posals of the Advisory Committee on Health Insurance. While some of us have had the opportunity of seeing these proposals, they have not been seen by our constituent societies. It is our hope that in the immediate future the medical profession throughout Canada will be permitted to examine these proposals in detail and that shortly thereafter we may be in a position to come back to you to discuss those aspects of the proposals upon which you might desire our advice and opinion.

In conclusion, the Canadian Medical Association desires to assure the Special Committee on Social Security that our entire organization stretching from sea to sea stands ready to render any assistance in its power towards the solution of one of the country's most important problems; namely, the safeguarding of the health of our people.

PERSONNEL SELECTION IN THE ARMY

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and

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One of the main differences between this war and the last is the greater importance now attached to the problem of selection and placement of personnel in the armed forces. Especially is this true of the Army. In the past it made but little difference whether a man was intelligent, literate or skilled in some trade, so long as he could learn to march and fire a rifle. The present emphasis is on mobility and mechanization, on specialist corps and units of all types, and on the training of men in the use of highly complicated fighting machinery, both as individuals and in small groups or teams.

These trends in modern warfare have developed specialized methods in the screening, selection, and allocation of men in the armies of most of the great powers. It is the purpose of this article to describe briefly some of the selective techniques at present being used by the Canadian Army.

Purpose of Personnel Selection

The primary object of personnel selection is to appraise the soldier's general ability and personal fitness and to place him effectively. Other functions, some of which are described below, are important, but remain subsidiary.

A modern army employs skills most highly complex and technical. It demands the coordination of the efforts and abilities of all soldiers. This can be accomplished only if men function at their maximum capacity. Efficiency of every degree of technical complexity drops when men are placed in posts which are either too difficult or too easy for them. In the one case, they are bored and easily distracted. Delinquency rates mount, sick parades become crowded, and in many ways the mental health of the group goes down. Morale suffers too, if ability or special qualifications go unrecognized and unused. The individual soldier must feel he is doing a job for which he is competent and in which he can gain promotion by doing his best.

Growth of Personnel Methods

Since the last war the increased specialization in industry has led to the intensive study of selection techniques, whereby the natural aptitudes and abilities of individuals can be estimated. Vocational guidance programs have been started in many progressive high schools. These programs have utilized with increasing success psychological tests of various types. The so-called "Intelligence" test is one example. In addition, there are tests of mechanical aptitude, clerical aptitude, and educational achievement as well as tests of temperament and personality.

The American Army in the last war developed group tests of intelligence which proved of definite value in selecting N.C.O.'s and officers, as well as in screening out the mental defectives. The German Army, quick to capitalize on this experience, developed an elaborate system of psychological selection as early as 1926. Today psychological testing is generally accepted as a necessary part of military personnel work.

Important progress has also been made in the art of interviewing and counselling. Many of Canada's major industries have developed personnel services in which both testing and interviewing are used to help select and allocate employees. In many instances the personnel managers and their assistants have become skilled clinicians in appraising personality. It is this "clinical" approach which the Canadian Army is using in its selection and allocation of soldiers.
The "M" test.—Various tests are used in the Canadian Army, but the standard test which is now administered to all recruits is the so-called "Revised Examination M", or "M" test. Designed and standardized by the Canadian Psychological Association, it has been of tremendous value in the preliminary screening of men to determine their learning capacity and aptitude. It is a group test that can be given to groups of fifty or more men at one time.

The "M" test is a printed paper booklet of eight short sub-tests. It is carefully designed so that a minimum of writing is required. The recruit uses a pencil to mark, make simple calculations, or underline words. Before beginning the test the group is given a short talk by an officer (Army examiner) of the Personnel Selection staff. Since very often the "M" test is the first formal procedure the recruit meets in the army, this informal talk is exceedingly important. The rôle of Personnel Selection in the allocation and follow-up of men is briefly explained. The test is described as a procedure designed to help the army to do intelligent placement. Every effort is made to allay tension and apprehension.

The eight sub-tests are all quite different and each samples a different type of experience and ability. Definite time limits, ranging from 2½ to 5 minutes, are assigned to each, and the whole takes about an hour. Each sub-test is preceded by a practice exercise which acquaints the recruit with the nature of the test and, in general, with the kind of response he is expected to make.

Sub-tests 1, 2 and 3 are non-language "picture" tests. There are no words to read or numbers to interpret. They comprise pictures of common objects, every-day situations or simple geometric forms. The recruit is asked to determine what is missing or wrong in the pictures and how the geometric forms may be divided in order to obtain smaller forms. The material can be readily understood by the completely illiterate, providing they are of average intelligence. With the aid of the practice exercises and, occasionally, some individual instruction, it is even understood by recruits who speak little English or French. The total score on these three alone is an excellent indication of the man's learning capacity, and can be used as a guide to help select those men from among the completely illiterate who are educable.

Sub-tests 4 and 5 are designed to measure the man's knowledge of tools and simple mechanical processes. In a limited way they may reflect mechanical aptitude, since men who are interested and experienced in mechanical things often, though not always, develop an aptitude in this direction.

Sub-tests 6, 7 and 8 measure the individual's ability in simple arithmetic, vocabulary and word (or idea) relationships, respectively. A considerable degree of literacy is required to do well in these tests.

The recruit's score in the test, as a whole, is expressed by a number (0 to 211) indicating the number of items completed correctly. The score gives an excellent indication of the man's potentiality as a soldier. The average score obtained in the Canadian Army is about 130.

Since more than 200,000 men have been tested so far in Canada alone, it has been possible to make a very complete statistical analysis of the scores and determine the relation between test score and success in army training and placement. It has been definitely established, for instance, that with a few well recognized exceptions there is little chance of a recruit completing his military training successfully if his "M" score is much below 75 or 80. Similarly, it has been found that soldiers selected for trades training should have "M" scores above a critical threshold, carefully established by analysis of the successes and failures at the army trades schools. The "M" test has also proved to be very valuable in helping to select candidates for officer training. A French version of the test is given to French-speaking recruits, and has been similarly standardized.

To those who have become accustomed to think of intelligence in terms of mental age or I.Q., the point score system as used with the "M" test is apt to be confusing. Although it has been demonstrated that there is a very high correlation between mental age and "M" score, no attempt is made to translate the scores into I.Q.s. As a matter of fact, the mental-age concept, except in describing mental deficiency, is not of very great value in work with adults. Instead, the scores are interpreted in terms of their place in the total distribution of scores. Thus, for example, a man's score might be classed with the highest 20% of the army, or the lowest 10%. This places the man's performance in relation to that of the army generally. A greater refinement usually is not necessary.
The interview.—Just as important as the "M" test is the personal interview by an Army examiner which follows the test. Most recruits find this interview a very pleasant experience, the highlight of the whole procedure. Every effort is made by the interviewing officer to establish good rapport, gain the man's confidence, and make it easy for him to talk about himself. In this way, the vital background information, so essential to effective placement, is gained. And, through it, an effort is made to assess the man's temperament and character.

The interview serves several functions. It checks and interprets the test score. It determines, on the basis of education, past experience and the findings of the medical board, the most effective placement for the man in the army. It indicates men who seem to be potential officers, N.C.O.'s or specialists. And, finally, it earmarks for recheck by the psychiatrist and Medical Board men who by reason of poor mental capacity or instability seem unsuitable for placement anywhere in the army.

The interview is definitely not a parade. The atmosphere is quite informal. The recruit is invited to sit down, and smoke if he wishes to. The attitude of the interview officer is one of friendly interest. A few questions relating to the man's birthplace, age, etc., serve to get the man talking about himself and to direct and stimulate the conversation. Routine or stereotyped questions are avoided as much as possible. The aim is to secure certain basic factual information about the man to prepare a penupture of him as an individual. The extent and nature of his previous military training (if any), his educational background (academic and vocational) and his occupational background are all investigated. In addition, information is obtained about his hobbies and interests, his social activities, and his family.

During the interview the examiner keeps an observant eye on the recruit. He watches for signs of emotional and nervous instability. He notices whether the man is comfortable or ill at ease, shy and reserved, or over-confident. He tries to find out how the recruit really thinks and feels about things; his attitude to home, family, the army, etc. Sometimes this leads to the discovery of psychopathic trends which necessitate referral to the psychiatrist. In general, the examiner attempts to appraise not only the general appearance and bearing of the man but his personality as well.

Finally, the question of allocation is fully discussed with the recruit. In his talk to the group, either immediately preceding the "M" test or the interview, one of the Army examiners has previously described the chief corps and arms of the service in terms of the kind of work done, weapons used, possibilities for various specialties, etc. Often this talk is illustrated by pictures or posters. Now, in the interview a decision must be made, definitely assigning the recruit to one of these corps and, if possible, to a particular specialty in that corps.

Job analyses and specifications have been made of all the principal types of army occupations. It is laid down, for instance, that an infantry rifleman should have an "M" score above a certain figure; be in medical category "A"; and have good nervous stability. If, in addition, he is interested in hunting and outdoor life generally, and likes the notion of commando training, the chances are excellent that he will make a good infantryman. The specialist jobs in corps such as the Signals or Ordnance, have very detailed specifications which include not only such things as "M" score but the size and weight of the man, his temperament, education, and vocational experience.

Every effort is made to make the recruit feel satisfied about his allocation. If it is obvious that he desires a post for which he is quite unsuited, the situation is explained in detail. He is made to see the futility of trying to force himself to achieve something which is quite beyond him. This is regarded as one of the most important aspects of allocation.

In order to control the number of allocations made to various arms and corps, quotas are provided every fortnight from the Adjutant General’s Branch. These quotas must be continually taken into account in allocating recruits. If on one day too many men have been allocated to the artillery, this particular arm is neglected a little the following day. And so a balance is maintained between all the branches. An attempt is made to give them all a fair share of the best men as well as some of the poorer, always considering the requirements and difficulties of their training schedules.

All the information obtained from the "M" test and the interview, including the allocation, is duly recorded on a special Personnel Selection Report card, which is placed with the man's documents and accompanies him wherever he goes. This report card is cumulative,
for from time to time further entries may be made.

**Organization**

To carry out an efficient program of personnel selection it was necessary to train and appoint a number of officers and sub-staff. Senior officers in Personnel Selection, for the most part, are qualified psychologists with extensive clinical experience. There were not enough psychologists in Canada, however, to provide the number of officers required. Consequently, men were recruited from the personnel divisions of industry and the larger business firms. Others were high school teachers with experience in vocational guidance. All have been given intensive training in military methods and have a working knowledge of the requirements for all of the arms and corps.

In addition to the staff required for the initial testing, interviewing and allocation work at Recruiting and Reception Centres, Army examiners have been posted to all Basic and Advanced Training Centres, Army Trade Schools, and all District Depots. It is intended to provide staff for the operational units in the field as soon as suitable officers can be trained.

From the above, it is seen that Personnel Selection plays a rôle throughout the man's training. It is not merely a procedure which happens to a man once at enlistment and then is forgotten. Although the original allocation is made at the Reception Centre, it is reviewed during basic, advanced and specialist training.

Where necessary, when it has been shown that a mistake has been made and a man obviously is unsuitable for his particular allocation, he may be reallocated to another type of work or to a different arm or corps. Similarly, it is very natural that there should be a very close liaison between the Personnel Selection staff and the medical officers, particularly the psychiatrists. It is a common practice for medical officers and Army examiners to discuss cases in which they have a mutual interest. Often the medical officer will feel that a man's health would be materially improved if his work were changed. He discusses this with the Army examiner. Sometimes the Army examiner wonders if the man he has interviewed is really in the correct medical category and this is discussed with the medical officer.

**The Reception Centre**

Nowhere is there a better example of the close collaboration between the R.C.A.M.C. and Personnel Selection than at the Recruiting or Reception Centres. Although these centres have not yet been organized in every military district it is intended to have them as quickly as facilities can be arranged. At the Reception Centre the recruit presents himself, either for voluntary enlistment or for enrolment under the N.R.M.A. In some of the larger centres as many as two or three hundred recruits are enlisted in one day. On arrival they are welcomed by the recruiting staff. After some preliminary documentation they are given the "M" test and a short "Health" questionnaire.

The Army examiner has a short interview with all men who obtain low "M" scores. This enables him to decide whether or not the man’s poor performance was due to language handicap, insufficient education or lack of intelligence. If he suspects that it is due to lack of intelligence, the recruit is referred to the psychiatrist for examination.

The "Health" questionnaire, which takes only five or ten minutes to administer to an assembled group, consists of about thirty questions, phrased in simple language and designed to indicate those men who are emotionally or temperamentally unstable. Such questions as the following indicate the general trend: Have you fainted more than twice in your life? Do you worry about people talking about you behind your back? Do you have to go to a doctor often? Do you think you are very nervous?

Various forms of the questionnaire are being tried in different districts, but, in general, the questions cover much the same sort of material. It has been found quite practical to obtain fairly reliable information in this way about the recruit’s attitude toward his own health, the incidence of nervousness in his family, various indications of poor emotional and social adjustment such as alcoholism, criminal record, occupational instability, etc. On the basis of the answers to these questions, a proportion of the recruits are earmarked for careful psychiatric examination.

Having completed the "M" test and the questionnaire, the recruit proceeds to the medical examination which includes the usual x-ray and laboratory procedures. A psychiatrist is working constantly in close collaboration with the Medical Board. He does not attempt to examine
every man. But he does make sure of seeing all those who are referred (a) by the Army examiner because of low ‘‘M’’ score and probable mental retardation; (b) by the answers given on the questionnaire, and (c) by the other members of the medical board when they feel the recruit shows evidence of some mental or nervous disorder. This represents usually about 25 to 40% of the total number of recruits medically examined. Of the group referred to the psychiatrist perhaps a third to a half will be rejected because of psychiatric disability.

After the recruit completes his medical examination and is tentatively accepted as physically and mentally fit he proceeds to the Personnel Selection interview. The interview has been described in detail above. At the end of the interview recommendations concerning his allocation are made and he formally enters the army.

The interview, itself, acts as a final psychiatric screen, in the sense that any recruit who has not been seen previously by the psychiatrist, and who in the opinion of the Army examiner exhibits symptoms of instability or other psychiatric disorder, is sent back immediately for psychiatric examination. Very few have to be referred back in this manner. Nevertheless, the psychiatrist works closely with the Army examiner, to make sure that likely cases are spotted. Occasional clinics are held by the psychiatrist in order to assist the Army examiners in their search for signs of instability.

Malingering is a matter that is constantly under discussion. From the layman’s point of view, it would seem easy for the recruit to pretend to be stupid and thus sabotage the ‘‘M’’ test in order to obtain a rejection. Similarly, it would seem to be a simple thing to learn how to give a history of the vague complaints (including nervousness) which are so characteristic of psychoneurosis. The fact is, however, malinger is very uncommon and can easily be spotted.

Men who deliberately try to do badly on the ‘‘M’’ test almost always overplay their hand. They make the characteristic mistake of giving silly answers even on items which can be done correctly by the feebleminded. Or the educational and occupational history is not consistent with their poor effort on ‘‘M’’. A little questioning quickly brings out the discrepancies. (It may be said in parenthesis, however, that in many cases it would be of great value to have the social, educational and occupational background checked by a qualified social worker. For occasionally men are accepted for service when a complete check-up on their history and background would have revealed that they are in fact unsuitable because of psychiatric disability. It is hoped that in the near future a qualified social worker will be posted to each reception centre in order to help with this aspect of selection.)

The importance of keeping out of the army men who are potential psychiatric casualties cannot be too greatly emphasized. Since the beginning of the war more than 13,000 men have been discharged from the army for nervous and mental disorders. It is felt that a great proportion of these men should never have been enlisted, and under the present plane of psychiatric screening would certainly have been rejected.

Other Aspects of Personnel Selection

Personnel Selection has many Army responsibilities in addition to psychiatric screening and the allocation of recruits. More and more emphasis has been placed on the careful selection of trade trainees and candidates for officer-training centres. Most of these special selections are finally made at a time when the soldier has nearly completed his ‘‘basic’’ and ‘‘advanced’’ training. Nevertheless, a notation is often put on the report card of the recruit at the Reception Centre, indicating that he has the potential capacity of an officer or specialist. This gives the training officers a hint as to the most promising recruits in their centres. These men are observed closely and if by the end of ‘‘advanced’’ training they seem to show the other qualities necessary in a successful specialist, (e.g., an officer must possess leadership qualities as well as intelligence) they are selected for special training.

More and more frequently, commanding officers are consulting the Army examiners in connection with disciplinary problems. It has been discovered, for instance, that many men are chronically delinquent because they are disgruntled and unhappy in their army placement. In many cases other emotional factors come to light, such as worry over family, home and finances. The Army examiner, the psychiatrist, the chaplain and auxiliary service officers may all play a part in the handling of such cases. And there would appear to be an excellent op-
portunity here, also, for a trained social worker.

The training officers regularly consult the Army examiners about the everyday problems of their work. One man is failing in map-reading; another breaks down on the drill square; a third co-ordinates badly and seems unusually clumsy. Such cases are investigated, and special measures suggested to deal with them. Frequently it is a question of reallocation to another branch of the army.

Largely because of problems thrown into relief by personnel and psychiatric methods, the army has developed new techniques in connection with training. For example, because it was discovered that many hundreds of men were coming into the army, who had had little or no schooling and were partially or wholly illiterate, the special Education Basic Training Centres at North Bay and Joliette were established. One of these centres is for English-speaking recruits and the other for French. These training centres teach men to read, write, and do arithmetic in addition to the regular basic military training. Four months, instead of the usual two, are allowed for this purpose. This plan has salvaged a great many men and made them into useful soldiers.

Another development has been the recognition of the fact that all men do not learn at the same rate. In certain training centres, therefore, the men are grouped according to their speed of learning. Certain groups will cover the course and qualify a month or so before the usual time. Other groups, on the other hand, take longer. Re-grouping has had a most stimulating effect on morale as well as training.

CONCLUSION

An attempt has been made to sketch very briefly the rôle of Personnel Selection in the Canadian Army. More and more emphasis is now being placed on what might be called the human side of army organization. Psychology, psychiatry, and education are collaborating to improve fighting efficiency and morale. The development of Personnel Selection in such close relationship to the R.C.A.M.C. reflects credit on the far-sighted judgment of those in National Defence Headquarters who were responsible for its inception. The benefits in terms of increased efficiency in training, lessening in the wastage of manpower, and the heightening of morale generally, have already been clearly demonstrated.

RÉSUMÉ

L'expérience a démontré que le personnel de l'armée doit être soigneusement sélectionné aux points de vue habileté et efficacité. Les tests d'aptitude et d'aptitude placer maintenant les bons sujets aux postes pour lesquels ils sont compétents, de même qu'ils éliminent les moins bien pourvus. Les tests sont suivis par une "interview" du candidat par l'examineur afin d'établir les données exactes sur son tempérament et son caractère; afin aussi de déterminer le rôle le plus utile qu'il pourra être appelé à jouer. Ces examens sont conduits par des psychologues expérimentés, par des orienteurs entraînés et parfois avec la collaboration des psychiatres.

Au centre de réception, l'examen préliminaire permet déjà un premier triage qui facilitera la tâche des examinateurs spécialisés subséquents. Du reste, un psychiatre collabore constamment avec le médecin examinateur au cours des premiers examens cliniques. La simulation est facilement démasquée, du-on recourir aux services d'aides sociales pour relever leur passé. Grâce à cette sélection, il arrive souvent que les qualités exceptionnelles des sujets examinés guident les chefs dans les promotions comme dans les changements de postes. Cette sélection augmente, en définitive, le rendement et le moral de l'armée.

JEAN SAUCIER

PSYCHIATRIC PROBLEMS IN THE ARMY

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MENTAL disorder is one of the army's major medical problems. Since this war began thousands of soldiers have been discharged from the Canadian Army with psychiatric disabilities. At least 30% of all men being returned now from overseas are unsuitable are psychiatric casualties. From these amazing figures, many people have erroneously deduced that military service produces psychiatric disabilities among individuals who were perfectly healthy in civilian life. But this conclusion is wrong. Our experience has shown that these newly revealed psychiatric disorders invariably existed, at least potentially, before the individual was inducted into the army. Furthermore, it has shown us that with adequate psychiatric examination the great majority of these disabilities could have been diagnosed at the time the individual entered the service.

Why then do these apparently latent mental disorders come to light during military service? Why is the psychiatric admission rate in military hospitals four times as high proportionately as in civilian hospitals? Why do physicians, who in general medical practice considered psychiatry to be confined to the hospital care of the violently deranged, quickly come to realize that it is an integral part of their every day army work?