

Special Article

Aptitude for Osteopathic Training*

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In making his appeal to a democratic people, Thomas Jefferson said that all men are created free and equal. Yet most people never did, nor do they now, accept such a notion of equality. Individuals are neither free nor equal. They neither are born equal, live equal, nor die equal. Some are born into homes of culture and luxury, and are given all the advantages that wealth and influence can afford; while others are born into homes of indolent parents and share with them their disease and poverty. Between these extremes the majority come into homes which are provided with the meager necessities of life and with few, if any, of its luxuries. Some have such perfect physical bodies that they remain almost free from disease; others less fortunate are more susceptible to disease and have their periods of sickness; while still others are born with a physical body so weak that it is never free from disease. Some are born with superior mental ability; most have an average mental life; while some have such a low mentality that they must live and die as morons, imbeciles or idiots.

No group is more conscious of individual differences than those in the medical profession. From the beginning of his training the attention of the doctor is called to the inequalities and eccentricities of patients. Everywhere he is reminded that people are different, and that as a practitioner he must treat the individual rather than the disease. Both remedies and methods of care must be changed to meet the peculiarities and conditions of the individual patient.

Although the doctor is fully conscious of these marked differences in human beings, he has usually thought of them as they manifest themselves in his patients. The interests of this paper are centered around those fundamental differences that are found among the doctors themselves. And by fundamental differences I mean those that cannot be accounted for by references to training, but find root in the realm of the physical and social heredity peculiar to the individual. Of these differences which are considered as fundamental, the present paper is limited to mental aptitude, sometimes called intelligence.

To avoid possible ambiguity, we present, first, our own notion of aptitude. Writers have used this term with slightly different meanings as they have wished to emphasize different aspects of mental life. Some stress inherited capacity; others present ability, or ease with which one learns, or dominant interest. Still others use the term aptitude when

they are thinking of ability, proficiency, skill, or talent. To us, aptitude means a condition or set of conditions regarded as symptomatic of the readiness and ease with which an individual will respond to a course of training or acquire some specific knowledge or skill. Aptitude is therefore a present condition, a knowledge of which enables one to predict future possibilities.

It is assumed that students who offer themselves for osteopathic training are different in their aptitudes, and that it is to the best interest of the osteopathic profession and of the public at large that only those of ability and special aptitude be selected for training. Before this selection can be made, aptitudes must be analyzed and measured.

An analysis of aptitude for the osteopathic profession finds more than potential ability in performance. Fitness for the work and satisfaction in the work are important. One would not consider himself to have an aptitude for osteopathy if he found the routine duties of the profession highly distasteful. Indeed, if a person cannot develop a satisfaction in, and a liking for, a profession along with proficiency in it, he cannot claim aptitude for the profession.

It is only in comparatively recent years that educators have begun to feel that the teacher's first duty is not to teach but to learn the students, and then try to teach them in accordance with what has been learned about their abilities, interests, and past achievements. The old apprenticeship system in medical education seldom gave this necessary scientific description of the abilities and needs of the individual student. In those instances where such data were secured, they came too late to be of value to the student entering college, or to the school that desired to protect itself and the best interests of its students. There is a need for the discovery of ability before any expense and obligations are incurred. Human costs could be greatly reduced if only those students were admitted to training who could first demonstrate their ability to succeed in the work. The method of the psychological examination lends itself as well to the selection of students for academic, industrial, or legal training.

Before going into a discussion of the application of the psychological test in the selection and training of doctors, it is well, first, to consider briefly the theory of vocational selection. Some are very pessimistic in their conclusions on the subject of vocational guidance. To their way of thinking each child is born into the world to do a certain bit of work; if he finds this work for which he was created, he will be a glorious success; if, however,

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he fails to find this particular job and tries his best to show up well in another, he is doomed to failure. He is a misfit, and is referred to as a "square peg in a round hole." There is a small element of truth here, but on the whole this is a false doctrine. Once one accepts this principle he is forced to accept the false observation that teachers, preachers, etc., are born and not made. If teachers, musicians, doctors, and nurses are born and not made, then colleges, conservatories, and training schools are unnecessary and should be closed. However well the theory may sound, in practice most of us desire and demand the services of thoroughly trained people. In our modern competitive society it takes much more than a birth certificate to succeed as a doctor, lawyer, teacher, nurse, or a member in any other of our well-defined professions.

There are at least four variables to be considered in giving educational guidance and predicting professional results. These are general mental ability, professional interests, personality, and opportunity. The student is not born with any one of these factors; he plays the major rôle in the development of each. The truth of this statement is obvious from even a casual consideration.

Consider general mental ability. Whether a person thinks of it as ability to solve abstract problems, ability to reason well, or ability to adjust oneself to one's environment, he must concede that the individual is an important factor in its development. Even the environment in which the student elects to live has something to do with the level of his final mental maturity. The greatest mental growth will occur where there is the constant feeling of need for a more refined and more effective system of behavior.

One is not born with certain definite vocational interests. The explanation of special interests in a given profession is to be found in social heredity instead of the family tree. The young child is equally interested in everything new. Inequalities do not occur until, in some experience with parent, nurse, teacher or playmate, one interest is encouraged while another is destroyed. It is not difficult for you to recall the teacher who killed your interest in Latin, English, history, or mathematics. With the help and hindrance of the different members of society the child grows into attitudes, interests, and skills, i.e., into its professional interests just as truly as it grows into manhood or womanhood.

Personality, the third factor to be considered when giving young people professional advice, is also the result of achievement. It is true that we are born with certain physical potentialities, which are important in the development of our personality, but in the human adult habits and attitudes make up the greater part of the personality. Any given profession makes certain demands upon the personality of the one who follows this profession with the hope of success. The student should have a personality that can meet these demands or else he should be able to develop these particular qualities of personality before he is advised to go into training for the profession.

It is more important in some professions than in others that a definite opportunity be open for

trained workers. The knowledge that there is a place prepared for one is a definite stimulation during the period of training. It gives purpose and organization to the whole training program and to the individual student it gives perspective and confidence. Moreover, it changes the whole problem of teaching. From a process of pushing and prodding, it becomes a form of guidance and leadership. And this important factor, like the three preceding, was not determined at birth. The individual, together with circumstances far beyond his control, make opportunities open up at the right time.

When the technique of psychological testing was applied to the problem of vocational selection, the subject matter of the ordinary mental test was changed somewhat and it became an aptitude test. This procedure was based upon the assumption that if the student has an aptitude for a certain work he will have been interested in this work for some time, and will have become better informed in this field than the average student. The aptitude test is supposed to retain much of the good qualities of the mental test and at the same time measure the student's special interest in and information concerning a given profession. Take, for example, the aptitude tests used in the selection of students for training in engineering. In addition to testing ability to follow directions, to comprehend the printed page, and to reason well, these tests measure the extent of the student's information concerning certain mechanical facts and relationships which are regarded as important prerequisites to successful training in engineering. The method of construction remains practically the same as that of the mental test, yet the subject matter is selected from the limited field of engineering.

The same thing has happened in law and medicine. Tests have been developed to measure professional fitness, interests, and information as well as general mental ability. The results of these tests in engineering, and in medicine so far as they have been applied have been phenomenal. In osteopathic training the work is just getting under way. The field is equally as promising, and the literature convinces one that those in charge of the colleges of osteopathy today are determined to verify the results of aptitude testing in this profession.

In the literature there appears to be some confusion of mental tests with aptitude tests. It is obvious from the foregoing paragraph that they have much in common. The general method of procedure is the same, and the results are often used to the same end. An aptitude test is a measure of mental ability in a limited sense. Indeed, an aptitude test is a measure of mental ability in a particular field. All aptitude tests are, therefore, mental tests of a specific and definite type. The mental test is a measure of general mental ability and is never limited in its subject matter. To limit it is to change it into an aptitude test.

An examination of a few aptitude tests reveals the further fact that aptitude is often confused with trade or professional skill. For example, take the "Aptitude Test for Nursing" prepared by Dr. F. A. Moss of George Washington University. Here is a test designed to classify students entering nurses' training schools. There are many more applicants for

training than can be taken care of in these schools, or than can be assimilated into the profession were it possible to give them the necessary training. Upon the basis of the results of this test one is supposed to be able to select those students who will profit most by the instruction offered. Much of the material of this examination is too difficult for beginners. I am confident a graduate nurse could answer these questions, but very doubtful of the results where the test is given at the end of the probation period. Some parts of this examination are entirely foreign to most beginners. An aptitude test should be constructed for those who have had no special professional training. It is to be administered before training begins and not at the conclusion of the course; its results are used for the prediction of probable success in training, and not to measure actual success achieved.

I have been unable to find an aptitude test for the profession of osteopathy.[†] The need for one is as great, I am sure, as that in the other professions. This need is indicated by the percentage of failure in training. The rate of mortality is high in all of our professional schools. It is contended that the application of well-developed aptitude tests would greatly reduce this percentage of failure and thereby save individuals and the community time, energy, and money costs.

An aptitude test for osteopathic physicians should be so designed that it will get data to serve as a basis for predicting success in the training courses, and for predicting later success in the profession with the peculiar demands it makes upon one's social and emotional habits of life and strength of character. Can one be trained into the social attitude and emotional stability that are necessary to follow the osteopathic career? This question should always be answered before advising one to enter the profession. A thorough test of general information concerning the profession and of ability to follow directions, to comprehend the printed page, to remember instructions, and to use a scientific vocabulary, should furnish dependable data for making such a prediction. Other data should be gathered. In order to make a reliable prediction of the student's later professional success supplementary data should be gathered on interests, emotions, personality, and general social attitude.

Aptitude tests for students of osteopathy must deal with a particular subject matter. This subject matter should be selected from the common content of the mental life of students of osteopathy who later have demonstrated their ability and professional fitness. Standardized questions built out of this material might easily become an important instrument in the selection of students for training in the osteopathic profession.

In addition to the predictive value of the results of aptitude tests, they may also serve as a basis for advice and guidance during the period of training. An examination of these data should throw light upon economic, social and curricular problems of the individual students. Administration of discipline would become more reasonable. In-

dividual personalities with peculiar and definite needs would be revealed and should have special consideration with regard to both curriculum and methods of instruction.

We must not become overenthusiastic and expect too much of the aptitude test. It is new, and the new is seldom viewed with discernment. Recent developments in any field lack the clarity of perspective. Measurement of individual differences is a development of recent years; therefore, it is customarily greeted either with unwarranted mistrust, or, more often, with unwarranted optimism. Indeed, much of the mistrust is an outgrowth of the optimism. Uninformed enthusiasm has been the enemy of the movement from the start. Before the method and technique of testing have been perfected, zealous practitioners have rushed into every field with tests for every purpose. Before sufficient data were gathered for interpretations to be made, these same zealots have given out conclusive findings on far too many points. No, we must not expect too much of the aptitude test for doctors. At its best it can give us data on but one phase of the students' fitness for training. These data must be supplemented with data concerning other equally important phases of ability and fitness. The aptitude test must, therefore, never be considered as a panacea. It is only one of a number of devices which may be used to secure information to serve as a basis for giving educational guidance and predicting professional results.

CONCLUSIONS

1. From this study, it seems that the aptitude test can be applied in the selection and training of students of osteopathy with as much success as has followed its application in other professions.

2. The aptitude test will render its best service when used in combination with other measuring devices. Results of an aptitude test must always be considered in connection with general mental ability, personality, and financial and social opportunity. Advice and guidance based upon such a combination of measures would greatly reduce the mortality rate in osteopathic colleges and thereby save time and money to both the student and the school, and save the unfit student from embarrassment and final disappointment.

[†]Editorial Note: An aptitude test for prospective osteopathic students is in the process of formation with the help of Professor Edward A. Strong of Stanford University and sponsored by the Associated Colleges of Osteopathy.