Is There a Science of Personnel Selection?*

Selecting Public Health Administrators.

MILTON M. MANDELL

Chief, Administrative and Management Testing, U. S. Civil Service Commission, Washington, D. C.

SPECIALISTS in the personnel field have had a rude awakening. In the past they have assumed that they could accomplish their objectives by concentrating their efforts on the employees who constitute the bulk of the employed staff. They have directed their attention to better selection methods, better training, and better counseling for technical and clerical employees. But personnel specialists soon found that these programs were not adequate. Having good rank and file workers was not a complete answer. Therefore, in the last five years, they have increasingly turned their attention to programs for the better selection and training of supervisors. The importance of this present effort should not be underestimated—repeated studies of morale have underlined the importance of good supervision. But we will soon learn, as some have already learned, that present efforts are still inadequate, and that the primary goal must be to obtain better administrators by the use of better selection methods and better training. Only when we have obtained good administrators will we find that our efforts to improve the selection of supervisors, technicians, and clerks can be fully successful. Until then we are dealing with the symptoms instead of the cause and not curing the patient.

What are the obstacles to better selection methods for administrators? On the one hand, we have as a handicap a present lack of knowledge. We are far from knowing definitely the methods for measuring the characteristics needed for administrative success, and we would be dogmatic if we stated that we are even sure what those characteristics are. One might logically conclude from this that there is nothing new that should be considered and that present methods should be continued until the characteristics of successful administrators are definitely learned and selection methods firmly established. To a group in the field of public health administration it would seem to me that this conclusion would not appear sound because it flies in the face of the practices of doctors, dentists, biologists, and engineers. Doctors did not turn away patients before penicillin was available—engineers did not stop building bridges because modern methods of metallurgical analysis were not developed. They used the best methods available, even though they were imperfect, and at the same time encouraged basic research which would increase knowledge in the future.

The second basic obstacle to progress is that present administrators have not

* Presented before the Merit System Service of the American Public Health Association at the Seventy-eighth Annual Meeting in St. Louis, Mo., November 2, 1950.

April, 1951
encouraged research in this field. Either they have been content with methods familiar to them or they have been highly skeptical of the value of research in this area. It is interesting to note, in the recent book *Science Is a Sacred Cow*, that the only field in the biological and social sciences which was commended for its methodology was the field of testing. But progress in testing for administrative positions needs the cooperation of present administrators. Progress will be made only by continuous research, not by being content with present methods or skeptical of future ones. In any case, the real question is not whether it is possible to be scientific in choosing between administrators. The choice will be made anyway. The real question, therefore, is whether it is to be made with more or less information, with more or less reflection, with more or less rationality.

In discussing selection methods for administrators, I would like to start by discussing the administrative judgment test. The test is being used in the federal government on an open competitive basis for the selection of junior executives, and on a promotion basis for the selection of middle and top executives. The test emphasizes the ability to apply judgment, not in abstract or general terms, but to the solution of specific administrative problems. The usual types of problems in this test, generally presented in "case" form, consist of questions on the relations between the headquarters office and the district offices of an organization, the relations between successive levels of an organization, the relations between staff and line people, the relations between research and operating personnel, the organization of the office of the administrator, and the understanding of the administrator relating to such basic management problems as personnel and budget administration. The questions in the test are not specific to any one field of administration but are designed to be useful for any substantive field of administration.

It is interesting to note that there is evidence that some persons who do poorly on this test are rigid and inflexible in their thinking about administrative problems. They think that in administration two and two always equal four. In real life, of course, administrative problems are rarely, if ever, the sum of their parts.

The research evidence for this test indicates that, in about 85 per cent of the cases, those getting high scores on the test are those who will be or have been successful administrators. This statement is based on studies involving about 200 administrative employees in positions paying up to $11,000 a year. The test has been used, or experimented with, in connection with the selection of administrators of housing, legal, accounting, forestry, and engineering functions. It has demonstrated its value for this selection problem. While it is obvious that this test measures but one part of the administrator's job, it is also evident that it is measuring an important part of the job, directly in terms of the specific factors in the test, and indirectly in terms of the correlation of these specific factors with such general factors as mental ability including verbal ability, interest in administration, and some personal characteristics.

What other tests and what other selection methods should we use? There is some indication that a test of public affairs containing questions on current social, political, and economic problems is related to administrative success. Analysis of the administrator's job makes obvious why such a test should be useful. The successful administrator must relate his program in terms of timing and content to the events of the world today. Lack of interest in, or understanding of, current developments would seem to be fatal to successful administration.
Whether indirectly measured by means of the administrative judgment test, or directly measured, it seems highly necessary to evaluate the level of verbal ability of candidates for administrative positions. This factor is of special importance when selecting administrators for functions where the technical work itself does not require a high level of verbal ability. If one were selecting administrators from among social scientists, whose work is highly verbal, it could probably be safely assumed that no special test of verbal ability is needed, and, if it were used, that its value would be low. But when we select administrators from among such professional groups as engineers, whose work generally requires relatively little verbal ability, then measuring verbal ability becomes necessary. The need of the administrator for verbal ability is so obvious that it need not be explained or justified, and the higher the administrative level the more important it seems to be. For example, for a group of executives earning $50,000 or more, 72 per cent considered that this ability was of primary importance, while only 46 per cent of executives at lower salary levels stressed the importance of this factor.

I would like to discuss next the relationship between technical qualifications and administrative success. I personally believe that it is desirable for an administrator to have, in addition to his administrative ability, a background in the technical work he is administering. The primary reason why I think so is that it will help him to secure acceptance by his staff and the groups he deals with. The higher the administrative post the less important this item is, but it still should receive some recognition. The level of technical ability beyond a general professional competence can probably be safely ignored in high-level administrative positions but given some weight in first-level administrative positions. This competence might be measured by means of a test or the background of experience and training of the applicant.

Having discussed these relatively objective qualifications and selection methods for administrators, we come naturally to the group of characteristics we usually describe as interests and personality. No one can overemphasize the importance of interest and personality evaluation in selecting administrators, although it is common to neglect the importance of the objective factors we have discussed for the past few minutes. It would seem that the pendulum of administrative selection practices is rarely in the center of the arc. It either swings to one extreme or the other. Either we overemphasize the value, for example, of technical ability or intelligence in selecting administrators, or we ignore these factors and attempt to measure only personal characteristics. It is evident that either approach is a partial one; the best selection methods will combine both types of factors.

First under interests we should discuss the findings of Professor Strong of Stanford University. The most significant of these findings is the following: Professional persons who tend to concentrate their interest patterns in their own professions tend to be poor administrators, while the best administrators have only an average level of interests in their own profession and, at the same time, an interest in other occupations requiring dealing with people. This is a long way of stating that the professional who is basically a technician in his interests is not generally a good prospect for administrative work. In addition, the work of Professor Thurstone of the University of Chicago, and that of a large mail-order house, as well as our own research, indicates consistently that a high level of interests in theoretical matters as measured by the Allport-Vernon Study of Values is related to administrative success.
Professor Thurstone’s work and ours indicate a negative relationship between desire for monetary rewards, as measured by the economic scale of the Allport-Vernon, and success as a public administrator. These findings support the statement of Dr. L. E. Burney of the Indiana State Board of Health in his article in the American Journal of Public Health for December, 1949, in which he said: “A desire for wealth automatically eliminates a career in public health—one just does not acquire that kind of money in public health.” Finally, several studies of ours indicate that there is a significant relationship between administrative success and interest in administration as measured by the knowledge that the person possesses of the administrative structure, key personalities, and administrative policies of the organization in which he works. That is, in cases where employees have an equal opportunity to pick up such information, those who have the most extensive knowledge of these matters are likely to be those with the greatest interest in administration. Employees can be differentiated on the basis of this knowledge and it seems to be related to administrative success.

Last, but far from least, is the measurement of personal characteristics. What should we look for? First I would place emotional stability and buoyancy, that is, the person who can not only meet a trying situation with equanimity but actually flourish under such conditions. This would mean that he is self-confident but not overly so, not subject to wide ranges of mood, in good physical health and vigor, and that he has a happy home life, and a level of aspiration not too far beyond what he is likely to achieve. Equal in importance is his liking for dealing with people. By this I mean not the person who superficially gets along well with people, but the person who gets real satisfaction from being with people individually and in groups. My opinion is that, although these two categories could be added to indefinitely, most of the additions would represent duplications of these two categories. One could mention character, integrity, drive, and a host of other qualities, but I think they would represent the same categories organized differently.

Whether these or others are the personal characteristics we should look for, we then face the most complex problem of measuring these factors. Here we have an area where the personal experiences of each of us heavily influence our thinking. Here is an area where, frequently, quantitative evidence on the value, or more often the lack of value, of various methods of measuring personal characteristics is often ignored because it does not jibe with our own feelings and our own personal experiences. I am sure that there are among us those who believe in the value of projective techniques, those who believe in personal references, those who believe in the value of interviews, those who believe in the clinical psychologist’s interview and in the psychiatrist’s interview, and so forth. Because this situation is what it is, I shall place my emphasis on an analysis of various methods, rather than rely entirely on quantitative evidence.

My belief is that the most satisfactory method is a thorough investigation of the individual through personal discussion by having a competent person discuss him with those who have been his subordinates, colleagues, and superiors, or who have known him in other capacities. I think this method is the best there is, but it assumes the following conditions:

First, the correct questions have to be asked about him. By the correct questions I mean that there must have been a thorough study of the job to be filled so that the relevant points are covered. Furthermore, discrimination must be shown in choosing which questions to
ask each person interviewed, since all will not be able to answer the same questions.

Second, I would stress the importance of speaking to a sufficient number of people and to the right people. There are many people who have different levels of personality characteristics depending on whom they are dealing with. For example, they may please their board of directors and antagonize their professional staffs and vice versa. There is need for talking with representative people who have had different types of relationships with the applicant and there is need for evaluating the person giving the information in such terms as his standards, his possible biases, and any other factors that may affect the validity of the information being given. Finally, great skill is needed in the evaluation of the information that is obtained, because much of it will be contradictory and all of it will have to be evaluated for its proper significance.

I think that this method, if the above precautions are followed, is the best of all. It is psychologically sound because, unlike some methods, it treats the whole person rather than parts; it is sound because it needs fewer inferences than some other methods; it is sound because it is orientated around descriptions of behavior, rather than evaluations, and because it measures the candidate in the work environment rather than assuming that the person away from his work is the same as the person at work. This method is expensive, but the expense can often be justified. It can be supplemented by telephone and written inquiries but these methods should be considered as a supplement rather than a substitute.

We come then to the oral interview, the most widely used selection method in the world. What are its merits and demerits? Its great merit is that it gives the person doing the selecting a feeling of confidence. The application blank has furnished information but it is cold and lifeless. The written test results in a numerical grade, and none of us who appreciate the complexities of the human being likes to categorize a person by a number. The personal investigation method furnishes words but no person. In the interview we presumably see him as he is, not in words or by number, but as a living person. How can anyone question this selection method! If our criteria are—Do I like his looks? Do I like his mannerisms? Do I like his voice?—then no one can question the place of the interview.

But if our criterion is the simple one—namely, What are the correlations between ratings of job success and ratings in an oral interview?—then data are still to be obtained to justify using the interview as the primary selection method. I personally think that the interview has merit where the competence of the interviewer has been tested and found adequate, but there seems to be strong evidence that interviewers vary widely in their ability. In addition to the flaws in the interview caused by the rating process, a further defect is that it does not meet the conditions of soundness I have previously mentioned. The interview generally involves the making of extensive inferences from limited data obtained in an artificial situation. Experimentation has indicated some methods for partially overcoming this condition, as in the group oral performance test, but no method has yet been devised to overcome fully the basic limitation of the interview.

What does this all mean? Are we still in the dark ages so far as selecting administrators is concerned? Do we have all of the answers? If I may speak in analogies, recognizing my limitations of knowledge, I would say we have reached approximately the same stage in this field as medicine reached when the connection between germs and illness was recognized. In other words, selec-
tion is now a field of science with a substantial body of knowledge which is constantly being enriched, but there are as yet no wonder drugs. We know now more than we ever did before about the administrator's job; we have learned about the validity of written tests; we have learned about methods for measuring interest in administration, and we are improving our skills in evaluating personality. I think this combination—written tests, measurement of interests, and measurement of personality—when well done and based on a thorough job analysis, will insure even today a high probability of successful selection.

Finally, in recognition of the great complexity of the subject we are discussing, I would like to close with the following description of an administrator’s job by Luther Evans, the Librarian of Congress. He said: “Being head of an agency . . . requires a combination of requirements which, as far as I know, no human being has in the measure which the situation requires for the most successful and satisfying achievement. . . . The demand on the human organism of being an agency head—demands for imagination, capacity of mind, endurance, retentiveness of memory, width and depth of learning and understanding, composure and sense of justice—are more than any human can provide, as far as I know.”

U.S.P.H.S. Personnel to Southeast Asia

By early February, 80 medical specialists had been loaned by the Public Health Service to the Economic Cooperation Administration for one or two year assignments in Southeast Asia. Thirty had already gone to posts in Burma, Indo-China, Indonesia, and Thailand; 50 others are taking 90 day specialized training arranged by the Harvard School of Public Health. Such matters as geography, culture, politics, and economics of Southeast Asia are included in the training.

The 50 include 20 physicians, 12 engineers, 10 nurses, 3 malarialogists, 3 entomologists, and 2 health educators. These American specialists will work with local health authorities through government agencies already established in these countries, to aid in improving health and sanitary conditions among their 136,000,000 people.