**Psychological Screening in the Indian Navy**

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**Abstract**

In the military parlance, screening implies evaluation or investigation of something as part of a methodical survey, to assess suitability for a particular role or purpose. Psychological screening to assess fitness for induction into military service has a long and tumultuous history. From being limited to tests of intelligence, the practice of psychological screening has evolved over the century to now being focused on the assessment of personality and motivation. There are various types of screening tools utilized by the militaries worldwide. They are debatable in their utility in screening out unfit individuals. However they are considered effective in choosing individuals with specific attributes and aptitudes for specific roles within the military. This article reviews the existing system of screening worldwide, derives lessons for the Indian scenario, and the way ahead for psychological assessment in the Indian Navy.

**Keywords:** Navy, psychological assessment, psychological screening, Submarines

**INTRODUCTION**

The word “Screening” has two meanings: One, the evaluation or investigation of something as part of a methodical survey, to assess suitability for a particular role or purpose. Two, the testing of a person or group of people for the presence of a disease or other condition. The first is of relevance in the parlance of military regarding induction of personnel.

Key military competencies include the high physical proficiency, ability to live with the constant threat of injury/death, unconditional obedience to orders, and readiness for deployment at short notice. The change in the warfare of modern times from the erstwhile years (involving cyberwar, use of nuclear, chemical and biological weapons, and covert insurgencies) entails development of selection processes focused on these novel skill sets.

The selection can be based on either a uniform selection policy, wherein all inductees, irrespective of their role, cadre and rank, undergo the same tests. The candidates in US all take the armed forces (AFs) qualification test; On the other hand there can be a diversified selection policy, wherein the testing at the time of induction depends on the job description of the inductee, for example, the former Dutch and Belgian Systems. A third option is a blending of these two policies, for example, the current Belgian Defense Forces.[1] In any case, the inductee generally has to undergo three different stages of assessment – the administrative selection, comprising such selection criteria as age, education, and nationality, the medical/physical selection focused on physical/medical fitness standards, and the psychological selection, which is the focus of this article.

The psychological selection assesses the candidate’s abilities in relation to mental, social, and motivational criteria. The tests for selection are performed by trained selection officers, psychologists, military specialists having experience in certain jobs, and high ranking officers who often decide on acceptance or rejection of applicants as members or presidents of a selection board. There are various types of screening tools available for use in selection procedures.

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These include aptitude tests, knowledge tests, biographical data, interview (unstructured, semi-structured, or structured), assessment scales or questionnaires (self/peer), and personality tests. Specific job profiles require more focused testing. These include pilots, humanitarian assistance operations, submariners and special forces.

**Origin of psychological screening**

The concept of quantification of human qualities originated with Francis Galton – Father of psychological testing, in 1884. The turn of the century saw the development of the Simon-Binet Intelligence Test, which was a major breakthrough in the measurement of intelligence, followed by personal data sheet by Robert Woodworth (1917), the forerunner of the current Minnesota Multiphasic Personality Inventory. Intelligence testing was the mainstay of psychological screening in the US Army (but not Navy) in WWI. By WWII, the screening procedure had been modified to include “psychiatric qualification” as an assessment tool, which led to a rejection rate of 10%–15%.

Divergent views emerged on the usefulness of these tests in the WWII era, questioning the ability of these tests to predict long-term psychological functioning of the inductees in combat conditions and the adequacy of data obtained from these tests in determining fitness. Thus, the debate centered around quality versus quantity of information available from these tests. Moreover, the tests kept getting more cumbersome and time-consuming, requiring funds and skilled psychologists for performing them. The US Department of Defense review of neuropsychiatric screening found that the screening was ineffective in predicting psychiatric disability in future and was useful in screening out only overt psychiatric disorders.

In the post-WWII era, screening procedures were modified and integrated into the medical screening process, making them less time-consuming and more specific to rule out overt psychiatric illnesses. This brought the rejection rates down drastically. After the Korean War, personality and motivation measures began to be preferred over cognitive measures.

In addition to the World wars that determined the evolution of screening procedures, societal changes have also been instrumental in this. Technological knowledge has made it possible to make the large scale selection procedures more efficient. Furthermore, a lot of societal changes resulted in a different view of the relevant competencies with regard to the military. These include the Cold War, humanitarian and peacekeeping operations, and counter-terrorism.

**Global scenario**

Currently, in the US armed forces, there are three screening procedures, used to screen military service applicants: (1) Armed Services Vocational Aptitude Battery, (2) determination of educational achievement and review of medical screening forms, and (3) general psychiatric evaluation integrated into the entrance physical examination. In addition, the AF and Navy conduct secondary psychological screening of recruits on arrival at entry-level training sites, and Special Forces applicants also undergo specialized accession screening.

The Israeli armed forces started their psychological screening of inductees in 1948 for selection of pilots in AF. The psycho-technical center came up in 1950, and the British War office selection board assessment procedure was adopted. Several other batteries of psychological tests were used, mostly developed in the US and UK. The Manpower Classification and Assignment Centre came up in 1953, later giving way to the establishment of the Israel Défense Forces Manpower Directorate. Kabba (Intelligence) Testing was the main test, which was soon to be discontinued and replaced by “Professional Profile.”

The Belgian Defense Forces use the California personality inventory and NEO Personality Inventory–Revised as part of their basic selection, which is a recommended test for personality assessment in organizational settings. Officer candidates have to pass language and mathematics examinations, organized by the Royal Military Academy and a high-level cognitive test battery organized by the National Military Recruitment Centre.

Group observational procedures are used as tests of leadership in the United Kingdom, Belgium, Denmark, Switzerland, and Germany. In this sort of exercise, an assignment is given to a small group of candidates, and trained observers watch how the candidates interact to arrive at an acceptable solution.

The Turkish forces use a unique, six-step Turkish Pilot Selection test battery, (1999) and 16 personality factor as the personality test. The Turkish AF organizes a leaderless group discussion for pilot candidates.

The Austrian Armed Forces have a unique set of assessment tools to test competencies for humanitarian assistance operations. Four selection criteria are used as follows: intelligence and social intelligence, accuracy and concentration, stress resistance, and social integration.

**Indian scenario**

The concept of psychological screening for military selection in India took shape in 1943 when War Officer Selection Board was established at Dehradun to apply the scientific (psychological) method of selection. In 1949, the psychological research wing (now known as Defense Institute of Psychological Research [DIPR]) was established at Delhi. Thirty-nine Qualities (grouped into five factors) were identified in 1950 for selection of officers. In 1956, Naval Psychological Research Unit (NPRU) was established at Cochin. For assessment tools, a comprehensive battery of cognitive abilities and projective personality testing was the mainstay of officers’ selection, but no such selection process was adopted for personnel below officer ranks.

The Indian Navy had introduced a psychological screening of submarine volunteers in the 1960s. The crews of the first
two submarines had been selected through psychological tests carried out by DIPR at New Delhi. In 1969, it was decided to do away with psychological testing. In selecting a crew for a submarine in the mid-eighties, psychologists conducted elaborate psychological screening tests. Presently, for crew selection, submarine medical officers and Indian Naval psychiatrists conduct the psychological screening.

**Current psychological screening procedure for submariners**

The current system of psychological screening for submariners is based on SUBSCREEN used by the US Navy. This test provides a background for the interview and can also reveal personal/family/social/financial stressors that the person might be facing.

This is followed by a personality assessment test (NEO-FFI). The subject has to choose from 60 statements which would describe his nature.

A neuropsychological assessment is carried out which tests certain aspects such as verbal memory, visual memory and recall, attention and concentration in a given task, basic mathematical ability, visuospatial ability, and pattern discrimination. These tests have been selected from certain components of (neuropsychological assessment battery – complete testing of which takes 5–6 h). This modified assessment takes around 20 min per candidate.

Based on the above and the personal interview with candidate, the psychological screening is carried out.

**Personality assessment of aviators has been recognized as important in the context of Indian AF.** However, it has been recognized as an important screening tool in the context of Indian Air Force.

**Discussion**

Psychological screening in military parlance has evolved over the decades. Worldwide, the focus has shifted from intelligence testing to screening out frank psychiatric illnesses to assess suitability for specific job profiles. With the changes in warfare techniques worldwide, new skill sets are required among military personnel which would determine their suitability in a given job profile. Certain aspects of psychological screening are tabulated in the form of a critique in Table 1.

**Way ahead**

Various screening tests are being used across the world, including India, but no hard data/longitudinal study has been obtained in India so far to assess the effectiveness of screening procedures. There is also a need to conduct prospective studies with the data collected and develop better assessment techniques.

In order to align the requirements of the future blue water Navy in India, psychological screening of personnel will assume great importance. The effectiveness of these screening

| Table 1: Critique of psychological screening |  |
| --- | --- | --- |
| **Advantages** | **Disadvantages** | **Limitations** |
| Selection of fit individuals for deployment | Stringent screening tests may lead to reduced intake | Classified data, inaccessible for interpretation |
| Early detection of Psychiatric disability | Lenient selection criteria and inclusive approach may result in increasing disability and attrition later | Imperfect prediction of future adjustment in military service |
| Timely intervention can be instituted | Undue impetus on inherent vulnerability; may not correlate with future adaptability in military environment | Comprehensive, but cumbersome tests versus brief, but unreliable tests |
| Minimizes treatment costs and burden of disability | Propagates stigma against mental illness | Confounding factors in predicting outcomes, such as crew cohesion, flying performance, and resource availability |
| Helps to predict long-term neuropsychiatric casualties | Legal implications centered around discrimination in case of vulnerability-based screening out | In isolation, personality factors alone may not be predictive of incidents or outcomes |
| Psychological profiling to assess suitability for specific trades | Assessment tools are useful for monitoring and follow-up as well | Lack of adequate trained workforce for administration and analysis of tests |

| Table 2: Way ahead in psychological screening in the Indian Navy |  |
| --- | --- | --- |
| **What is needed** | **What it entails** |
| Manpower | Skilled psychologists |
| | Skilled psychiatric social workers |
| | Trained general practitioners |
| Money | Centrally funded program |
| Material | Screening for both exclusion and inclusion |
| | Standardized instruments and assessment tools |
| | Computerized inventories |
| | Database management and backups of data on server |
| Minutes | Time required for |
| | Training |
| | Testing |
| | Feedback |
| | Data analysis and further improvements |
| | Periodicity of assessment |
procedures will depend upon the availability of four Ms, tabulated in Table 2.

**Conclusion**

The focus of screening tests should not be to weed out vulnerable individuals but to improve operational effectiveness by tailoring training and deployment approach based on assessed personality and motivation measures in the personnel. The ideal assessment should be one that is standardized on the Indian population, is comprehensive but not cumbersome, is done at regular intervals and can be assessed for outcomes longitudinally.

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There are no conflicts of interest.

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