distance enables those who have acquired authority from the group to remain aloof in order to manipulate and maintain the system.\(^{27}\)

4. Communication

The basis of communication is a dynamic process by which certain persons are able to transmit their desires in the accomplishment of a

\(^{26}\) Barnard, *op. cit.* p. 167.

\(^{27}\) *Encyclopedia of the Social Sciences*, *op. cit.*, p. 320.
common purpose. In the majority of cases the method of communication used is verbal and thus centers around language. It is thus that the primary concern of communication effort is the transmission and receipt of intent.  

Communication is indeed a critical dimension of organizational functioning today and has an extremely important bearing on the behavioral patterns and interpersonal relationships between employer and employee. A vivid example is the importance placed upon lack of communication in a fairly recent General Electric Company strike and the lessons learned, resulting in the practice of "Boulwarism" during employer - employee - union bargaining periods.  

The 1946 strike was a direct result of the General Electric Company failure to communicate with its employees, in the eyes of Lemuel R. Boulware, vice-president for employee relations. He reasoned that employees, union, general public - and even middle management in such a large diversified concern - are very likely to learn of important decisions affecting their mutual economic welfare by external, devious and in most cases, inaccurate means of communication, if the top management does not take the initiative. At best, information received from sources outside the responsible network of communication is dis-

28 Barnard, op. cit., pp. 89 - 90.

29"Boulwarism" is based on the right to communicate and in essence is a bargaining approach where the company takes the initiative by presenting a package deal before the union, which deal obviously places the union on the defensive. This does enhance management position if full knowledge has been communicated to the employees and is responsive to their needs.
torted. Communication is not really a program, as it must be based upon performance; but it must be truthful.  

In the absence of a well structured communication net, management can lose control of employees to unqualified elements. Likewise, if the full value of the information is not transmitted throughout the network it will be disclaimed as misrepresentative of the facts and employee confidence in management will be weakened.

The foregoing example contains some of the important dimensions of communications in the contemporary time phase. Among those directly mentioned or implied, which are of extreme importance are:

a) Network - the structure of the communications system, which affects the group interaction by setting the norms for form and contact. In addition, feedback and noise in the net are variants which are of importance.  

b) Character of system - practices to be observed in the system such as:

(1) Full knowledge of channels available.
(2) Normal channel for every member.
(3) Minimum length of lines of communication.
(4) Non-use of short-cuts.
(5) Complete competence of persons serving as centers of communication.


(6) Non-interruption of lines of communication when functioning.

(7) Authentication of all communications.  

c) Content - the diverse nature of material which is transmitted can be classified into the categories of:

(1) Cognitive material such as facts concerning current projects, problems and experiences, or ideas regarding policy.

(2) Motivational material such as attitudes and reactions, goals and objectives or attitudes toward support or rejection.

With an eye to such complexity of the system and variety of material, it is small wonder that management personnel are so preoccupied with the problems of communication. Unfavorable employee attitudes is a prime blocking influence in the transmission and receipt of intent. Supervisional pressures, creating an atmosphere of unreasonableness around various communications tend to block the upward flow or feedback with which management can gauge effectiveness of a directive. Feedback is analogous to the receptors in the nervous system which transmit the external changes affecting the body, to the brain; or, it can be compared with the closed loop electronic circuit in a computer which can adjust and compensate for expected error.

The "noise" encountered in a system can be thought of as things which tend to interfere with transmission. Static on a telephone would be an analogous situation. A psychological noise would be the resulting interference of thinking about another subject during transmission.


Noise in any communication network is an expense since it reduces accuracy of reception and is combated most effectively by repetition or redundancy. Such situations are very wasteful of both time and energy and are detrimental to the efficiency of any network, no matter how minutely planned.\(^3\)

Approximately fifteen years ago, a series of experiments were begun at M.I.T. dealing with communication nets and their effects on group problem solving. The experiments were fairly simple in both purpose and conception and can be explained rather quickly.

![Diagram of communication networks](image)

**Fig. 3-1. Experimental Communication Nets.**

Groups of five persons were arranged in various communicative positions, the three most significant of which are shown in Fig. 3-1. The question is whether comparable groups working on the identical problem will solve it in significantly varying degrees of efficiency. The problem is as follows:

Each man has a cup containing five marbles of different colors. Only one corresponding color marble appears in all of the cups. The problem is to discover what that single color is and to do it as fast as possible. Only written communications are allowed - only along the channels open in the particular network being tested. The job is not considered solved until all five men know what the common color is. The problem is used again and again for the same group in the same net, each time with a new set of marbles.

A record of speed, errors and number of messages was kept, along with clarity of leadership and organizational form. The results proved network III, the circle to be the most erratic and disorganized but most satisfying to its members. Network I, the wheel, was least erratic, solved problems in a neat and well structured manner with evidence of definite leadership but its members were less satisfied. Network II, the chain, reacted more like the wheel than the circle, with the person in the most central position, A, assuming leadership. Time differences among the networks did not have a significant variance from one another.

During conduct of the experiments, "noise" was injected by means of unusually colored marbles. In these cases, Network III readily adapted by developing a new code whereas Network I had a more difficult time of it with this more abstract job.

By use of some industrial criteria such as speed, clarity of organization, job description and miserly use of paper among others, the


centralized network I appeared to be more effective. However, by use of criteria of more shortlived connotation such as creativity, flexibility, loyalty and morale, the more decentralized Network III appeared the best. The scientific management theory based on Taylor's findings is reinforced by Network I, whereas the humanistic and participative theories are recognized in Network III. The most practical conclusion which could be drawn from these experiments, it seems, should be that each goal can be attained by a corresponding structure.

The structure of Network I, for example lends itself to the possibility of automation with a consequential elimination of the human factor.37

Communication is synonymous with information flow. Employees want to be well informed concerning the organization for which they work. Management tends instead to be somewhat secretive, thus tending to inhibit what could naturally develop into a sense of belonging on the part of the workers, a spirit of teamwork and cohesion.38

The character of the communication network, then as envisioned by Barnard and outlined previously can go a long way toward making a close-knit and well informed hierarchy. The resultant benefits through confidence and trust in both an upward and downward direction can more than compensate for any efforts originally required to design the network.

37 Leavitt, Unhuman, pp. 95 - 96.

By making all channels of communication known, there can be no suspicion of deviousness concerning a communication. Such knowledge would imply that persons in position of authority to authenticate/originate directives would be known to all, eliminating any zone of indifference as to appropriateness of action. Redundancy in lines of communication would be at a minimum but this would require that all lines necessary for proper dissemination be in use and never be discontinued in use for any period of time while the entire network is expected to function properly (i.e. in use except with legal notice to all). Communication is that dimension through which a purposeful intent is transmitted to those desirous of action and is best achieved through a properly appointed and duly authenticated network.39

The tremendous diversity of information which is to be distributed throughout the various channels in the network must be understood to be accepted by those for whom intended. It is of utmost importance to reduce to a minimum the possibility of being misunderstood. The context of the directive must be aimed at the audience with the fact in mind that every man carries with him his own context.40

Many words have connotations that are opposite in interpretation by the employee from what management had intended them to be. Other general pitfalls in the field of semantics to which management is easily susceptible are familiarity of persons with the actual meaning


of words and the emotional effects on people of certain words and phrases. In the meaning, the manager must make judicious use of familiar synonyms without overdoing the situation to the point of giving the impression of patronizing the audience. As for the emotional effect, an example would be the favorable feeling toward "incentive pay" as opposed to "piece work" or preference of "union shop" over "compulsory union membership". A proper understanding of the nature of material being transmitted in the light of technique and semantic comprehensibility can enhance the proper functioning of an organization. 41

The person who appears to always say the right thing at the right time is almost certainly a practitioner of the basic rules of communication rather than a person well versed in intuitive skill. A word can be deceptive and hold quite a different meaning for different people so that the need for thought and planning throughout the entire process of communication has proved to be of utmost importance.

5. Groups and the Individual

Management theory on group behavior in the operating atmosphere has been influenced greatly by the empirical observations of Frederick Taylor and his physiological of scientific management. Much of the concern over the physiological capacity of the worker failed to comprehend the complexities of human behavior. Thus, the recently past organizational theory has made such shallow and implicit assumptions as:

That people will attempt to fulfill only physical needs at work, worrying more over environmental factors than sociological problems.

That people will share group goal automatically, needing only to be shown what is expected of them and then proceeding to follow through.

That the average person will always try to optimize the solution to a problem, struggling to wring the maximum reward from each situation.

Such ideas are based on extremely simplified models of human behavior and tend to categorize those things which it would seem a person should do instead of what a person actually does. They ignore a) the interdependency of people and b) the complicated psychological aspect assumed by such factors as authority and responsibility of the individual in a group situation.

Small groups are the basic vehicle for goal satisfaction of the individual and therefore provide valuable insight into the larger organizational problems. We shall consider some modern and perceptive insights concerning group behavior in the following discussion.

Our society consists of a variety of groups and organizations of which the individual is usually a member of several. Each person is

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42 Leavitt, Managerial, p. 293.
43 Leavitt, Managerial, p. 294.
affected by the group and in turn contributes in some measure to changing form and ideologies of the group.

The contemporary social psychologist would usually recognize two categories of groups to exist:

. The **psychological group** where member behavior is mutually influential or interdependent. The group members share values and ideologies which are commonly evolved from member beliefs and interpersonal relationsuips. Such beliefs tend to set one such group apart from others.

. The **social organization** is comprised of many psychological groups, functionally related and joined in a common association to pursue a stated objective. 45

To expand the theory of group behavior on the individual, it must first be recognized that the very existence of a group is for the purpose of fulfilling member wants. It is then through association and interaction of the members that goals and ideologies are formalized, which in turn act upon the members to satisfy and influence the individual. Such patterns of influence can be of varying intensity dependent on the circumstances under which the individual became a group member (i.e. - whether by free choice or by external imposition). 46 Nevertheless, group members must come into eventual agreement on goals, no matter how varied the needs that first led to the initial affiliation. Interaction of members eventually mold the individual into the group image or else, if reconciliation

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is impossible, the person will dissociate entirely and seek an organization more suited to his needs.

There eventually persists in all groups a system or structure by which the roles of the individual members become evident. The system thus formed takes on a recognizable attitude which in turn affects the group function and the individual members. Regularity is now introduced into the group interactions. The formal organization emerges, characterized by lines of control, authority and communication channels. These functional channels are hopefully an efficient model for objective accomplishment. They should reflect the method best suited to obtain the group objective as visualized by the planner. The members are expected to behave within the limits projected by this formal organization.

Some of the organizational principles frequently observed to some degree; but nonetheless under criticism for various reasons by McGregor (38) and Simon (44) are:

- Task specialization which increases work efficiency and reduces skill requirements.
- Chain of command to direct the various groups through prescribed channels of communication.
- Span of control which limits the leader/subordinate ratio.
- Minimal number of levels will reduce administrative distance but is a contradiction to span of control.

47 Ibid., p. 412.

Group structure has a great deal of influence on member satisfaction. An hierarchical structure to insure a smooth flow of information throughout the entire membership must be developed. An example of some of the comprehensive study conducted in this area is the "linking pin" concept of Rensis Likert.⁴⁹

The "linking pin" function applies to all levels of an organization. The bottom of each level of management contains the key person in the next lower level. With all levels linked together in this fashion, an organization will acquire its full potential of effectiveness even if one of the pins fail. Such a structure can allow subordinates to share the load and prevent breakdown. The small group, high loyalty, overlapping organization is highly effective in three way communication flow. Should a conflict arise, a healthy society can deal with skill and mutual interaction because loyalty and trust are inherent where full flow of information is permitted.

Relationships between the individual and the organization are in a constant state of review and re-evaluation due to the sphere of influence between the formal organization and the individual, by virtue of informal activities and group associations. The entire organization therefore can be regarded as a behavioral system, subject to the psychological diagnosis of group behavior.⁵⁰

⁴⁹Likert, op. cit., pp. 113 - 115.

The leaders of the group have an important role in the shaping of goals and activities and in turn are equally influenced by the function and situation of the group. A hierarchy of leaders develops, with a consequent decentralization of control in some form. The patterns for choosing leaders are varied, for example:

- Conflict from within may require a balance of power leader.
- Outside threat may bring forth a strong organizer.
- Personal characteristics which are enhanced by a peculiar situation may be in evidence.

It is also true that not only the leader, but the leadership distribution will be determined by the situation creating the need.\(^{51}\)

The functions of the group leader are varied and as numerous as the texts in which discussed. Performance differences are accounted for by two descriptive dimensions of leadership behavior:

- **Consideration.** This is concerned with motivation of the group toward accepted goals with concurrent harmony and group satisfaction.
- **Initiating and directing.** This behavior is achieved by providing ways and means for goal achievement and acquiring coordinative effort among the members.\(^{52}\)

Over a period of time, the group will undergo a series of changes in structure and leadership due to conflicts and membership fluctuations. Internal conflicts are many and varied but in most instances seem to be

\(^{51}\)Krech, *op. cit.*, p. 424.

\(^{52}\)Ibid., p. 432.
self-equilibrating, tending to reduce internal tensions which have been building up within the group.

External conflicts are dramatic in many instances, causing splits and dissention within various sub-groups. In extreme cases, the original group function may be compromised, with a change in organizational function resulting from the conflict.

Member changes within a group can cause either radical or subtle differences in the structure. Even the aging of a group can cause psychological changes among the members. Special values are most likely to alter in connotation over a period of time.\(^5^3\)

The nature of the situation in combination with the talents of the individual, act in concert to determine his independence from or adherence to group pressures. The role in the group structure has an impressionable and lasting effect on his personality.\(^5^4\)

6. **Summary**

Motivations, which are peculiar to each worker, are becoming more and more the concern of management. Continual studies and theories concerning the proper role of the employer in concert with the worker are being devised and tested (operationally where possible). Attitudes toward the people lower in the organizational hierarchy are being affected by humanistic and behavioral science influence, along with the practical application of contemporary industrial revisions.

\(^5^3\)Ibid., p. 452.

\(^5^4\)Ibid., p. 529.
The source of authority, then, must be recognized as originating in the consent of the governed. This applies to all sizes and types of organization. Both large and small groups have goals which appeal to the individual and as such serve as inducements for him to become a member. Through judicious use of the channels of communication available to those in a position of authority, individuals in the various groups can be influenced to accept decisions and directives which comprise the sum of requests for authority.

To positively influence an individual and enhance personal goals, needs and motivation, channels of the communication network must be all encompassing, well supervised, direct, continuous and carry only those directives which are easily identifiable as originating at a position of potential authority. Consistency of actions by those in positions of authority tend to alleviate any doubt concerning authenticity of communications by individuals along the chain of command. This development of reliance on the judgment of superiors creates an area of practically unquestioned acceptance and reduces the possibility of rejection of authority. Separation of levels of the hierarchy requires a continuing review of the consistency between group and overall goals to determine the effectiveness of the communications network and to assure the perpetuation of authority.
CHAPTER IV
EVALUATION AND SUPERVISION

1. Introduction

Future personnel decisions are being continually shaped and influenced by trends which are being generated and by forces at work today. Management, therefore, must certainly have some insight into the skills that will be needed to cope with future trends.

Opinions naturally vary widely, but there is a good deal of agreement that such forces as technology, efficiency, competition and the welfare state will most probably be dominant trends leading toward both unemployment and the associated counter to alleviate security needs. Attention must be diverted to the training and personnel needs of the professional employee.¹

The general fields of knowledge which will be highly utilized to meet future changes include psychology, business management, sociology and mathematics high on the list. Inclusion of these fields so high on the preference list is related to recent interest in group dynamics, the growth of industrial technology and the application of quantitative solutions to problems in the business atmosphere.

The major concern of management is that a more democratic-oriented, vice autocratic-oriented skill will be necessary in gaining the required cooperation of labor. Human relations factors with emphasis on counsel-

ing skills will have to show an increase commensurate with sophistication involved in dealing with a better educated employee.²

Management must make judicious use of the tools of personnel administration based on an understanding of those management concepts which though flexible and open to revision, are the bases on which an orderly and continuing transition from present to future requirements rely.

The advancement of personnel is inherent in a progressive industry. The tools for advancement programs are exploited with varying degrees of success and include such factors as:

a) Performance appraisal techniques.

b) Supervision.
   
   (1) Training programs.

   (2) Interviews and counseling devices.

   (3) Aptitude testing.

   (4) Motivational environment.

Several types of employee ratings will be discussed. With the exception of the specific factors, employee ratings and supervisory ratings are very much alike. Supervisory ability affects advancement in so far as the interpersonal relationships between supervisor and employee allow an exertion of influence upward through the chain of authority/communication toward the enhancement of employee motivational needs. Training programs are the responsibility of upper management as well as the middle and lower hierarchy of supervisors. Adjuncts of these tools are the testing and counseling devices which are best utilized in the hands

of specialists and as such serve to point out traits and abilities which a person possesses and provide a means of discussing any matters which may be reoriented to the benefit of the individual and the group.

2. **Evaluation**
   
   a) **Introduction**

   The evaluation of an individual's performance to determine his present and future worth to an organization or group is one of the most difficult of the problems presented in personnel administration. The importance of meaningful performance evaluation techniques is increased by the changes in our business world, i.e. gradual shift from blue collar to white collar; increasing size and complexity of organizations; owner separation from management of firms with a shift to professional managers and staff management organizations; complex job structures with specialization and lack of significant correlation between the individual's effort and the total product; utilization of machine computers which enable top management to examine minute details of an organization; increased emphasis by management on concepts of human relations. Accordingly, the purpose of the following section is to examine the methods currently used for performance evaluation and methods which may be used in the future.  

   b) **General Characteristics**

   The two most common and simple techniques of determining an employee's worth to an organization are: (1) informal evaluation of the employee by a supervisor, manager or owner of a firm without regard to

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detailed analysis of specific traits and (2) the use of seniority (prevalent with blue collar workers) to determine personnel actions. However, as noted above, the changes in our business world today have required the manager and owner to place increased reliance on performance appraisal techniques which give more meaningful data on the employee in order to best utilize the human resources available. The specific uses of a performance appraisal system are as follows:

a) Promotion or advancement.
b) Employee development.
c) Hiring and firing.
d) Allocating workers to jobs.
e) Validating decisions made with regard to promotion and/or wage compensation.

In determining the method of performance appraisal or evaluation to be utilized, the objectives of the appraisal system must be defined in terms of one or a combination of the uses listed above. Thence, it is a matter of adapting the evaluation system to the objectives by considering one's resources (both financial and personnel); and the organization; validity and reliability of the different methods; and the traits or factors for which a measure is desired. In addition, consideration must also be given to certain errors which are inherent to varying degrees in all appraisal methods. These errors

\[\text{Ibid.}\]
or fallacies in obtaining objective evaluation can be summarized as follows:

Halo Error. This is probably the most common error in performance evaluation and stems from the tendency of a rater to evaluate an individual high or low in all traits because there is a particular trait that the individual demonstrates which the rater likes or dislikes. In other words, one stand-out trait will dictate the evaluation of all other traits. Another explanation of the halo error is the inherent dislike of people to judge others when the rater is aware that he is "playing for keeps" and his evaluation will have definite effects, either good or bad, on the individual's future. This results in a tendency on the part of the rater to give more favorable evaluation reports than would be objectively deserved.

Over emphasis of recent behavior. Most evaluation reports cover an employee's performance over a period of time varying from six months to a year or more. Therefore, when the rater is making up the report, it is only natural for him to think in terms of the employee's most recent behavior. As a consequence, if the employee has been superior in his performance during the last few days prior to the evaluation date, the report may indicate superior performance for the entire period although the employee may very well have been unsatisfactory ten of the twelve months of the reporting period.

Personal bias. Personal bias or prejudices play an important

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part of any judgment made with respect to human behavior. The ability or inability of a rater to recognize his bias and attempt to exclude such factors from his objective evaluation is difficult, to say the least.

**Constant Errors.** Constant errors are introduced into an evaluation system by the manner in which raters will evaluate their subordinates. Some raters will consistently evaluate high, while others will evaluate low. In addition, some raters will take the "middle of the road" approach, either high nor low.

**Standards of Satisfactory Job Performance.** Probably one of the most difficult problems facing a designer of an evaluation system is that of specifying the performance standards for employees. The criteria used establishing the standards must be tailored to the job for which the employee's performance will be rated. If the standards are not defined or realistic, the results, of course, will be meaningless and the system a waste of time and money.

c) **Performance Appraisal Methods**

**Graphic Rating Scale Method.** This system is the oldest and most common formal method of performance evaluation. Research had indicated that this method has the highest reliability although it's validity in all cases is a matter of argument. Basically, the system employs a format which lists certain traits (selected by the organization as desirable) on a continuum scale that runs from favorable to unfavorable. Various adjective descriptions are given for the degree of favorable or unfavorable performance along the scale. The rater

merely checks the adjective phrases that best describe the employee. The scale enables the quantification of the data reported.

The advantages of the graphic rating scale can be summarized as:
(1) easy and cheap to administer in terms of money, time and rater ability; (2) data may be quantified which lends to machine tabulation; (3) individual differences may be marked to a degree on the scale; and (4) the system requires the rater to consider individual traits of the subordinate instead of attempting to evaluate him as a whole.

The major disadvantage of this method is the so called halo error discussed previously. This error may be offset however, by the use of forced distribution, i.e. analyze all of the particular rater's evaluation reports and force, by weighting traits, a normal distribution.

Forced Choice Method. The forced choice method was pioneered and to great extent developed by the U. S. Army. Again, the individual is judged with regard to certain selected traits deemed desirable by the particular organization. Essentially, a specified trait is listed with four descriptive phrases called tetrads. Two of the descriptive phrases are favorable and two are unfavorable. The rater is required in each tetrad, to mark the most descriptive and least descriptive phrase. In as much as two of the phrases appear equally favorable, and two of the phrases appear equally unfavorable, the rater is not sure whether or not he is marking the individual high or low.

The advantages of the forced choice method are: (1) does not lend itself to manipulation on the part of the rater in attempting to force

7Ibid., pp. 274 - 276.
a high or low evaluation; (2) reduces bias and prejudice influences on the part of the rater; (3) forces a better distribution; (4) lends to quantification and machine tabulation; and (5) forces objective evaluation.

The major disadvantage lies in one of its advantages. If the objective of the program is counseling and employee development, forced choice cannot be used due to the secrecy involved. In addition, the system is complex and requires expert design in setting up the tetrads.

**Ranking Methods.** This system consists of ranking individuals within a group in order of best to worst in specified traits. The only judgment on the part of the rater which is required is the comparison of the members of the group with each other.

The primary advantage of the ranking method is that it is a simple and natural way to judge individuals. We make such comparisons every day in our judgments. Disadvantages include: (1) difficulty in administering to large groups and (2) results do not determine absolute values in the differences between individuals such as how much better the individual ranked number five is than the person ranked number six in absolute values.

**Critical Incident Method.** Briefly, this method encompasses the systematic recording of noteworthy incidents in employee behavior. The

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definition of a "critical" incident is one in which an employee has done, or has failed to do, some function or duty which results in other than routine success or failure. The method entails the recording, by the supervisor, factual data concerning the incident. This data is subsequently analyzed and interpreted to determine trait characteristics and their strength and weakness.

The major advantage of this system is that the data recorded is factual information and therefore objective for the most part. The major disadvantage is in the analysis of the data, as subjective analysis must be used to determine traits. In addition, the method is fairly time consuming and requires considerable paper work on the part of the recorders.

Two additional methods which may be used in combination with one of the above described methods or by themselves are the free-written rating method and the peer ranking method.\textsuperscript{10}

The free written rating is simply an overall unstructured description of the employee behavior. The advantage of being simple and easy to administer is offset by the disadvantages of subjective unstructured analysis, data does not lend itself to quantification, and the method is time consuming.


The peer ranking method is the same method described in ranking procedures; however, the raters are peer members of the group. The theory is that a co-worker knows the individual better than a senior or supervisor. The major advantages, in addition to those discussed in ranking techniques, are relatively high validity and reliability.

In summary, there are certain inherent errors in any of the techniques of performance appraisal today. These errors must be recognized and an attempt made to minimize their effects by education of the raters. In choosing the technique to be utilized, two factors are critical:

(1) The appraisal technique must be matched with the objectives sought.

(2) Realistic performance standards should be defined and indicator traits of behavior specified.

Further, consideration must be given to resources in the form of personnel talent, time, and money available to meet the desired objectives. From a review of the techniques discussed, it is apparent that the ideal situation would be one wherein resources available would be sufficient to utilize all of the techniques or combinations of techniques to encompass all of the possible uses of an appraisal system.

3. Supervision

The person in a supervisory billet is there because he has responsibility for more work than one man can do. He must depend on subordinates to help get the job done and the degree of success in accomplishment reflects in a great measure his influence with the subordinates. There-
fore the supervisor's job is people, not production, although he is responsible for production.

Too many line managers above the middle management level use the excuse of production responsibility to excuse themselves from human relations responsibility. But such top level superiors should evaluate the techniques used in dealings with subordinates, those people who are going to accomplish production.  

The worker is dependent on the supervisor in many aspects. From the time a man is new on the job he is dependent for his need satisfaction, commencing with his pay rate, job security, and environmental factors and progressing to egoistic needs such as recognition of achievement, growth and eventual advancement. However, this dependence should not reach the point where it stultifies initiative and aggressiveness. Argyris has made the point that subordinates are dependent in some degree, consistent with the skills of the supervisor, for most of their rewards, penalties, authority, perpetuation, communication, and identification.

In the conduct of the affairs of an organization, a manager/supervisor if forced to take account of various environmental pressures which are related to the type of organization, the nature of the problem, effectiveness of the group and time element involved. He is challenged by


13Ibid., pp. 64 - 66.

restrictions forced upon him by such pressures but must attempt to view them as variables which can be oriented toward the accomplishment of long range objectives. These objectives are very nearly standardized in the scheme of modern management and follow this approximate pattern:

- To further the individual employee development.
- To raise the motivational level of employees.
- To enhance worker readiness to agree to change.
- To develop morale and teamwork.
- To improve managerial decision quality.

The successful supervisor must understand himself, the individuals, and the group with which he is dealing, and be able to assess the readiness for growth of his subordinates.\(^{15}\)

a) **Training Programs**

A systematic training system is essential if the human resources of an organization are to be utilized in an efficient manner to attain a continuing satisfactory level of performance. The most usual practice involved in training has dealt with the day to day relationship between the supervisor and the men with whom he has to do the job. In addition, modern scientific management has begun to use a supplement to this practical method of training in the form of staff experts who set up and supervise, usually by remote overseeing, vehicles such as course written material or machinery mock-ups. In many such instances, the supervisor has the first-line control over such programs.

Varying in specifics with the individual case at hand, a general statement of training purposes is as follows:

- Develop employee skills to enhance effective work performance.
- Transmit information concerning policy, product and services.
- Modify attitudes of workers in an effort to insure proper motivational atmosphere toward achievement of individual and organizational goals. ¹⁶

Administration of the training program is usually accomplished by the organization itself with expert or institutional assistance in technical or classroom phases if required. Types of training are usually categorized as follows:

- **On-the-job training** which involves, hopefully, a systematic effort by supervisors while the employee is actually engaged in work.
- **Apprentice training** which consists of a mix of classroom instruction and shop practice supervised by a craftsman with the eventual goal of craft qualification.
- **Supervisory and management training** which is aimed at an improved level of knowledge and skill among those persons responsible for handling personnel.
- **Vestibule training** which stresses the training aspect rather than production effort, is conducted at a distance from the job site utilizing facsimile machinery.

Technical training is found in varying forms but almost always deals with a specialized facet of a job or a related job.

Orientation training can be used both for new employee familiarization or present employee instruction regarding the organization and tends to be motivationally oriented. 17

Of all the job training types listed above, the first three are most commonly found and will be discussed further:

1. Apprentice Training. This is the primary method of skill acquisition in the skilled craft trades. With the exception of perhaps, the college-trained technician, no other group of industrial employees receives such a lengthy and arduous training period as the skilled craftsman. In fact, such training programs have a minimum number of hours training as a requirement of the federal government. Such a lengthy program which results in a commensurately high level of skill is of great concern to employers and managers since any unnecessary turnover in such trained personnel represents quite a healthy sum of money and effort gone to naught as far as the immediate organization is concerned. 18

Everything possible to retain such persons involved in an apprentice program must be done. This runs the gamut from equitable contractual arrangements to a proper battery of psychological tests to aid in the selectivity process and eventual promotional enhancement. In respect to


the former, union membership is quite frequently the governing feature. As to selectivity, some of the contemporary skills in this area will be discussed later in this paper, however, it can be said here that work differences and behavioral complexes are of growing concern to supervisory and management personnel. There is the necessity, due to rapid advances in technology, that an employee not only be able to do the job in a highly competent manner but also that he be temperamentally suitable to the job. This implied relationship between job performance and personal traits has been borne out in the past few decades by many studies which in summary indicate the practical advantage of matching employee jobs and abilities.  

(2) Management and Supervisory Training. An important and new emphasis has been placed in recent years on this type of training. Actually the shift in duties involved in supervisory and management capacity has triggered this need for parallel training. Many functions such as hiring, firing, and discipline have been taken over by staff experts with additional responsibilities falling to the lot of supervisory personnel such as:

(a) Social legislation and union contract interpretation.
(b) Grievance handling.
(c) Communications link between upper management and employee.
(d) Key role in human relations development.
(e) Interpreting company policy and regulations.


Support from top management for such a program is essential, for it involves an approach to training as a whole which can maximize the entire training effort of an organization. The basis is a multiplication of training effort achieved by this training of managers and supervisors to become capable on-the-job trainers themselves. No organization could justly refuse such an opportunity. Through the proper training of supervisors in the technique and principles of job training, coupled with the ability to make them feel that such a function is a vital part of their job, the training program can be made highly effective all through the organization.  

Today, more than fifty percent of the national labor force have high-school accreditation and the technical work force is increasing at three times the rate of the total population. This educated society has forced the adoption of radical and unique training methods and above all, the supervisory level must be adept and productive in their own right. Management must be flexible and adaptable to thinking about training in terms of tomorrow. The worker must be taught with a theoretical background which is broad enough to think of his job in its perspective of the larger task of which it is a part. In other words, the skills which are stressed at present in the apprentice program will become a part of a more general background of the worker. Supervisory and management talent, properly oriented by sufficient training

themselves, will be expected to supplement the uni-directional outlook of the craft tradesman to enhance the eventual advancement of the craftsman in a foreseeable work atmosphere free of narrow tradition and dependent more and more upon originality, perception, imagination and mental flexibility. The eventual goal of supervisorial training will be the alleviation of a great deal of the vis-a-vis tedium in the explanation of many present day problem areas through worker self-supervision and contribution to problem solving.²²

(3) **On-The-Job Training.** Line management has the primary responsibility for training. A reasonably close estimate of the amount of worthwhile employee change which takes place in the job situation is ninety percent of the total change. It is in this atmosphere that the worker makes his money, associations, decisions affecting upward motivation and his errors as well. All this is done in the scope of influence of his supervisor. In all the rewards noted above, an exchange of information between worker and supervisor could have the effect of a complete re-orientation of activity, should that information be of consequence to the situation. Here is the phenomenon of "feedback" which is in this case merely a reflection by the supervisor on previous action by the worker which can open a more constructive approach to future treatment of the situation at hand. The exchange is instantaneous and the worker is apprised of the potentiality of his past and future actions while in the work atmosphere.

The supervisor must know the abilities of his personnel in order to best direct them. The whole man must be considered, which means his overall relationship with job environment and community. In the course of his duties he will be conducting an evaluation program, formal or otherwise, considering the performance of each worker. Points of concern which the supervisor must question are, for example:

(a) Effective arrangement of job responsibility.
(b) Use of full potential in job situation.
(c) Benefit to be gained from a job change.
(d) Training needs in way of skill, knowledge and attitude.
(e) Qualifications for advancement.²³

Sometimes a worker gets an insight that he is capable of better performance. This is a good test of a supervisor's ability to conduct on-the-job instruction. He must first uncover some gain or reward of worth to the worker, then study the present performance to determine where improvement is possible and then insure that adjustive responses within the psychophysiological tolerance limits of that person are created which will effect an improved performance.²⁴

(4) Current Factors. Current factors which are adding emphasis to training as a function are (a) increased job security resulting from union contracts and a tight labor market and (b) an accompanying seniority increase. Both of these factors point to the fact that the

²³Kellner, op. cit., p. 296 - 297.
persons that are trained by an organization will probably be around for a longer time than heretofore anticipated. Therefore the training job had better be done effectively if the future work is to be carried on to higher productive levels. Also, the security of the job will fulfill lower needs in the hierarchy with a resulting challenge to management to provide rewards for higher-order needs.

Seniority promotions in industry presently outweigh merit promotions for various reasons but mainly as a reward for a kind of behavior which is valuable to an organization and at the same time a social asset. This type of promotion does take away the conventional short term reward and punishment opportunity so that the supervisor again is forced to look to substitutes in the higher-order need fulfillment. However, in any case, merit or seniority promotion, the organization must have the responsibility of insuring that an adequately trained man is ready for the transition.

The training program must have clearly conceived objectives and a staff able to accomplish them in the light of psychological and human relations techniques.  

b) Employee Counseling

Although in many instances the difference between counseling and interviewing is hard to discern, counseling is generally thought of as an interview type which attacks a problem area through the attitudes and feelings of the person concerned. During the process of selection for advancement, some areas of concern with employee traits or adjustment may come to the attention of the supervisor. In many cases, just the

ability to detect personality flaws could mean the difference between an able person filling a position or not. The supervisor need not be a trained counselor since many corporations now have professionals on their staff to assist employees with distractions. However, the supervisor may find it useful to understand the most prominent methods used in assisting troubled employees, if only to know what he should not do in some instances where he would otherwise be tempted to step in and court disaster.26

The method of counseling to be used, generally depends upon the severity of the situation and the responsiveness of the client. Trouble shooting in an industrial atmosphere would usually be centered around:

(1) **Advice**, which is a solution offered without probing into the real causes of the crisis.

(2) **Guidance**, which guesses at the reason for the disturbance and gives the person several alternative solutions for his own choice.

(3) **Counseling**, which attempts to uncover the real cause of the crisis and leads the person to an understanding, and hopefully to overcome the problem.

The first method is representative of a form of counseling called directive counseling, wherein the counselor steers the interview along, getting a feel for the person, forming a hypothesis, predicting future action and analyzing in the hope of solving his problem.

The third method, refers primarily to non-directive counseling of which Dr. Carl Rodgers is an avid proponent and pioneer. In this method, the counselor need not be expertly trained and so it lends itself to more widespread, still cautious, usage. The counselor neither gives advice nor attempts to diagnose in this case, rather he acts as a sounding board for the client, in the hopes the client really has a better knowledge of his own situation and will get an insight into his problem just by talking. The method here is for the counselor to listen without appraisal or criticism, allowing free expression in the hope of reducing frustration and tensions.27

A by-product of this non-directive counseling is the fact that during the course of its conduct a communication of worker attitudes to management is being accomplished. This is generally harder to accomplish than communicating to the workers. Therefore, a supervisor cognizant of counseling methods can aid in the selectivity, promotability and communicative efforts of workers with a simple and discretionary tool which can be used with minimum disruptive influence.

c) Test and Interviews

Techniques commonly used in evaluating personnel for advancement and selection have previously been discussed. Closely related to these evaluative tools are psychological tests by which many characteristics of an individual can be measured, and based on these measurements, comparisons between individuals made.

(1) **Testing**

The basic purpose of testing is the prediction of individual action, and the principal value lies in the recognition of test limitations by the user. Some inherent characteristics of tests which should be recognized are:

- Complex vocational or learning situations do not lend themselves to accurate predictability of personnel reaction.
- Measurement techniques are tools used to present evidence, not to make the decision itself.
- Test scores of all behavioral measurements can show only what the person scored, not why.\(^{28}\)

The use of tests for personnel placement and selection gained increased acceptance after World War I. During the past few decades, considerable research and test development has placed more reliability and validity in tests to be used for promotion and training. At present few organizations use such tests for promotion but this approach will surely come into more favor as it can reasonably assure that a person has the requisite knowledge to handle a job of higher qualification. Testing is slowly overcoming the reluctant attitudes of executives, managers and union leaders, each with their own prejudices and mindful of the previous validity obstacles which the art of psychological testing has had to overcome.\(^{29}\)


\(^{29}\) Chruden, *op. cit.*, p. 187.
A few of the most common tests used in industry today are thus highlighted:

(a) **Aptitude tests** are used to predict success in an occupation or training course, characterized by the standard tests. They rely on the fact that each measurable aptitude is usable in several occupations thus allowing a series of standard test batteries to be utilized and normed to yield scores for a number of occupations. The General Aptitude Test Battery developed by the U. S. Employment Service is an excellent contemporary example of both accumulated occupational normative and validity data with applicability to adults and adolescents.\(^{30}\)

(b) **Personality tests** have been developed to measure characteristics and traits such as self confidence, emotional adjustment and dominance-submission. Although this type test has been subject to "faking", the recently developed "Gordon Personal Profile" is of a force choice nature which reduces the possibility of falsifying results.

(c) **Dexterity tests** of which the "Stromberg Dexterity Test" is representative, are related to jobs requiring assembly and miniaturized repair facility.

(d) **Vocational proficiency tests**, although not able to measure aptitude can measure skills and knowledge already acquired. Such tests are used as bench marks for advancement success for candidates already in a trade or vocation.\(^{31}\)


\(^{31}\)Super, op. cit., p. 154.
The ground rules which have developed thus far concerning the use of projective testing in industry are to use such tests:\(^{32}\)

1. When no better method exists to make judgments.
2. When cost of the program justifies it.
3. When results are a supplement to and not a replacement for judgment.
4. When reliability and validity of that test are reasonably certain.
5. When it applies to a specific situation.
6. When competent personnel are available to evaluate the results.

Cost is a big consideration for the organization; and employee acceptance of the methods when being used for training and promotion purposes may nullify its value. Usually one-of-a-kind examinations may cost $75-$250. Large groups reduce the cost to a charge of perhaps $75-$200 per day.

Good test results have been obtained in clerical and assembly work while marginal success has been recorded in supervisory selection and professional work. Psychological testing, then, must be considered as only one of many elements to be utilized in judgment which selects personnel but when used in a judicial and sober manner can be of benefit in the selection of personnel for advancement.\(^{33}\)

\(^{32}\)Projective technique refers to a type of testing utilizing such tools as Ink Blot test, TAT, word association, polygraph and psychoanalysis.

(2) **Promotional Interviews**

(a) An interview of this sort is rather difficult to define structurally since it falls between an employment and counseling interview. The candidate at this point is assumed to possess the technical merit required for the higher position, thus the interview is largely in consideration of the motivation of the person for advancement in the organization.

The interviewer must know the reasons for attaining present position, whether by true merit, chance, or with external influence. Emphasis must be given to the relation of the individual with the group and any functional tendencies under added responsibility. Major attention should be paid to the manner in which the candidate relates to the person holding the interview. An attempt should be made to evaluate whether or not the client tends to exaggerate his abilities, seems unrealistic in his demands on the organization or himself and in general assure that the atmosphere is one of honesty and candid exchange of information. The candidate must be informed of any external information gathered and the results of the interview should be included in a feedback of the entire advancement effort to the individual.  

34 The "exit interview" is also a source of feedback information of value to employers regarding advancement from the negative side if the interviewer is experienced.

The important quality of the interview is to assure that the technical facility of communication is present and that hidden motivations do not dominate the exchange, keeping the interview within the scope of its purpose.

(c) Another important use of this type of interview as implied above, is the feed-back of test results including their ramifications and an educational presentation of their meaning. The prospective promotee is entitled to know where his weaknesses and strengths lie. He should be given palpable facts and a chance to express himself in the light of his own insight into the situation as it develops. Remedial suggestions must be made for the self-corrective feature of feedback and the employee must be guided toward overcoming any deficiencies through self-improvement and self-insight.36

(3) Retraining Tests and Interviews

Technological advance resulting in mass unemployment in many industries has created a monstrous problem both in concentrated sectors and in wide areas of population. A majority of persons left jobless are unskilled or semiskilled thus multiplying the task of relocation.

The big drawback in relocation of these persons is the extremely high cost to private industry in providing adequate preliminary facilities such as testing and physically retraining those found adaptable, in a new trade. The tremendous expense and impact on the economy

emphasizes the fact that future anticipation in relocating such affected personnel will have to be a part of industrial relations.

Such a broad subject could easily be handled by a separate research series and so is only briefly mentioned here as a future need for testing and interviewing services of great importance to an expanding economy.

d) Motivational Environment

The human motive which appears to many modern businessmen to have been greatly responsible for economic growth is that of achievement. It is also known to some as the self satisfaction of accomplishment, but under any name the inherent incentives of worthwhile contribution to society by the individual is a keystone to organizational success.\(^37\)

The social setting of the employee must be central to his life interests or he will not be dependent on his job to furnish any of the used concepts other than the basic physiological rewards. He will have no motivation to continue an effective work performance but will rather fulfill his higher needs in institutional settings which are more congruent to his desires. The manager is continually struggling against indifference and apathy in his workers and the centrality of interest by workers could explain some of the difficulty.

The legitimate goals of the organization, therefore, must be plausible to the individual and a means for achieving them must be presented. Individual achievement motivation is strengthened in the


informal group association and is grounded in the prior belief that the organizational cause is a worthy one. Many corporations deliberately publicize the worthy corporate image in hopes of inspiring members into developing the proper moral predisposition and sense of obligation and accomplishment from the social setting.\(^{38}\)

There exists a difference between the needs of a formal organization and those of a mature individual. This gap tends to increase as the employees mature, as the structure is compressed for effectiveness, as work is mechanized and the farther down the chain of command one looks. Such disparity is frustrating and can be solved by the worker by several courses of action as developing an apathetical disinterest, quitting altogether, utilizing defense mechanisms, or by overlooking the short-term disparagement and making the effort to achieve and climb in the organization.

Here, then, is the dilemma facing any supervisor who has the least tendency to be a disinterested leader. To effect an achievement motivation, dependency and submissiveness on the part of the worker must be decreased through such methods as job-enlargement and democratic or some degree of participative leadership. Paradoxically this must be accomplished through directive leadership which seems to recreate the problem. However, the development of a technique in dealing with employees in this area should be emphasized.\(^{39}\)

The individual must be convinced that his job is a source of need satisfaction central to his life interests. An inherent desire for

accomplishment will be forthcoming only when this person is able to identify and associate himself with organizational objectives.

e) **Summary**

Various methods of personnel evaluation are being used by industry and the military today running the spectrum from graphic scale to forced choice. In addition, evaluations are being used for many purposes, both intended and unintended, including advancement, merit pay rating, job selection, distribution, relocation and development.

Continual research in selection and evaluation methods is being carried on in an effort to enhance the validity of present and proposed testing and evaluation methods. The Basic Battery Test used by the Navy saves an estimated $25,000,000 yearly by virtue of reduced attrition of technical school trainees. Projects to further develop criteria against which to validate selection instruments are of consequence in the Navy research portfolio.

Supervisory methods are sure to be under the closest scrutiny as technology advances the state of the industrial art. To insure continuity, organizations will have to orient training of all personnel toward a wide perspective of knowledge. Skills soon to be outmoded must be supplanted by a broader theoretical knowledge, with the worker able to think in his job with a sense of flexibility and imagination.

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CHAPTER V
SUMMARY AND CONCLUSIONS

1. Summary

As stated in Chapter I, the purpose of this research study is to analyze the present Navy enlisted advancement system in an attempt to discern whether or not contemporary management concepts surrounding the relationships between the individual and his human environment are being exploited by Navy personnel management practices.

From a review of the information presented, it is readily apparent that an advancement system is of primary importance in the practice of effective personnel administration. Also, an advancement system is designed and administered with consideration of the problems and facets of motivation, communications, group behavior, authority, training, counseling, performance appraisal, testing and interviewing. This combination of many different factors in an advancement system is particularly true of the Navy, as advancement or promotion is the key to fulfilling motivation needs in the form of increased responsibility, status and monetary rewards.

With the importance of an effective advancement system in mind, the most striking difference between the Navy's enlisted advancement system and that envisioned by progressive management concepts lies in the difference between the fundamental objectives of the systems. The Navy's demonstrated objectives are to impartially select those best qualified for advancement first. While progressive management recognizes the importance of impartiality and selection of the best
qualified first, of primary importance is the development of the individual or exploitation of resources available. This emphasis on individual employee development can be traced to purely economic reasons wherein the progressive manager will attempt to obtain the most productivity from his factors of production. Or stated another way, the Navy uses the advancement system, to a great extent, as a sorting and allocation system while profit minded progressive management would tie the system to improving human resources in order to obtain the most for their dollar per labor production costs.

Obviously, we in the Navy would prefer to have an advancement system which embodies the objectives of improvement and motivation of the individual in order to meet the Fleet's demand. To say that we do not now have such a system, nor do we recognize the importance of such a system, requires justification. Therefore, the summarization of this research paper will be concerned with a comparison of management concepts and techniques set forth in Chapters III and IV with the enlisted advancement system covered in Chapter II. Before making the comparison, however, the following factors unique to the environment of the Navy must be considered:

1. Large organization of enlisted personnel scattered throughout the world at many and varied duty stations.
2. Some sort of centralized control of advancement is required due to allowance versus onboard manning levels, budget limitations requiring Navy wide control, and equitable distribution of available man power based on the needs of the Navy as well as that of the command.
3. Lack of qualified personnel administrators at each command.
Unique mission of the Navy versus that of a civilian profit motivated organization.

Rotation of personnel from command to command.

a) **Comparison of Management Concepts**

(1) **Motivation.** Certainly, the statement can be made that the advancement system in the Navy is a prime factor of individual motivation. A sailor's success or failure in the Navy stems from the advancement system and therefore, plays a large part in the fulfillment of his motivation needs.

How has the Navy designed and used the advancement system to enhance this motivation factor? A critical answer would be by centralized control, heavy weighting of written examination results for use of quota control, emphasis on textbook learning for textbook answers for the examination, competition with statistics vice co-workers, and lack of interest on the part of immediate supervisors (other than recommendation for advancement). It appears that the motivation factor concerning enlisted advancement is limited to insuring impartial and equal competition throughout the Navy.

(2) **Authority.** Following Barnard's theory of authority, it appears that the authority of the commanding officer is somewhat undercut by the advancement system. Specifically, the individual must see in the authority's (commanding officer's) exercise of power over him, some means to his own goals, or effective authority is not present. This brings rise to the question of what authority does the commanding officer have with regard to advancement? The answer is that he can refuse to recommend or advance an enlisted man, but he does not have
the unilateral power to advance a man. In addition, his active assistance in helping the man to advance is limited due to weighting of advancement factors which places the most emphasis on written examinations. As a consequence, and due to the limited time an enlisted man is at any given command, the individual can very well fail to give the commanding officer the authority that is required by the commanding officer in the execution of his duties.

(3) Communication. The requirement for effective two way communications in an organization has been discussed in Chapter III. The Navy recognizes the importance of communication in tactical functions, of course, and provides for such communication networks in administration of the advancement system. However, analysis of the Navy system in comparison with the models discussed in Chapter III reveal the following discrepancies:

(a) Formal minimum length channels for every member with regard to advancement follow the chain of command. The knowledge of command level officers with regard to individual advancement opportunities, examination material and standing of the individual with regard to competition is lacking, to say the least.

(b) Motivational material such as attitudes and reactions, goals and objectives are in the form of one way communications from BUPERS. Feedback is dependent upon assignment of fleet personnel to billets in the Naval Examining Center and BUPERS.

The use of profile cards to acquaint the sailor with examination results is one method of individual communications with the "ivory tower". When faced with feedback to the "ivory tower", however, communications end.
Groups and the Individual. The dynamic action of groups within a command is related to advancement in the form of leadership selection. The Navy, by necessity, must rely on "headman" leadership of a group. That the individual sees or does not see in his leader a means to fulfill his own goals increases the consequences of arbitrary selection of leaders by a remote entity. By what criteria does the advancement system provide for the selection of a leader? If we equate technical knowledge of an occupation with leadership capability we have a fairly accurate measure for selection. That we cannot equate the two, and this due to the performance appraisal system and weighting method, leads one to conclude that selection of leaders leaves much to be desired.

b) Comparison of Management Tools

(1) Evaluation. As discussed in Chapter IV, the Navy uses the advancement system for advancement and allocation of personnel to jobs. In addition, employee development could be considered to be an adjunct of the advancement system if training and counseling is utilized at the command level.

The use by the Navy of the graphic rating scale method of appraisal appears to be necessitated by the requirement for centralized control, simplification of reporting, ease of quantification of data, and uniformity. The weighting factor, insofar as advancement is concerned, stems from the halo and constant errors previously discussed. As a result of using only the graphic rating scale with its errors, the written examination has been utilized, by weighting, to make the real determination as to whom
shall be advanced. Simple experimental manipulation of advancement scores of the various factors used in reaching a final multiple leads to the observation that performance evaluation does not play the dominant role, by any means, in advancement of the sailor.

(2) **Training.** The requirements of the enlisted advancement system for training fall in three categories; (a) schools, (b) on the job training with fulfillment of required practical factors, and (c) self training by studying for advancement examinations. The responsibility for the first two categories lies with the command, and responsibility for the third with the individual. In measuring the effectiveness of the three categories of training insofar as advancement of the individual is concerned, we would undoubtably conclude that self training is the most effective. This is caused by the fact that the training of an individual within a command by the use of schools and on the job training is dictated by the immediate requirements of the command. Too often, we find lip service being paid to individual development due to lack of time and interest on the part of officers, and the elaborate paper training programs, which lead immediate supervisors to conclude that training is no longer their responsibility. Thus, the sailor is left to self training with one objective, to score high on the examination text book learning for required multiple choice text book answers'. On the job training and required knowledge for the sailor's present job may bear little resemblance to the written examination.
(3) Counseling, Interviews, Testing. As set forth in Chapter IV, counseling, interviews and testing can be valuable tools when used in an advancement system. The fact that they are not being used may be an indicator of the advancement systems' objectives and effectiveness.

Testing as defined in Chapter IV is utilized in the Navy to determine the individuals' occupation field and, in the advancement system, to determine his technical and military knowledge. Testing is not utilized to determine personality characteristics or leadership capabilities.

Counseling and interviewing are used in day to day personnel administration; however, such counseling/interviewing is concerned primarily as relates to the problems of the immediate command. Counseling and interviewing, for the most part, is not concerned with individual improvement as related to the advancement system. This result could very well be traced to the lack of authority by the individual commanding officer to unilaterally advance personnel.

(4) Motivational Environment. Much has been written concerning the motivational environment of the enlisted man. The fact that we still have enlisted men voluntarily serving on WWII destroyers is proof enough that at least some men must realize and see their goals in concert with the Navy's goals. The problem is demonstrated in motivational environment when we consider the quality of those men we lose and those we retain.

As in industry, we are now faced with technological developments which greatly separate the individual's work with the end product, whether it is making an automobile or putting a missile on target. To combat this problem, we stress teamwork and recognition of the importance of the
individual in the team, except in the enlisted advancement system. Advancement and recognition of individual achievement should be an integral part of the local motivational environment. The individual should be physically allied with opportunities, skill and knowledge requirements and authorities who make advancement decisions. In the present advancement system, the enlisted man is fighting a private battle with statistics, quotas and "ivory tower" examinations at the lonely end of a paper work communications channel.

2. Conclusions

The personal objectives of the authors were to explore and attempt to resolve in our own minds some possible causes and answers to the problems stated by Adm. Burke quoted in Chapter I. Rather than attempt to research and comment on the entire subject of personnel administration, the research was focused on the enlisted advancement system with regard to the many management concepts and tools which could be employed or are concerned with advancement. In addition, the authors have made liberal use of the academic freedom enjoyed by builders of paper models in an attempt to gain some insight into the overall functions and limitations of progressive personnel management as may be related to the stated problem. In defense of this approach, too often we see the objectives tailored to a system, and not the system tailored to the desired objective.

In view of the foregoing remarks, the following conclusions are reached:

a) In shifting from a decentralized method of enlisted advancement to the present centralized system, the Navy sacrificed some
desirable aspects of individual motivation, communications, authority, and group dynamics which are present in face to face relationships between an individual and an authority who has unilateral power to advance the individual.

b) By our failure to provide and administer an effective performance appraisal system, we are required to use an examination of technical knowledge as the primary criteria for advancement determination.

c) By our failure to devise an effective system of identification and quantification of individual leadership capabilities, we are required to make advancement decisions, for petty officers, based primarily on their technical knowledge.

d) By our failure to incorporate the training program for individual advancement with the command's training program, we find a conflict in goals. The individual must see, in the command's training requirements, a furtherance of his own training goals for advancement.

e) The objectives of the Navy enlisted advancement system have no doubt been tailored to the constraints of the environment in which they operate. The stated or demonstrated objectives of employee development are lacking. In this omission, we find the key to most criticism of the present system.

In proposing solutions to some of the problems uncovered, consideration must, of course, be given to the environment and compromises made. Be that as it may, the most significant change that could be made would be a shift of objectives from advancement and allocation of jobs, to enlisted development with concurrent advancement. This would require the placing of enlisted development and advancement within the
command. One method of accomplishing this shift would be the simple certification by the commanding officer that this candidate fully meets the standards for advancement specified by higher authority. Quota control by BUPERS would be exercised by advancement based on seniority lists of those certified as being qualified.

Another improvement required is a more meaningful method of performance appraisal in order to place the performance factor back in the dominant role as a determinant of advancement. The possible incorporation of peer rating, properly weighted, with regard to rank within a particular peer group size, may be a partial solution. The use of forced distribution incorporating EDF equipment may also be desirable.

In summary, our advances in the understanding of human behavior, coupled with the increased complexity of the enlisted man's job, requires progressive personnel management techniques. In order to effectively use these new concepts and techniques of modern management, we may very well find our tools not only in education, but in the application of machine technology.

The task of quantification and summarization of the behavior characteristics of large numbers of people, which was once prohibitive in time and money, will now be possible.


B. PERIODICALS


C. PUBLICATIONS OF THE GOVERNMENT


73. The Blue Jackets' Manual. Annapolis, Maryland: The United States Naval Institute, 1950.

F. ENCYCLOPEDIA ARTICLES
