

Hugh Murray

The Transformation of Selection Procedures

The War Office Selection Boards*

The Presenting Problem and the Initial Response

Towards the end of 1941, the impending rapid expansion of the British Army required a large number of officers. The ensuing crisis in officer selection was of sufficient magnitude for a major innovation in assessment procedures to emerge—the War Office Selection Boards. These boards enabled the army to officer itself when traditional methods were failing and when there was doubt as to whether a sufficient reserve of officer material existed among the other ranks. The process of collaboration between experts and administrators, which the boards exemplified, became a model for many other joint undertakings. The methodological revolution consisted in replacing a military judge using a short interview by an inter-disciplinary group of selectors who assessed groups of candidates over two-and-a-half days. The extent of the participation achieved among all those concerned made the Boards profoundly acceptable to the war-time army.

Failure rates at Officer Cadet Training Units (OCTUs) had risen to over 20 percent in many courses and to over 30 percent in some. Not only did these failures represent a great deal of effort wasted on unproductive training (courses were of three months), they created undue stress in the training units. Next, there were insufficient numbers of good applicants. This lack was complex in its origins; letters of complaint received by the War Office indicated that there was a reluctance to apply for a commission. Furthermore, the return to their units of a noticeable number of failures reinforced this reluctance.

At this time candidates for commissions went before a Command Interview Board (CIB) consisting of a permanent president and two commanding officers (COs) as ad hoc members. These boards conducted a short interview with each

*A new paper based on original documents and unpublished papers, drafted by B.S. Morris, J.D. Sutherland and E.L. Trist, held in the archives of the Tavistock Institute.

candidate, usually some 20 minutes, and decisions were made on the impressions gained, together with the information contained in a brief report from the man's CO. Many candidates felt that they could not do themselves justice in such short interviews. The presidents felt equally dissatisfied. Reports from units were also proving less helpful than had been hoped. COs had not yet had experience of men under sufficiently varied conditions and the course of the war had been such that relatively few candidates had had the critical test of battle. Potential officers were being drawn from an ever-widening range of social classes so that presidents no longer had those signposts to leadership qualities with which they were familiar in young men from the public (USA = private) schools. The uncertainty felt about such short interviews was increased by pressure to find all possible candidates rather than to take only those who were obviously good.

BACKGROUND TO THE CHANGE

Early in 1940 a psychiatrist was posted to each of the Army Commands and soon afterwards other psychiatrists were added to assist the Command psychiatrists. Many of the breakdowns they encountered were obviously precipitated by factors in the military environment as well as by limitations in the individual. The psychiatrists began to occupy a therapeutic role in relation to their employing institution, the army, as well as to individual patients within it by making suggestions for the prevention of psychiatric illness from social causes (Sutherland and Fitzpatrick, 1945). One of the most important causes of difficulty in adjustment was unsuitable employment in the army itself. A new Directorate for the Selection of Personnel was established which, working in close collaboration with the Directorate for Army Psychiatry, prepared a scheme which radically altered the recruiting arrangements of the army and entailed the building of a new social system—the General Service Corps—into which men were now taken for a short period before being sent to a specific arm of the service. During this induction period they were given several psychological tests and a short interview which enabled Personnel Selection Officers to make recommendations for each man's training in keeping with his abilities and, as far as possible, his preferences (Vernon and Parry, 1949). The psychometric underpinning of this scheme was in sharp contrast to the methods then used for the selection of officer cadets.

In creating practical schemes for handling various manpower questions, it became the rule that the schemes had to be jointly planned by the army officer and the "expert," each contributing from his own special experience and knowledge (Rees, 1945). The social-therapeutic role of the psychiatrists, both in diagnosing problems from the human side of the military environment and in

fostering the development of specially adapted military institutions to meet them, paved the way for the early experiments and for some of the most characteristic features of the selection boards.

PRELIMINARY EXPERIMENTS

Experiments by army psychiatrists with both officers and officer-cadets pointed to ways of providing the CIBs with more evidence than they were accustomed to have. An experiment by Bowlby was stimulated by comments on the unsuitability of many officers recently commissioned: the numbers of unsuitable officer-cadets were intolerably high, they lacked the ability to master the technical training or the degree of leadership required for an armored regiment, or both. Since psychological tests and interviews had proved useful in identifying other-rank recruits likely to prove failures, the new inquiry aimed to discover whether an intelligence test and an interview by a psychiatrist could accurately predict the technical ability and officer-like qualities of cadets at OCTU.

A critical experiment with serving officers (Wittkower and Rodger, 1941) arose out of a Command psychiatrist's work with problem officers and the interest of his Army Commander in the methods of officer selection used in the German army. An initial experiment was set up at a school for company commanders whose commandant and staff had, during an intensive five-week course, formed a thorough-going opinion of the students' all-around capabilities as officers, their technical proficiency and their human qualities. They could give ratings of their students with which the opinions of the psychiatrist could be compared.

The investigation included written and laboratory tests and an interview. In order to compare opinions, the commandant and the psychiatrists each made a brief evaluation of the student's personality, together with a judgment on his suitability as a combatant officer. Both sides read their reports and then rated the results of the comparison according to the degree of agreement. Of the 48 comparisons, 26 (55 percent) were in essential agreement, 12 (25 percent) in substantial agreement and 10 (20 percent) in essential disagreement. Nine-tenths of these disagreements were due to underlying personality deviations which had escaped the attention of the commandant, in some cases the psychological abnormality being very severe.

The program, with the addition of a psychologist to administer intelligence tests, was repeated with another course of officers at the company commanders' school. The results reduced the 20 percent disagreement by half. The improvement appeared to be due not only to the psychiatrists incorporating the results of the intelligence tests into their reports, but also to the mutual

education of the psychiatrists and the commandant. The psychiatrists learned more of the variety of talents which could successfully be used in officer roles, while the commandant became aware of the possible psychological significance of certain aspects of a man's performance during the course. It was recognized that some differences of opinion would be inevitable because of the limitations of the methods used by each judge—the one using interviews, supported by written and laboratory tests, and the other observing men in a variety of practical training activities.

The assessment of these officers, while presenting many difficulties, was nevertheless an easier task than the assessment of younger men who did not have occupational or military records as evidence of their potentialities. The investigations were therefore repeated with several groups of cadets at an OCTU. A similar degree of overall essential and substantial agreement, 80 to 90 percent, was found between the reports of the training staff and the psychiatrists. The relationship between training outcome and performance in the field was, of course, unknown.

So long as the categories of substantial and essential agreement were combined, the level of agreement was higher than might have been expected. But if the category of substantial agreement was added to that of essential disagreement, a more negative picture emerged. It was concluded that an opinion based simply on interview and intelligence tests would not be sufficient for making reliable judgments on the substantial proportion of candidates likely to be near the threshold of acceptance—and boards were under pressure to accept as many of these as they could, with safety, pass. From the nature of the discrepancies between the judgments of the psychiatrist and the OCTU staff, it appeared that practical tests would be a valuable addition to an interview, as a man could then be seen in action. If a way could be found of combining the resources and methods of military personnel and the opinions of psychiatric and psychological specialists, rather than of using one as a criterion for validating the other, a type of selection procedure might be instituted which would be reliable in assessing officer candidates and acceptable to military opinion.

INITIAL WORKING PRINCIPLES

From the preliminary experiments six general principles emerged for an improved selection procedure:

- The responsibility for selection must belong, and manifestly so, to the employing institution, i. e., the army. If selection were to be delegated to the "expert," insuperable difficulties would follow regarding the acceptance of new methods by both officers and men.

- The introduction of scientific procedures could best be effected by grafting them onto the existing Command Interview Boards. To do this entailed creating a new social institution, for the original board would be transformed in character. The president of the new board would retain responsibility for selection, but with evidence provided by other examiners. His experience of the army was essential. He should carry a rank—full Colonel—which would strengthen his position in relation to the COs of units from which candidates would be drawn.
- Data from interviews needed to be supplemented by observation of the individual in action. The president should have a junior regimental officer with experience of battle conditions, to be known as a Military Testing Officer (MTO), who would conduct a number of practical tests based on common tasks of an officer's role.
- The psychological contributions to the board's evidence should be of two kinds. First, evidence about each candidate submitted by a psychiatrist and a psychologist. As full an interview as possible should be preserved. In addition to tests which had been proved worthwhile, such as tests of intelligence, ways of estimating qualities of personality should be developed.
- Candidates should live in a hostel with the MTO for a period of three days—the time estimated to process an intake of, say, 30 candidates.
- Working out a practical testing procedure required further experimentation. An experimental board should, therefore, be established with a president, an MTO, two psychiatrists and a psychologist.

The proposals were well received. The creation of a new type of military unit for the selection of officers which would introduce scientific methods in the context of a residential procedure was acceptable to the presidents of the Command Interview Boards.

The Work of the Experimental Selection Board

The experimental selection board* assembled early in January 1942 to begin working out an operational procedure on the principles agreed. Whatever aspects of a candidate might need special attention in the light of job analyses—which were carried out by officers with recent battle experience—the

*W.R. Bion, J.D. Sutherland (psychiatrists) and E.L. Trist (psychologist) became the nuclear technical group which, in conjunction with Colonel J.V. Delahaye (President) and Captain W.N. Gray (MTO), worked up and tested out a reproducible model. Three psychological assistants (sergeant testers—later commissioned) supported this group.

“whole man” had to be taken into account. Many kinds of men made good officers. Few personal qualities were specific to the job. Almost all an individual’s attributes could contribute to his effectiveness and could affect the attitudes of his men and of his fellow officers towards him. It would be his competence to fill the main roles of the officer’s job that would matter rather than his particular method of carrying them out. Preconceptions about officer qualities or types of potential officers had to be overcome. Judges needed an extensive knowledge of officer roles and then had to assess how candidates could use their resources to fill them.

Three main demands of the officer’s job needed assessment: quality of social relations with superiors, equals and subordinates; competence in practical situations; stamina over long periods and under stress. The president and the psychiatrist had their own distinctive method of assessment (the interview) already available but suitable testing methods for the MTO and the psychologist would have to be created.

QUASI REAL-LIFE SITUATIONS

The first military tests were decided by the background, training and battle experience which the MTO brought to his task. As a regimental officer he judged men on the basis of their performance in actual situations and roles. Therefore his intuitions and discriminations were likely to be most effective with tests which enabled him to relate what he observed directly to his field of experience. The most suitable tests were, therefore, quasi real-life situations in which the essentials of various officer roles and problems were imitated. The situations had to be such that they depended as little as possible on special military knowledge and amount of military training.

The tests were of two types: command situations and practical individual situations. Command situations consisted of asking each candidate to play the role of officer in simple military situations using the other candidates as his men. Such situations typically required the officer to deal with his men at the same time as solving concrete problems created by things. Two different kinds of situations were used, one with the candidate in independent command in an outdoor practical situation; the other focussing on his administrative and management roles.

The practical individual situations were designed to bring out certain qualities thought to be related to the capacity to endure stress. They consisted of physical obstacles arranged in a series or “course” with specially constructed apparatus. Athletic prowess was largely irrelevant. The candidate had to assess his own resources in relation to each obstacle. What was looked for was his judgment in overcoming them, as well as his stamina.

munication between military and specialist members, while allowing freer exploration of preconceptions and conflicting beliefs about "officer quality." Differences of opinion were not always resolvable. The difficulty of collating independent reports for the first time at the final conference was one of the main reasons which led to the abandonment of having completely independent roles for the judges.

The experimental board had only just begun to get a program under way when it emerged that 15 to 20 boards would have to be established within the next six months, each with a throughput of 80 to 100 candidates a week. The application of the new methods would not be possible unless the necessary staff could be secured and trained, and the testing program modified to meet such urgent and large-scale needs. To occupy the military roles—president, deputy president and MTOs—suitable officers could be found and trained; but filling the technical roles posed a problem. The psychiatrists' interviews would constitute the main bottleneck. Fortunately, the increasing skill of psychological assistants in making personality pointers enabled the psychiatrist to obtain a sufficient preview of the candidate's personality to distribute his interview time more economically, considerably increase the number of candidates he could see in a day and still feel a reasonable degree of confidence in his judgment.

With a staff of president, deputy president, two psychiatrists, assisted by two (later three) psychological assistants, the interview load could be carried. As regards the practical tests, the MTOs were increased to four. A trial program capable of extension to new boards with intakes of 40 was organized as follows: the psychological tests were confined to the first (half) day; on the next two days the president and deputy president each interviewed 20 candidates, being provided with the intelligence results and notes on the biographical questionnaire; the two psychiatrists each interviewed 20 candidates with the aid of the pointers. All four interviewers prepared reports by the end of the second day for the final board meeting next morning. The MTOs' tests proceeded as before, all candidates carrying out individually prescribed physical tests and taking part in both indoor and outdoor command situations.

This program was accepted by the army authorities and the decision was taken in April 1942 to convert existing CIBs to the new style and to add a number of new boards.

Operational Development and Expansion

The boards were brought under direct War Office control in order that officer selection could develop as a centrally co-ordinated activity. They were named War Office Selection Boards (OCTUs)—WOSBs for short. Simultaneously, the composition of the boards was altered. The psychiatrists and the MTOs

were not members of the board but acted as advisers to a board which retained the composition of CIBs. Visiting members were dispensed with. Nonetheless, their presence had been valuable. They saw what was being attempted and took back to their units first-hand impressions of the work being done.

The changeover from old to new took place rapidly, staff being trained at the experimental board (renamed No. 1 WOSB) and at one of the earliest of the new boards to be established. There were 15 new boards at work by September 1942. There were not enough psychiatrists to have two per board. Commissioned psychologists were appointed, who interviewed the less problematic candidates so that only one psychiatrist became necessary.

The staff of the experimental board had a continuing concern with the inadequate nature of the tests used by the MTOs and with the feelings of the president and psychiatrist that their judgment would be improved if they themselves could see something of the candidates in action. Conversely, the MTOs needed to know something of the inner man so that their cross-sectional view could be better interpreted. The unsatisfactory system of bringing independent reports together for the first time at the final conference required revision.

THE LEADERLESS GROUP METHOD

The general difficulty with the MTOs' tests was that they had little or no coherent conceptual framework governing their content and sequence. The method of leaderless groups in which a group was left to its own devices in coping with a situation with which the MTO had confronted it, or which it set for itself, was conceived by W.R. Bion (Bion, 1946; Trist, 1985). Formal leadership was removed and leadership patterns were left to emerge through a series of group situations, beginning with the least structured and proceeding to more structured events. The aim of the leaderless group tests was to reproduce those aspects of an officer's job principally concerned with his approach to, and his relations with, others.

While other methods and interviews informed the testing officers to some extent about the quality of the candidate's social relations, the leaderless group method forced the candidate to reveal this quality directly in the here-and-now. The method made use of the candidate's anxiety to do well for himself, to further his own hopes and aspirations. In individual tests his desire to do better than other candidates presented no problem, but when he was put through tests as a member of a group without a leader, a problem was introduced. The anxiety to look after his own interests remained, but the MTO's instruction called into activity not individuals, but a group formed by those individuals. Moreover, no indication was given as to whether judgment would be on the

PSYCHOLOGICAL TESTS

The best arrangement was for the psychiatrist to provide an integrated technical report that combined clinical assessment with the more objective measures which psychological tests could give. Four types of test were chosen: questionnaires, intelligence tests, projective tests of personality and individual tests of a laboratory type based on those used in the German army (Ansbacher, 1941). The latter were subsequently dropped as being redundant or impractical. The first two were group-administered written tests and the third soon became so. The function of the two questionnaires was to have recorded, for the convenience of both interviewers, the main features of the candidate's scholastic, occupational and military history and, for the psychiatrist and psychologist, more personal information about family history and health.

In choosing and developing intelligence tests, the following factors had to be taken into account: the capacity to reason with both verbal and non-verbal material (the influence of different educational opportunities being reduced to a minimum); flexibility—the test items were arranged so that each problem would be approached afresh; the maximum discrimination should occur among the top 30 percent of the army population. Candidates were separated into those clearly acceptable, those of borderline acceptability and those unacceptable. Individual confirmatory tests (Semeonoff and Trist, 1958) were given to three categories of candidate: those whose educational or occupational record was out of keeping with the test results; those showing unusual discrepancies between performances on the three tests; and candidates of borderline ability who did well in interview or on the MTO tests.

The projective method creates conditions for the total personality—its conscious and unconscious forces and their organization—to reveal itself in a spontaneous way. Certain projective tests were identified for further work because of their ease of group application and assessment. Three were eventually chosen: a modified Word Association Test, a short series of Thematic Apperception Test pictures and a written Self-Description. These were all given in group form after the questionnaires and intelligence tests.

The purpose of the Word Association Test was to explore spontaneous attitudes towards the officer's job. Words were chosen because of the likelihood of their being linked with such attitudes, including the anxieties aroused (Sutherland and Fitzpatrick, 1945). The Thematic Apperception Test (Murray et al., 1938) was expected to throw light on unconscious conflicts revolving around officer/men relations, those in authority and those who might be enemies. The Self-Description (Wittkower and Rodger, 1941) illuminated the candidate's insight into his strengths and weaknesses and how he handled hostile or favorable attitudes to himself.

The written responses to the projective tests had to be interpreted in a

clinical manner and thus gave scope for large subjective influences. Nevertheless, it was soon proved that psychological assistants who had a fairly advanced psychological training in their university courses before the war could be trained to interpret the material along psycho-dynamic lines with a reasonable degree of consistency. This was a crucial finding, because the few experienced psychologists available were required for much-needed research and development. Furthermore, the projective tests were not intended to be used as independent measures but to provide leads to personality features requiring clinical assessment in psychiatric interview. Their limited scientific status was signified by calling them personality pointers. The pointers helped to identify early in the program those candidates on whom the psychiatrist's assessment would be particularly valuable. They threw light on assets and liabilities in a way that enabled interview time to be used most effectively. To produce the personality pointers for each candidate from the four hours of written tests took, on average, half an hour.

ADAPTING TO INCREASED DEMANDS

Candidates were given the status of cadets and shared a mess with the MTOs. There was little difficulty throughout the three days in maintaining an informal atmosphere consistent with the basic features of army discipline and custom. Badges of rank were replaced by identification numbers on arm-bands which, while convenient to board staff, indicated to all that judgments would be made on what the candidate was, not who he was.

The president with the two local COs formed the board proper, while the psychiatrist, psychologist and MTO played the part of expert advisers. The president interviewed all the candidates himself and the two visiting officers usually conducted a joint interview. The two psychiatrists each interviewed half the candidates, and the MTO and the psychologist used the tests described. At the final board meeting the independent interview judgments were placed alongside the data from the specialist advisers and a new composite judgment was made.

While this form of board was appropriate for working out test methods, it was not optimum for operational use. Accordingly, a deputy president and an extra MTO were added and the staff soon divided into two boards, each with its own team of president, MTO and psychiatrist. The psychologist and two psychological assistants worked with both psychiatrists. Each team could handle 16 candidates in three days so that a board with two teams could see 64 men a week.

A system of reporting, analytical only to the point of separating facts, interpretations and gradings, emerged. Though not ideal, it facilitated com-

performance of individuals or the performance of the group. The conflict for each individual candidate was that he could demonstrate his abilities only through the medium of others. This being true of everyone in the group, a common purpose was created, namely, to act towards one another so that each would have an opportunity to display himself.

There were two problems set by the leaderless group method—the real or social problem, i.e., to reconcile group purpose with individual aspirations, and the quasi-real or presented problem. Candidates direct their attention to the quasi-real problem which conceals the real problem, so that the latter is only vaguely sensed. The more that candidates accepted the quasi-real problem, the more could the MTO identify what was spontaneous in their behavior and through this get an indication of their cohesive and destructive tendencies. It was not the artificial test, but the real-life situation that the observers had to watch—the way in which a man's capacity for personal relationships stand up under the strain of his own and other men's fear of failure and desire for personal success (Bion, 1946).

The leaderless group tasks were set in a series intended to parallel phases in the formation of a group faced with a common task. These phases would overlap, but to separate them made observation easier. Groups of eight candidates were found to be best, though groups of 10 were manageable. The interplay of personalities was freer and more illuminating when the groups could be made as homogeneous as possible in regard to age, rank, arm, and length of service. A basic series of tests lasting about two-and-a-half hours was evolved to represent four phases:

Exploration. The phase of preliminary contact in which members of the group sized each other up and began to know each other, represented in mutual introductions in which each candidate took about three minutes to give personal particulars of himself. This led on to a free group discussion in which the group had to choose a subject which would make for a good argument and then discuss it, 30 minutes being allowed in all.

Competition. In this phase the group members were competing for dominance and the group got some experience of its members in leadership roles. This was represented in spontaneous situations in which several military problems were presented in quick succession, the MTO using the immediate outdoor surroundings as material. The situations were not complex enough to call for action by the group as a whole. It was up to each individual to declare his preferred method of participation (or non-participation).

Co-operation. Each individual had to learn that only by pooling of resources and setting aside self-centered attitudes and motives could a goal be reached. This was represented in the progressive group task which con-

sisted of a practical problem. Characteristically the group had to carry a heavy and awkward load over a series of obstacles of increasing difficulty, in a military setting with an air of urgency. The group had to cooperate to produce an acceptable plan and build an organization around the most effective leadership it could produce. The group had to sustain its activity over a period of time—30 to 45 minutes—to reach an objective.

Discipline. The individual had to identify himself with the group's decisions and subordinate himself to a pattern of organization in which he had to accept the role assigned to him. This was represented in the group game, usually, between two groups, carrying a heavy object, competing against each other for 20 to 30 minutes around an obstacle course.

THE OBSERVER TEAM

The leaderless group tests dealt with the general qualities of social relations which concerned all members of the board. There was an advantage, therefore, in their being observed by the full team of selectors—the president or deputy president, psychiatrist and psychologist as well as the MTO. When a group of observers watched the basic series it was almost impossible for them not to discuss what they had seen and thus difficult to maintain strict independence. With shared observations, differences in opinion were aired early on and this was formalized in a “query conference” at the end of the basic series. Each judge noted those candidates on whom his specialist attention would need to be centered.

“The leaderless group method changed the entire character of the WOSB. The board became a learning community which improved collective capacity through the sharing of common here-and-now experiences of the candidates instead of conducting acrimonious and unresolvable debates on independently based judgments” (Trist, 1985). The creation of the observer team enhanced the value of the special contribution which each member would make in the final board conference. It greatly improved the basis for the collaboration of the three types of judge, both in their feelings about each other's role and in their common task. The shared observations indicated to each member his prejudices and biases. The comparisons of judgments on the same data did much to keep standards similar amongst observers in the same team.

With candidates who failed there was a strong desire among board members to advise them and to secure conditions in which they could develop or use their assets to the best advantage of the army and themselves. Thus letters to COs would explain the board's opinion and ask them to give these candidates

such facilities for gaining leadership experience as were available. A special training center was set up for immature candidates. Transfers to more appropriate jobs were suggested in the case of men of high ability who would never acquire the personal qualities needed in an officer. It appeared to be virtually impossible to sustain selection procedures without extending some form of guidance to those who failed. For general satisfaction a selection procedure had to be a two-way process in which the observer team got a lot out of the candidates and the latter, in turn, got something from the observer team.

As the number of WOSBs increased it was decided to set up near London a headquarters called the Research and Training Centre (RTC). It was desirable for the original group of psychiatrists and psychologists to be geographically close to the War Office where they could give help on policy questions affecting the WOSBs as a whole. Unhappily, the way the RTC was set up prevented the development of more refined assessment methods for the ordinary work of the boards. For example, it could not also function as an ordinary working WOSB and so directly encounter the emergent problems in regular selection. Access to neighboring boards could not provide suitable conditions for further development as the pressure of work was too great. The professional group at RTC became increasingly absorbed in planning follow-up and allied investigations. They had to devote a very large part of their time to an increasing range of selection problems to which the start of the WOSBs had given rise.

ATTITUDE TO THE NEW WOSBs

Within a remarkably short period the new methods gained the almost unanimous approval of the other ranks. The opinion of candidates was sought by asking them to give, anonymously, their frank comments on the whole program. This was done after the testing was completed and while the board was sitting so that nothing said would be "used in evidence against them." These spontaneous comments showed a remarkable support for what the board was trying to achieve. Ninety-eight percent approved whole-heartedly of the new procedure.

Despite the fact that many COs were in sympathy with the aims of the board, there was, not unexpectedly, skepticism and hostility. This was minimized only when more officers could visit a board for a whole intake and go through the work with the president. Apart from negative attitudes of a more personal origin, resistance to the new methods could have been predicted because the role of COs in the selection task had not been clearly worked out—and certainly not with them. They were, in fact, being asked to accept a change introduced from above and one which was not in response to a need that they

were experiencing directly at this stage of the war. The attitudes of the COs to the new methods was basic to their participation in the larger task of the production of officers.

The Crisis of Candidate Supply

The staff of the experimental selection board became aware that the task was not only to improve the quality of officer cadets by suitable selection methods but also to ensure that every soldier with officer potential should come to a board and that all men who reached minimum standards of suitability should be identified. It had been quite widely felt that a large number of good candidates were not available through COs discouraging them, directly or indirectly, from leaving their units. Many COs feared that if they gave up some of their best men they would seriously weaken their units as a fighting force. The staff of the experimental board could not directly remedy this situation, but they could ascertain to what extent it might be true.

The other armed services and the war industries were all being provided with leaders at the expense of the army. Compared with the first world war, the ratio of officers to other ranks was nearly doubled so that, from sources already creamed to some extent, far more officers had to be found. Indeed, anxiety was expressed as to whether the army could provide its own officers.

In the first four months of the experimental board the supply of candidates in the country as a whole was barely one-third of what was needed and in the catchment area of the board itself it was even less. A survey was made of the sources of candidates in a command area with the startling result that their numbers were absurdly small from the majority of units. Over two-thirds of the 700 independent units (Lieutenant Colonel or Major commands) provided no candidates in a 15-week period and 14 percent only one candidate, the proportion of units then decreasing as the number of candidates increased. The accepted, though tacit, convention was not to put candidates forward. Further analysis showed that the nearer a unit was to going overseas to take up a role in combat, the smaller the number of candidates it produced; the larger the unit, the smaller the proportion of candidates; and, the more candidates a unit sent to a selection board, the higher the proportion accepted (A.T.M., Wilson, 1951). Furthermore, units producing most officers usually had internal institutions to discover such candidates.

THE REGIMENTAL NOMINATION EXPERIMENT

Bion suggested that the knowledge the men had of each other should be used in finding candidates. If a CO was interested the men in the entire unit could be

asked to give the names of those of their fellows whom they thought highly of and whom they would trust to lead them into action. Trist recognized this proposal as a use of sociometric principles (Moreno, 1934) and worked out a method of carrying it out, which became known as Regimental Nomination. It was based on the notion that whole battalions or equivalent units of good reputation should be awarded the privilege by the Army Commander of pre-selecting their WOSB candidates in such a way that they came forward in the name of the regiment. To secure this, officers, NCOs and men had all actively to participate. The suggested method would be additional to the usual one by which men became WOSB candidates exclusively by CO recommendation. Any NCO or man nominated by the new method would have the right to refuse his nomination. A necessary condition of success would be the complete cooperation of the CO, who would take the lead in launching the experiment in his unit. The nomination procedure would be simple and, in the long term, self-administered within the unit itself. All nominations would be made independently and without prior discussion under conditions approximating those of psychological group testing. Particularly for fully trained units which had been in existence for some time, the aim was to provide the army with a more efficient social technique of bringing its potential officers to the surface.

Sanction for a crucial experiment was sought and given at the highest level and thereafter at each level in the hierarchy down to the units invited to participate in the scheme. In these the CO invited his unit, as a regimental whole, to share with him the responsibility for nominating candidates. Each of the four units selected by the Army Commander had a good military reputation. They were varied in their military function and in their state of readiness for action, and were representative of the general position regarding candidate supply. The nominating groups in each unit were of company size—between 100 and 200 men. There were 11 such groups among the four units selected for the experiment. A nominating group was seated indoors and split into platoons, or equivalent units, of 20 to 30 men. In the presence of representatives of the Army Commander and the WOSB organization, the CO explained the invitation of the former, the need for more officers, the nature of WOSBs, and the Regimental Nomination scheme. "To get our regimental candidates we are all going to vote: yourselves, your NCOs and your officers. We want to know if you can put up people so good that they do better than people who are put up in any other way. Choose good ones. You may have to fight under them. . . ." Under conditions of secrecy, each person was invited to write down the names of any individuals, first in his own platoon, and next from the rest of the company, whom he regarded as potential officers. He need nominate no one if he thought no one was suitable.

Two types of nominative information were available: how the individual was perceived as a potential officer from the viewpoints of different ranks in the

whole company—privates, junior NCOs, senior NCOs and officers; how he was regarded by those closest to him in military life (all ranks in his platoon) and also by those at a greater distance (members of other platoons in the company). This gave six nominative criteria. All who received an appreciable measure of support on any three or more were identified and discussed at a unit conference at which the CO gave his opinion and his grading of officer potential. He then published throughout the unit the names of all those who had received this appreciable spread of support and invited them to go forward to a WOSB. Special arrangements were made to ensure that the examining WOSB could not identify candidates who came to it as a result of the regimental nomination procedure.

The percentage of the 114 regimental nomination candidates from the four selected units who passed WOSBs (54 percent) was not significantly different from those who came through the usual channels (56 percent). The pass rate was clearly related to the number of nominative criteria satisfied by the candidates as shown in Table 1. The supply of candidates from the four units through regimental nomination represented 6.8 percent of the unit strength compared with 0.1 percent per month through the usual procedures. In round figures, that is equivalent to 10 candidates from an average company nominating group of 150 men compared with two men per year. There was thus strong support for the view that the difficulty in the supply of candidates was not, as often stated, due to a lack of suitable material, but to the "in-group" mentality in field force units, which increased as preparedness to go overseas increased. Giving up some of its best men in the larger interest of the army was not popular in such units. A method of releasing this supply had been demonstrated which increased regimental pride. Together with the discovery of an unsuspected amount of officer material, it offset the COs' anxiety over being stripped of their best men. In any case, the training of key other-rank replacements would not take as long as that of officers.

Careful planning was required to show how selective, low profile implementation might best be possible, as well as further work on how to identify and approach suitable units. But, as the success of the experiment became known, the whole of a famous division and the whole of a technical corps asked for regimental nomination. Even though there was no selection of officers, only nomination of candidates and no change in the rights of COs, a complex situation developed at the highest level (Trist, 1985). The technical staff did not effectively represent to higher authority the dangers of implementing regimental nomination without further development. This led to a premature and widespread disclosure of the scheme, disputes about matters of protocol and an ensuing meeting of the full Army Council. The military members of the Army Council, who favored the adoption of regimental nomination in the interests of the army, were in a minority of four to six to political

TABLE I Regimental Nomination Candidates

Nominative criteria satisfied	6	5	4	3
WOSB pass rate (percent)	77	54	35	23

and civil administrative interests, who thought the scheme possibly subversive ("Soviets in the British Army"). Further reference to regimental nomination was banned. To make the best of this situation a scheme, known as Exercise By-Pass, was developed in the Directorate of Selection of Personnel. To get as many candidates as possible to WOSB before they went to field force units, unit boards were set up in Corps Training Centres. Officer members of these boards could consult NCOs informally. However, the extension of the WOSB system at home and overseas, in itself, largely solved the problem of supply. The fear that the army could no longer officer itself was not expressed again.

Evaluation and Its Problems

The establishment of WOSBs had immediate effects. There was a rapid increase in the supply of candidates, the average number rising from 2,000 during the first quarter of 1942 to over 6,000 in October of that year. In the three years in which the WOSBs operated, from mid-1942 to mid-1945, over 125,000 candidates were assessed in the United Kingdom of whom nearly 60,000 were accepted. During most of this period there were also many boards at work in the Middle East, Italy, and in North Africa, where of 12,700 candidates, 5,600 were accepted. A board working in the British Liberation Armies in Europe (1944-45) saw 1,500 candidates and accepted 900. Another group of boards in India selected a large number of officers, both British and Indian.

A marked change took place as the war progressed in the predominant type of candidate appearing before the boards. The candidates accepted in the United Kingdom were younger, had less service, but a higher standard of education. To deal with such changes there had to be modifications in technique, particularly in the content and conduct of the MTO's tests. It was one of the virtues of the WOSB methods that these could easily be effected.

DIFFICULTIES WITH THE EARLIER FOLLOW-UPS

Nevertheless, the need to bring boards rapidly into operation had unfortunate effects for the subsequent validation studies (Morris, 1949). The new boards

had started before there was an agreed series of military tests. Boards developed their own idiom and to some extent their own techniques (Garforth, 1945; Harris, 1949). The difficulties over common standards between board members were greatly reduced by the introduction of the observer team, but wide differences between boards were known to exist. A common grading system was not introduced until some months after most boards had begun working and staff did not receive any common training in its use. Boards passed about the same percentage of candidates, but one would be less prone than another to award the higher gradings. The task of a board was not to discriminate at the top of the grading scale, but to find every possible officer. A high percentage of gradings, therefore, occurred in the area of marginal acceptances. In these circumstances it would have been desirable to use some form of profile assessment but it was not found possible to bring one into common use until late in the war. Apart from data collected by the psychologists, the only WOSB assessment available for follow-up purposes was the final grading on suitability.

After hostilities ceased in Europe a carefully designed experiment was conducted using the best and most experienced staff available, who were given an initial period of common training in reporting, and who adopted a standard personality profile. Two independent parallel boards, mutually incommunicado, simultaneously observed the same candidates doing the same tests. The average inter-correlation of the final grades of the two boards was 0.80; of the two presidents 0.65; psychiatrists 0.65; the MTOs 0.86 and the two psychologists in observer roles 0.87. The average inter-correlations showing the level of agreement between the different members—presidents, psychiatrists and MTOs—were 0.60. These figures, obtained under optimum conditions, show a satisfactory degree of reliability for work of this kind (Morris, 1949).

In making the comparison of gradings at boards with ratings of success after OCTU and after a campaign, the main problem was how to get the CO to give a reliable and valid report. Little previous work had been done on how to assess success in such a complex role as that of a junior officer and the problem proved to be in obtaining discrimination. A detailed report was obtained on each cadet or officer to be followed-up. The earlier follow-up studies included a questionnaire check list, a pen-picture, ratings and rankings and a discussion between the reporting officer and a follow-up interviewer to clear up ambiguities or disagreements.

The following results show how difficult it was to evaluate the work of the WOSBs. The first follow-up carried out soon after they had been started showed that the new boards, although passing the same proportion of candidates as the old, found significantly more above average and significantly fewer below average cadets as judged at the conclusion of OCTU training. In

contrast to these findings, a follow-up conducted after the campaigns in North Africa and Italy showed officers selected by the old and new methods did not differ according to ratings given by their COs. The samples covered the earliest period of WOSB operation when the boards were learning their job. Nevertheless, the result did not “make sense.” Was the method faulty?

CREATING AN OPERATIONAL FRAME OF REFERENCE

In these first field follow-ups the academically conventional approach to assessment failed to match the real-life conditions under which COs had to make judgments. A CO thought about his officers in two groups: those on whom he could rely and those on whom he could not rely. These latter had become problem officers whom he might have to remove from his unit. He regarded them as “unsatisfactory” and the rest as “satisfactory” about whom he did not have to bother. Among the satisfactory were a handful who might be promoted or sent on special assignments. These operational distinctions became the basis for an anthropologically derived rating scale. In the field follow-up after the liberation of France, the MTOs conducting the procedure (under Bowlby) asked each CO to rate all his officers so that the War Office could know directly the opinions of commanding officers in the field. This made every sense to them. They co-operated whole-heartedly. They never knew which officers in their units belonged to the follow-up sample.

With officers reported on after the liberation of France, the correlations between WOSB opinion and CO ratings were positive, though rather low. These correlations became higher when the youngest age groups were separately considered, i.e. board judgments were better on the younger candidates. Nearly all of these would have passed through new Boards—which had become more experienced and presumably more efficient as the war went on. On the other hand, the correlations between gradings given at OCTUs and CO ratings were negligible. Such complexities in evaluation were not unique to the WOSB scheme (OSS Assessment Staff, 1948).

As the war progressed more officers appeared in the field in reinforcement roles—a role more difficult than that of being an officer in a unit with which one had gone abroad. Of particular interest was the finding that the quality of reinforcements to units after battle was maintained, whereas in the first world war it deteriorated.

Overall, the important thing to the Army higher authorities was that only 12 percent of officers were unsatisfactory—unable to do their job. The COs were pleased to be able to say this. The War Office was delighted and inclined to leave the development of more precise follow-up methods to the future.

Later Developments

NEW TASKS FOR THE BOARDS

The impact on the army of a machinery which could investigate the individual in a way helpful both to him and to the army was not long in being felt at the boards. Within a few months of their being established, a wide range of assessment tasks was brought to them, each of which had to be carefully reviewed by the senior staff at RTC to ascertain what was involved. The particular kind of help requested varied from merely giving advice to working out a new procedure which was then executed by one or more WOSBs. A parallel scheme was evolved for selecting officer cadets for the women's auxiliary service; another to select officers for permanent commissions in the Regular Army. From time to time boards were used, or set up, to assess officers for various types of work such as paratroops, psychological warfare, the civil administration of occupied territories and special operations—the equivalent of the OSS in the U.S. (Morgan, 1955). A few boards were used to advise on suitable employment or disposal of officers with adverse reports and officers who had had psychiatric breakdowns. Towards the end of the war several boards were adapted, and a few specially created, to advise on the employment of both officers and NCOs who became surplus to establishment with the changing course of the war, and to give guidance to returned officer prisoners of war.

A nation-wide review of all engineers was undertaken on behalf of the Ministry of Labour, screening 130,000 registrants of whom 31,500 were interviewed and 12,500 accepted for a pool from which candidates for technical commissions in the services were drawn. A specially difficult task was the selection of 17-year-old schoolboy applicants for short university courses in science subjects (2,200 candidates, 1,170 accepted) and candidates for engineering cadetships in the army or navy (980 candidates, 620 accepted). Owing to the youth and under-developed characters of the applicants, the assessment of their potential officer quality presented an unusually difficult problem. Accordingly, a longer and more detailed procedure was required, because an order of merit had to be produced regardless of the particular board they happened to attend. Successful candidates had to be batched according to their knowledge and ability and sent to the appropriate university which was supplied with a report on each candidate's competence and educational background.

In the course of these additional tasks, the research staff were sometimes able to develop, as experiments of opportunity, such new assessment tools as real-object performance tests to explore the interests and motivation of candidates for engineering cadetships. Opportunity was at last on hand to develop

profile methods of assessment and to facilitate a common standard of decision-making at ordinary WOSBs. Most of these new tasks were necessarily undertaken before any evaluation became available of the methods used for the work the WOSBs had originally been set up to do. Had the WOSBs not, in general, satisfied the expectations and needs of the army, the candidates themselves and the civilian community, it is improbable that they would have become involved in such a wide array of problems and tasks.

THE WIDER IMPACT

The Royal Navy, the Royal Marines, the Royal Air Force, the National Fire Service and several of the Dominion and Allied armies later adopted the new methods in whole or in part. Many organizations with similar selection problems closely followed the work of the boards. Experimental procedures were tried out for those within the central government sector. The Civil Service modelled part of its reconstruction and post-war selection procedure for administrative trainees on WOSB procedures (Wilson, N.A.B., 1948; Davies, 1969). A number of industrial firms subsequently began to use similar methods in recruiting trainees for various grades of management (Bridger and Isdell-Carpenter, 1947; Munro Fraser, 1947; Rice, 1961). More than 40 years later multiple assessment methods, albeit different, but traceable to war-time methods used in WOSBs, continue in use for the appraisal of individual potential (Anstey, 1977; Dulewicz and Fletcher, 1982). Assessment centers have gained widespread acceptance throughout the world and constitute one of the most extensive, if expensive, practices for attracting, and evaluating the qualifications of, scarce human resources.

The readiness with which the methods of the WOSBs were elsewhere adopted indicated the disparate and widespread need for advances to be made in the field of personality assessment. The specialist staff concerned with their development were surprised that visitors wanted to take over the new methods with little, if any, preliminary critical inquiry regarding their appropriateness for selection tasks other than finding potential officers. Both the constitution of the boards and the nature of their methods played a part in creating this enthusiastic attitude at a time when scientific tests of their value were still not yet to hand. Their constitution seemed specially attractive because some of the resources of the psychological sciences were incorporated into the board, yet responsibility for decisions concerning selection remained vested, and manifestly so, in the senior representative of the employing authority. The other members of the board acted as advisers who provided special evidence. All members, however, were integral parts of the whole; the contributions of each had to be fully discussed with the others—in a group. Hence there was a high

degree of sharing among members of each others' special knowledge and experience. There were many reasons for the wide appeal of this particular way of integrating the wisdom of institutional representatives who recognized intuitively the kinds of person their institution could successfully employ, with the skills of experts who contributed a more general understanding of human personality.

The mutually educative and mutually supportive nature of the roles of regimental and expert members was reflected in the high morale of all board teams, sustained over long periods of time, often under intense work pressures. The other main source of attraction was that the methods used brought out the personality of the candidate in a direct way. Observers saw him respond to a variety of simple practical situations in which he had to deal with people and things spontaneously. In such situations the behavior of the candidate seemed often to speak for itself. Aspects were seen which would never have been revealed in interview. Interviews, however, were necessary to add a historical perspective to a contemporary one.

The choice of officers in any army is a markedly conservative process. It was a very considerable event for an army in the middle of a war to take such radical steps as to introduce psychiatrists and psychological tests into a procedure for choosing its officers and to allow a novel type of military institution to be created for this purpose. Collaboration between expert and administrator and its maintenance on a constructive basis is one of the pressing problems in large organizations. WOSB experience has yielded a wealth of insights and findings relevant to all those who must address these problems.

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