EXECUTIVE SUMMARY:
A REVIEW OF AA PSYCH CORPS INVOLVEMENT IN THE
ALLOCATION OF SOLDIERS TO CORPS AND EMPLOYMENT

by

Lieutenant Colonel R.C. Furry

November 1990

APPROVED FOR PUBLIC RELEASE

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IN 1988 THE DIRECTOR OF PSYCHOLOGY - ARMY REQUESTED A REVIEW OF AUSTRALIAN ARMY PSYCHOLOGY CORPS INVOLVEMENT IN ALLOCATING RECRUITS TO ARMY EMPLOYMENT.

A TECHNICAL REPORT (TR 1/89) REVIEW OF AA PSYCH CORPS INVOLVEMENT IN THE ALLOCATION OF SOLDIERS TO CORPS AND EMPLOYMENT WAS DISTRIBUTED WITHIN THE AUSTRALIAN ARMY PSYCHOLOGY CORPS. THE ENCLOSED EXECUTIVE SUMMARY REPRESENTS A SHORTER DOCUMENT THAT IS SUITABLE FOR WIDER DISTRIBUTION.
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EXECUTIVE SUMMARY:

A REVIEW OF AARPSYCH CORPS INVOLVEMENT IN

THE ALLOCATION OF SOLDIERS TO CORPS AND EMPLOYMENT

by

Lieutenant Colonel R.C. Furry

November 1990

This Directorate of Psychology publication has been prepared by
1st Psychological Research Unit and is authorised for issue by Director of
Psychology - Army.

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Lieutenant Colonel
Commanding Officer
1st Psychological Research Unit

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Abstract

In 1988 the Director of Psychology - Army requested a review of Australian Army Psychology Corps involvement in allocating recruits to Army employment.

A technical report (TR 1/89) REVIEW OF AA PSYCH CORPS INVOLVEMENT IN THE ALLOCATION OF SOLDIERS TO CORPS AND EMPLOYMENT was distributed within the Australian Army Psychology Corps. The enclosed executive summary represents a shorter document that is suitable for wider distribution.

The findings and views expressed in this report are the result of the author's research studies and are not to be taken as the official opinion of the Department of Defence (Army Office).
Each year the Army allocates more than 3,000 recruits to Army employments. The Australian Army Psychology Corps (AA Psych Corps) members advise the Soldier Career Management Agency (SCMA) (see glossary) Allocation Officer as to the suitability of individual recruits for allocation to particular employments. This advice is based on the results of testing and information gathered from interviews. It is in the best interests of all concerned that employment criteria are realistic and kept up to date and that psychologists can be confident that the test batteries are valid for the allocation process. Recent concerns have centred on the very limited choices for employment for some recruits and the difficulty in allocating some recruits of lesser ability.

Current Army Manpower Philosophy

The implied philosophy is that of recruiting a pool of manpower. Unlike the Royal Australian Navy (RAN) and the Royal Australian Air Force (RAAF) and most other foreign military services, the Army does not muster (select for specific employments) at the time of enlistment. One assumption (untested) made is that 'most' applicants are unable/unprepared to make a vocational choice at the time of enlistment. Despite this, applicants at the time of enlistment already have vocational expectations, derived primarily from Army advertising.

Demographic Factors

The recruiting pool is a small one derived from a small population widely dispersed in a large country (Drake-Brockman, 1985). Changing demographic and social trends will continue to place pressure on the current practices. Pressures include an anticipated decline in the population of 15 to 24 year olds over the next 10 years and the increasing level of participation in education. Retention in secondary school to year 10 has risen from 36% in 1982 to 49% in 1986. The Federal Government aims to achieve 65% by the early 1990's (Statement by the Chief of General Staff (CGS) at the CGS Exercise 1988).

The Overall Manning Process

The allocation process starts with the annual Army manning plan which sets targets for the Authorised Establishment (AE). Currently the AE creates a demand which is higher than can be manned with the current Approved Average Strength (AAS), after subtracting the number of non-effectives and the number of trainees. These latter two categories make up the Manpower Not Related to Establishment (MNRE). MNRE for Financial Year 87 was 11.43%. Achievable or Affordable AE=AAS-MNRE. Each 1% increase in wastage results in additional temporary undermanning of about 200. Planning factors included in the manning plan include start strength, AAS, wastage, training capacity and trained strength.

Twice a year (January/February, July/August), the Staff Officer Grade 2 (S02) Soldier Strength Management, Director of Personnel Plans - Army (DPP-A), after calculating manpower wastage, meets with Heads of Corps (HOC) to discuss manpower requirements. The SCMA Allocation Officer also attends these meetings. HOC are given gross figures and then 'bargain' among themselves. After the meeting HOC break down the gross figures into employments and then pass the figures on to the SCMA Allocation Officer who attempts to further break down the numbers according to existing course vacancies.
The Range of AA Psych Corps Clients and Differing Perspectives Involved

There are four quite different perspectives and three different 'clients' involved in the allocation process. The SCMA perspective centres on manpower requirements and the employment vacancies available. The interest of the Initial Employment Training (IET) schools is solely in getting 'trainable' soldiers and a fair share of the available talent. The Psychology Unit at the 1st Recruit Training Battalion (1RTB) is primarily concerned with the best possible match between abilities and skills and the employment available. The recruit has only one interest and that is getting his preference for an employment. Those involved in the allocation must somehow satisfy all three clients.

The process employed is aimed at ensuring that jobs are filled by individuals who meet minimum required standards (an approach that has served the Army well). This is a negative selection approach and in that sense is opposed to any concept of maximising the ability levels of individuals. In some overseas allocation systems (eg the U.S. Air Force) there is an effort to calculate the scaled importance value of each job holder aptitude level by job difficulty combination, and with the premise that the greater the job difficulty or higher the aptitude level of the individual, the higher the value of that allocation (a measure of utility). This approach attempts to identify the particular job where a particular individual can be expected to contribute the most to the organisation. If the Australian Army were to adopt this approach, any increase in terms of classification efficiency would be offset to some extent by such things as inequitable distribution of talent among Corps. This in itself an important consideration. If we take the steward trade as an example, an individual with a low level of ability can perform the job at entry level, but if everyone allocated to be a steward is at the same level, it is not possible to fill vacancies 'downstream' for mess supervisors. Rather than relying on a single minimum standard, there needs to be a distribution so that through maturation and attrition, Privates can be prepared by the system to be promoted and take on additional responsibility and more complex tasks.

The major question to be answered is: How do we improve the allocation 'process' (Figure 1) to significantly improve outcomes (failure rates at IET, percentage of recruits who get their preferences, matching of abilities and skills to employments, filling of vacancies)?

Current Allocation Guidelines and Standards

The Manual of Army Employments (MAE) is intended to be the primary reference source for information on Army employments. Unfortunately the MAE has not been kept up to date and very few of the entries specify any sort of usable psychological criteria. Allocation criteria have 'evolved' over the years with specific updates. The current criteria are based on information supplied by HOC and were introduced 1 January 1989. Allocation criteria are updated as a consequence of IET allocation board tours (consisting of SO2-Personnel Management Cell 5 SCMA, Officer Commanding (OC) 17 Psychology Unit (17 Psych Unit), Allocation Sergeant (SGT) 17 Psych Unit and usually a representative from DPP-A and Training Command (Trg Coord)). These visits in practical terms provide the only systematic feedback on the allocation process. Initially allocation criteria were set in 1954, not on a totally arbitrary basis, but based on selection procedures used by the RAAF and using test performances of similar soldiers serving in the second world war. The setting of standards should begin with Occupational Analysis, but in the absence of a MERIT (see glossary) type effort in the Army, we rely on Subject Matter Experts - in this case IET schools are asked which knowledge, skills or abilities (KSA) are required for successful job performance. The schools
Figure 1
Allocation As Part Of The Overall System

Trained Force

↑
Outcome

<table>
<thead>
<tr>
<th>Financial Constraints</th>
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<tbody>
<tr>
<td>Application of Training</td>
</tr>
<tr>
<td>Job Satisfaction</td>
</tr>
<tr>
<td>Relevance of IET</td>
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↑
Output

<table>
<thead>
<tr>
<th>Instructor Competence</th>
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<tbody>
<tr>
<td>Relevance of Training</td>
</tr>
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<td>Specified Course Dates</td>
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↑
Unrealistic Expectations
Recruit Performance
Recruit Preferences
Limited Vacancies
Limited Distribution of Talent
Corps Trade Requirements

↑
Limited Pool of Applicants
Applicant 'Quality'
Selection Standards

→
Throughput,
Process or
Value Added
Activities

→
Input
develop descriptions of job-related KSA which are made available to the allocation board. All of this assumes that the criterion is training performance and that training performance can be equated to job performance. Without some form of occupational analysis this cannot be determined. The question is: What are we allocating for? With the constraints that are currently involved the only possible answer is successful completion of IET.

In looking at performance measurement methods, there are three basic categories: objective measures of performance; tests of job knowledge and ratings. Objective hands-on performance tests measure both skill and knowledge components of the job; written job knowledge tests measure knowledge only; and ratings measure motivation and job performance over time. The final choice of method will be a function of trade-offs between the relevance of the measure, costs of obtaining the measure, and the quality of the measure (Eaton, et al, 1987).

The Allocation Process at 1RTB

The allocation process occurs in the following order:

<table>
<thead>
<tr>
<th>Week</th>
<th>Action</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>Classification testing (forms the basis for the recruit allocation guide).</td>
</tr>
<tr>
<td>5</td>
<td>Allocation guides distributed to recruits and allocation questions answered.</td>
</tr>
<tr>
<td>6</td>
<td>Allocation lecture given by the Allocation Officer from SCMA</td>
</tr>
<tr>
<td>8</td>
<td>Allocation interviews conducted.</td>
</tr>
<tr>
<td>9</td>
<td>Specialist testing and interviews (The Australian Army Intelligence Corps (Aust Int Corps), Army Adult Tradesmen's Scheme (AATS), AA Psych Corps).</td>
</tr>
<tr>
<td>10</td>
<td>Provisional allocation of recruits.</td>
</tr>
<tr>
<td>11</td>
<td>Final allocation.</td>
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This process is represented in Figure 2.

Four employments account for 50% of allocations (Figure 3). Rifleman on its own accounts for 25% (at times it has been as high as 40%). Rifleman and driver (all Corps) account for 36% of all allocations (for the six-month period from June 1988).

Continuing Problems

There is a continuous problem with finding enough job vacancies for those recruits with below average ability. Over time, entry standards have remained stable, while several employments can no longer be considered to be totally unskilled. SG4s (see glossary) with poor training reports (and often designated unsuitable areas) present the biggest problems with regard to allocation, as their choices are limited (to the most popular jobs - field engineer, driver, cook), but their lack of competitiveness for these popular trades usually results in the creation of an extra position/vacancy, which is often deemed unfair to other members of the platoon, or allocation to The Royal Australian Infantry Corps (RA Inf). Recruits' preferences are
Figure 2

The Allocation Process

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<tr>
<td>week 2</td>
<td>week 3-4</td>
<td>week 5</td>
<td>week 6</td>
<td>week 8-9</td>
<td>week 10 week 11</td>
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Allocation Guide: Shows suitability for employment. Based solely on test results.


Allocation Lecture: SCMA Allocation Officer outlines the allocation rationale and informs the platoon of the vacancies available.

Allocation Interviews: Psychologists interview recruits and discuss their allocation preferences with them, with knowledge of what jobs must be filled.

Pre-Allocation: Board consists of Allocation Officer, OC 17 Psych Unit and the allocation SGT.

Allocation: Board is the same as for pre-allocation. The board reconvenes the following morning for recruits dissatisfied with their allocation.
Figure 3

Allocation to Trade (%)

Note: Four trades account for 50% of allocations.

KEY:
RFN : Rifleman
DVR : Driver
FE : Field Engineer
CLERK ADMIN : Clerk Administrative
CMAN DVR/SIG : Crewman Driver/Signaller
RAEME AATS : Royal Australian Electrical and Mechanical Engineers Army Adult Tradesmen's Scheme
STWD : Steward
OP RDO : Operator Radio
COOK : Cook
constrained by the actual jobs being offered, their ability to meet minimum standards, their own imperfect knowledge of the jobs and possibly unrealistic expectations. A number of constraints will always complicate the allocation process. These include the requirement for an equitable distribution of 'talent' among Corps and restrictions on the time a trainee can spend at a school prior to starting course.

Psychologists involved in the allocation process have felt uncomfortable about requirements in some cases to predict an individual's suitability for a trade 12 months or more in the future. This has involved allocation to The Royal Australian Corps of Military Police (RACMP) as Policeman Military (POLCM MIL) and Aust Int Corps as Operator Intelligence (Op Intel). The issue has been settled for RACMP but an almost identical situation exists for Op Intel. Aust Int Corps likes to plan its manning in advance, arrange for security clearances, etc. The psychologist is put in the position of trying to determine suitability on the basis of very limited information at the same time discounting any changes that may occur in the following 12 months. This is not consistent with the principle of assessing individuals shortly before the start of training.

Issues to be Considered

There are a range of issues to be addressed including:

a. Are the current classification tests appropriate for the task?

b. Can we defend allocation decisions (in the legal sense) based on our current criteria? (Martyn, 1987 is germane)

c. What are the costs associated with misallocation? and

d. To what degree are IET course failures attributed to the individual and to what degree to the training? How often are other factors (motivation, etc) more important than test factors?

Issues a and b are intertwined.

Appropriateness of the Current Classification Tests

AA Psych Corps allocation testing can be said to have face validity (the tests appear on the face of it to be relevant to the performance), content validity (jobs involve the use of particular skills included in the tests) and construct validity (the tests measure concepts that can be shown to make conceptual sense). What we have not demonstrated is criterion related validity.

Issues Involved in Validating the Allocation Process/Predictors

The problem is not one of finding simple correlations. Testing experts increasingly question the sacredness of the single validity coefficient and show annoyance with the treatment of content, construct, and criterion-related validities as three different entities. Validity is neither a single number nor a single argument, but an inference from all the available evidence (Guion & Gibson, 1988, p.363). The basis for any prediction of performance is that test characteristics observed during the selection process will generalise to the job setting and endure long enough to permit useful predictions (Guion, 1987).
Any attempts at validating the allocation process will require that attention is given to questions of validity generalisation, utility, and classification efficiency. There is reasonable evidence that some tests are valid predictors of performance across a wide variety of jobs. The real question is which types of predictor tests generalise to which kinds of criteria in which types of tasks/jobs/occupations (Eaton, et al, 1987).

**Considerations in Defence of Current Psychological Criteria**

Legal cases overseas (U.S.) have centred on the setting and validation of cutoff scores, predictive validity of tests and criterion reliability. One view is that training itself is a sufficient criterion. Where it has not been practical to validate training performance with job performance, or validate the selection device with job performance, courts have generally accepted the use of tests that establish that candidates have the minimum skills necessary to complete the training programme. Most courts have found no merit in the argument that any cutoff score should be validated. The overall problem is one of producing empirical evidence linking test performance and job performance.

Cutting scores on tests are either a matter of policy or a matter of expected supply and demand (Guion & Gibson, 1988, p.359). Examinations are a permissible method of determining qualifications and lines must be drawn somewhere. The sole requirement is that there is some rational relationship between the cutoff score and the purpose of the examination. The real issue is not the cutoff score per se, but whether or not the testing procedure is valid (Cascio et al, 1988). There is little consensus about the best way to set standards in employment settings. Setting a cutting score is inevitably judgmental. A number of criteria do exist for what comprises a 'good' cutoff score. American Psychological Association (APA) guidelines say that a cutoff score should normally be set so as to be reasonable and consistent with the expectations of acceptable proficiency in the workforce. In the final assessment cutoff scores need not be mathematically precise. There is no assertion that a person who scores one point above the cutoff score will be a good employee while a person one point below will not (Cascio et al, 1988). In practice, within AA Psych Corps, cutoffs are treated as guidelines and can be moderated by factors such as relevant or current manpower demands.

**Previous Validation Attempts Within AA Psych Corps and the U.S. Experience**

The 1/78 IET Project (DPSYCH-A, 1978) was an attempt to establish the correlates of success/failure for IET training conducted by The Royal Australian Armoured Corps (RAAC), The Royal Australian Corps of Signals (RASigs), The Royal Australian Survey Corps (RA Svy) and The Royal Australian Army Ordnance Corps (RAAOC). Data was collected from 1RTB, IET schools and Army Health Records Office (Psych). Data collection commenced in 1978 and proceeded for 12 months. The project foundered because of a high rate of missing and incomplete data. Even after extensive recoding, the value of the data was very much in doubt.

Project M (Armstrong, 1979a, 1979b, 1979c) was an attempt to validate enlistment criteria rather than allocation criteria. Nevertheless, a great deal of usable experience in validation techniques was gained which has relevance to any validation of allocation criteria. The discussion of selection efficiency in Armstrong 1979b is particularly relevant. Project M also demonstrated that research findings are only as good as the data collected (eg existence of tattoos). Project M gave AA Psych Corps what was probably a 'once only' opportunity to chart the performance of all applicants except for a small number screened out by medical or enlistment officers.
There have been some 'minor' studies into specific employments. The latest being into failure rates for Operator Signals in 1986. The Clerk Administrative/Clerk Technical trades were looked at in 1978 and failure rates for the Technician Electronic trade have been raised (1982) but not investigated in any complete manner.

Project A (Peterson, 1987) is a comprehensive long-range (nine years from 1980) research and development programme aimed at improving the selection, classification and utilisation of U.S. Army personnel. Specific objectives are to validate existing selection measures against both existing and project measures; validate intermediate criteria (eg performance in training) as predictors of later criteria (eg performance ratings), and determine the relative utility to the Army of different performance across jobs. The size of the project is evident by the fact that it employs 40 to 50 researchers, looks at the 675,000 enlisted personnel in the U.S. Army and managed to administer the 'predictor battery' to 50,000 soldiers. The project comprises predictors (cognitive, psychomotor, temperament, interests, biodata) against training performance, job task performance and attrition/retention. Closely associated with Project A is the Enlisted Personnel Allocation System (EPAS) which operates on the principle that the readiness and performance of the Army could be substantially improved by better personnel allocation. EPAS uses an optimisation system that measures personnel costs against individual job performance.

The Crux of the Validation 'Problem'

Any problem always has associated constraints. The constraints with the validation problem relate to the resources available. If there were unlimited resources there could be a complete job analysis process carried out and validation could be done simultaneously for all trades. Obviously there are not unlimited resources available and we cannot afford to take an intensive long term approach as has been done by the U.S. Army with Project A.

The crux of the validation problem is how do we assess the net gain from extensive validation versus less-extensive or no validation? The question then becomes how can the payoff from a particular course of action be evaluated and/or how can the relative payoff from different courses of action be compared? The validity coefficient, in the form of the product moment correlation between a predictor composite and a criterion composite, is the classic method by which the value of a selection programme is represented. However, the correlation coefficient is a difficult statistic to interpret. A more useful kind of transformation is represented by the various ways of using the bivariate distribution to construct decision tables (Sadacca & Campbell, 1985). The statistic becomes the proportion of correct predictions that are made by one selection method versus another, or no selection (as in Project M).

To assess potential gains it is necessary to determine the dollar value of variability in performance - not easy to do in the military because salaries for military and civilian jobs are not comparable and the Army is not in the business of maximising profit, rather it attempts to maximise preparedness. In the current situation the question really comes down to assessing potential benefits against the percentage of Corps psychologists who would be tied up with such a project over a long period of time for possibly questionable results.

There are a few options to validating criteria across all trades. One would be to base validation on validity generalisation, sorting jobs according to categories such as clerical, technical, unskilled, etc. Schmidt,
Hunter and Peariman (1981) have found that about 75% of the variance in validity coefficients is accounted for by test and criterion reliability effects, range restriction effects, and sampling error. The claim is that situational specificity is largely an illusion created by statistical artefacts. In other words, clerical aptitude tests are accurate predictors of clerical performance regardless of the situation in which the tests are used. The question is how similar does another job have to be to the set of jobs in our analysis before we can say that the test is valid for this job? The whole question revolves around the limits of generalisation and how to best determine similarities or differences of jobs.

Another sensible strategy might be a critical factors approach (if we cannot look at all trades simultaneously). With this approach, a rank ordered list of Army trades would be constructed according to IET failure rates (highest to lowest) and then the list modified according to an index made up of the annual numbers trained in a trade multiplied by the course length in weeks. Selecting trades from the top of the list, data would be collected on recruits allocated to the trades (recruit battery, classification battery, biodata). At IET, data would be collected on performance (pass/fail/retest). After the soldier had spent one year in the trade, performance data would be collected based on ratings (PR66, MEROR scores (see glossary)), objective measures, hands-on measures and job-knowledge measures. This could be repeated again after three years in the trade. At each stage the data would be analysed. To prevent adding and deletions to test batteries and the setting of cut-off scores (or to modify the training). This approach assumes the need for multiple criteria and would require the complete support of Trg Cmd in tasking IET schools in the collection of data and cooperation in developing performance measures.

A third option would actually combine the other two options in that our rank-ordered list would be divided up into different categories: clerical, technical, unskilled, etc. The highest ranked trade in each category would be the validation target for all of the trades in the particular list.

It is worth noting reviews of literature (Eaton et al, 1987) indicating that cognitive abilities predict performance in all jobs. The U.S. Employment Service, in evaluating 515 validity studies, found cognitive ability (measured by the General Abilities Test Battery - GATB) had a mean validity of 0.53 across all jobs. Project A found that a general ability composite had a mean corrected validity of 0.39 for training performance and the addition of five other subtests only increased this to 0.41. In Project M the total psychological processing battery and interview were only marginally more predictive than Test AGC (a group intelligence test) on its own using the recruit population (The AGC was not administered to the applicant population).

In any approach taken, attention must be paid to the experience gained from the 1/78 IET Project and Project M, particularly in terms of data specification and collection.

The Problem of Limited 'Choices' for Recruits

In general there has been a considerable gap between the variety of jobs that recruits expect and actual vacancies. It is only necessary to see the shock that some recruits receive when they sight their completed allocation guide and when the SOMA Allocation Officer announces vacancies for the platoon, to understand the magnitude of the problem. The expectation gap is accounted for to some extent by misleading Army advertising and by the information given by recruiters. The actual situation is that at any one time only a certain number of jobs are available and for an individual recruit this number can reduce drastically when constraints for ability levels, colour...
...vision, etc are applied. In other words there is a set of hurdles before allocation can occur. A recruit who is SG4 and CP3 (see glossary) can in some cases find himself/herself with no actual choice in what he/she can be allocated to.

Short of mustering, the answer is to eliminate the expectations gap through more realistic advertising and pragmatic recruiters (factors AA Psych Corps has no control over), more probing of vocational expectations and more vocational counselling by psychologists at recruiting (factors AA Psych Corps does have control over).

The particular problem sometimes experienced in allocating Male General Entry (MGE) SG4s gives rise to a limited set of options - none of which is palatable in the current climate. The enlistment standard could be raised, but this would create problems in meeting manpower requirements. Allocation standards could be lowered, but this would increase failure rates at IET (assuming the allocation process is valid in making predictions of training performance) unless training was lengthened or modified to accommodate the less able.

Conclusions

If it were a matter of designing an allocation system from scratch (and if there were control over the whole process) there would be a variety of options that could be considered in terms of mustering, partial mustering, or no mustering; job analysis and criterion selection, etc. The question is not one of starting from scratch. Each of the AA Psych Corps clients in the allocation process has certain expectations and selection efficiency is dependent upon maximising those expectations. This means filling job vacancies with individuals who can meet realistic minimum requirements by at least completing IET; satisfying recruits' preferences where possible and on top of all this achieving a reasonable fit between those offering and the jobs to be filled (while still giving Corps some equitable distribution of talent).

At present SCMA is not faced with insurmountable vacancy problems. The IET schools in general are satisfied with the quality of trainee and failure rates on course, and the Soldier Attitude and Opinion Survey (SAOS) (see glossary) indicates that soldiers are generally satisfied with their allocation to Corps and trade.

All indicators are that we could defend allocation decisions (in the legal sense) based on the current system and current criteria. The criteria have been set by the "Subject Matter Experts" (HOC and IET school staff), are current as of 1 January 1989 and are subject to at least an annual review (based on feedback from IET school visits).

As to whether our current classification tests are appropriate for allocation purposes, we can only say that the tests have face, as well as content and construct validity and that a comprehensive criterion based evaluation is not currently feasible due to limited resources. There are options to validating criteria simultaneously across all trades. These include sorting jobs by common categories and using validity generalisation, or using a critical factor approach concentrating validation efforts on those trades with 'high' IET failure rates. The idea is getting maximum utility from the resources devoted to validation. Also, considering the percentage of allocations accounted for by riflemen (25%) and drivers (11%), any improvement in allocation to these employments would have a significant effect on overall selection efficiency. It would be worth comparing the performance
of those soldiers allocated as riflemen who had listed it as one of their three preferences with those who did not (many recruits are allocated as riflemen by default). It has also been demonstrated that recruits allocated as drivers have a much better chance of success if they already have driving experience. While not a requirement for allocation to driver, it seems good sense to consider those with driving licences before those without, where possible.

There are obviously costs associated with misallocation and this goes beyond the testing process itself. Putting actual figures on misallocation is beyond the scope of this review (but should be a high priority because the final worth of the whole process is judged by utility which we should be able to specify in dollar terms).

Any decision by the Army to go to a system of mustering or partial mustering would have a significant effect on our operation. A 'de facto' partial mustering already exists (where Corps have short term specific needs and prospects can be identified at the recruiting stage) and creates problems for 17 Psych Unit in terms of filling vacancies. Lateral recruiting and current proposals for the establishment of a specialist rank system could complicate the process as it now exists.

The primary criterion used in validating allocation criteria is pass/fail at IET. Selection is not the only factor that affects performance and failure rates. What we need to determine is the amount of variance accounted for by the test factors as opposed to other factors (motivation, instructor competence, etc). This is much easier said than done.

The real key to any validation attempt is the collection of data from IET schools after proper data specification. This is where the 1/78 IET project foundered. Any attempted validation will ultimately be a combined effort involving Trg Cord, the IET schools, operational units and ourselves. The challenge is planning and coordination, not techniques. A formal system is required where IET schools are tasked by Trg Cord to collect performance data.

Recommendations

The following recommendations are made:

a. That the 'client' orientation which currently guides the allocation process be maintained;

b. That the AA Psych Corps Operating Handbook (COH) sections on MGE/PGE interviews and recruit allocation be revised to provide for more probing of applicants' vocational interests at the time of the recruiting interviews so that psychologists can discourage unrealistic expectations prior to enlistment;

c. That psychologists involved in the allocation process ensure that published minimum standards for allocation are used as guidelines only and that the COH section on recruit allocation be revised to indicate factors that can moderate the standards;

d. That allocation standards are reviewed at least annually by visits to Corps schools;
e. That 17 Psych Unit keep a regular check on the allocation process by actively encouraging regular written feedback from IET schools on the training performance of soldiers (the idea is continuing feedback, rather than annual feedback only);

f. That criterion validation be carried out on an 'opportunity' basis, eg if 'clients' request assistance because of continuing high IET failure rates; and

g. That the results of the U.S. Army Project A, be studied in detail (when available) for any application of the research to the AA Psych Corps situation.
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<thead>
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<td><strong>CP</strong></td>
<td>Colour Perception (rated 1 - Normal, 2 - Colour defective Safe, and 3 - Colour defective Unsafe)</td>
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<td><strong>PR66</strong></td>
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<tr>
<td><strong>SAOS</strong></td>
<td>Soldier Attitude and Opinion Survey (Survey being conducted by 1 Psych Research Unit as tasked by the Personnel Division Army Office)</td>
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<td><strong>SCMA</strong></td>
<td>Soldier Career Management Agency, formerly Central Army Records Office</td>
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<tr>
<td><strong>SG</strong></td>
<td>Selection Group (Rated 1 highest, 5 lowest with the midpoint 3 being divided into 3+ and 3-)</td>
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Bibliography


Manual of Personnel Administration, Volume 1, Chapter 27.


