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Officer Selection in the Danish Armed Forces

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Abstract

This paper reviews the psychological part of the present selection process which include intelligence, ability and knowledge tests, a group exercise and interviews by psychologists. The result of the psychological assessment is presented for the selection board. Together with results from tests of physical proficiency and the ratings from the candidates' military service, the selection board will use the psychological report as the basis for the final decision.

The results of two studies of the system utility are presented: An investigation of the predictive validity showed that it is possible to forecast the examination result of the officer training with a rather high precision. The investigation showed that it was possible to calculate a prognosis for the examination result from the Officer Academy, where the multiple correlation coefficient with the actual examination result is 0.57 for those, who complete the officers training. Another follow-up study showed that the promotion percent of the officers was rising with increasing psychological assessment.

Introduction

Denmark has a compulsory military service and the Danish defence relies on mobilization. In peacetime, the active forces are a mixture of commissioned officers, professional noncommissioned officers (NCO) and soldiers, conscripts (officers, NCOs and privates) and civilians. The population of Denmark is 5,310,730 (October, 1998).

Personnel (approximate figures for 1999):

Officers	4,170
Professionals -NCOs and privates	13,012
Conscripts	7,925
Civilians	9,103
Total peacetime	34,210
After mobilization	81,200
Home Guard	64,000

Psychological selection of officer candidates in Denmark started shortly after the foundation of the Danish Armed Forces' Psychological Division in 1952; the division is now a part of the Danish Defence Centre for Leadership. The Danish officer selection procedure is an assessment centre and had its origins in the British War Office Section Board (WOSB) system, introduced in Great Britain during World War II. The WOSB combined paper and pencil tests with observation of the candidates in group situations and individual interviews. The WOSB model was introduced in Denmark in 1952 and has, of course, been modified since then. The use of group situations has been greatly reduced; today, it is primarily a leaderless group discussion. Psychiatrists have never been used in Denmark for this kind of task; most of the assessment work is done by trained military psychologists. The tests are, with few exceptions, of Danish origin, constructed by the Psychological Division, and have been revised several times.

There are three separate officer academies in Denmark (Army, Navy and Air Force). There are minor differences between the selection procedures for these three academies. Applicants for pilot training, which in Denmark include an officer training, have special admission requirements and are going through some simulationbased psychomotoric tests. The following description deals with the common elements in procedures to the three academies.

Candidates for officer academies in Denmark may enter the Armed Forces in one of the following ways:

- as a conscript
- as an enlisted private
- as a reserve officer
- as a directly recruited officer candidate trainee

Whatever the actual recruitment avenue, a certain amount of systematic selection processing will have already taken place, either at the draft station or at the Armed Forces Recruitment Centre. These initial selection procedures include medical and physical testing and varying amounts of psychological testing and

interviewing. Therefore, a certain amount of pre-selection will have taken place.

There are about 1,000 officer applicants each year and the officer academies have a total intake of about 220 cadets per year. Applicants should be undergraduates and they must have qualified for training as NCOs; if they are already NCOs, they must have complete their NCO training successfully and have performed for some period of time to the satisfaction of their superiors. Other admission requirements are:

- 18 to 25 years of age
- Danish citizenship
- a general certificate or equivalent with good grades in Danish, English and mathematics
- a strong constitution
- be at least 157 cm tall without shoes
- be able to pass a physical fitness test (run at least 2300 m in 12 minutes and pass a muscular strength test)
- be able to pass the officer selection procedure

The applicants are evaluated through the following procedure:

- intelligence, ability, and knowledge tests
- a leaderless group exercise
- a short psychological interview (30 minutes)
- a long psychological interview (60 minutes)
- a conference where the psychologists reach agreements about the evaluation of the candidates
- physical fitness test
 - an interview by an officer from the Officers Academy
- the selection board

The officer profile

Some of the important personality traits that are assessed in officer applicants are:

- General personality traits in the officer profile:

Indications of undesirable mental disorders:

- Mental suffering
- Adjustment difficulties
- Irrational/incomprehensible behavior
- Unpredictable behavior
- Loss of control

- Inexpedient originality and unconventionality
- Repulsive appearance
- Offence against regulations and standards of behavior

Indications of desirable mental health:

- Positive and realistic self-concept
- Goal-directed behavior
- Independence
- Realistic perception and interpretation
- Personal growth and self-realization
- Social competence and energy

- Specific personality traits in the officer profile:

Fitness for study

- Intellectual capacity
- Knowledge/proficiency
- Motivation for studying

Leadership potential:

- Analytical power
- Judgement/discernment
- Breadth of view
- Initiative
- Energy
- Perseverance
- Flexibility
- Personal power
- Resolution
- Ambition to lead
- Ability to co-operate
- Sensitivity to other people/empathy
- Situational awareness/alert to social environment
- Ability to communicate
- Self-confidence
- Assertiveness
- Humor
- Stress resistance
- Potential for further personal development

As the candidates are about 20 to 24 years old when they apply for the officer academy, the development of their personality has not finished. The

target of the psychologists is to evaluate the potential for personal development and growth in the context of military service.

The selection instruments

The first step in the selection procedure is psychological testing. A set of paper and pencil tests are used:

Intelligence tests

Logical-abstract reasoning, verbal skills, numerical skills and spatial reasoning

Mathematics test

Arithmetic and mathematical skills on an undergraduate level

Language tests

English and Danish grammar, vocabulary, and text understanding

Technical/mechanical comprehension test

Understanding of technical and mechanical matters

General knowledge test

Cultural, political, historical, and scientific knowledge

Personality test

Self-report questionnaire

If the applicants do not perform up to the standard on these tests (except for the personality test, which is used by the psychologist to make hypotheses for the interview), they are excluded from further processing. The "surviving" applicants go on to the next step in the selection procedure, which contains the following elements:

A. A leaderless group exercise (90 minutes) supervised by the three psychologists attached to each batch of six candidates. In this group exercise, the candidates are assessed on their ability to co-operate, their social skills, their sensitivity to other people, their energy, and their initiative.

B. A short psychological interview (30 minutes) focussing on military experiences.

C. A longer psychological interview (60 minutes) about upbringing, schooling, job experiences, interests, social relations, motivation and career intentions.

Each candidate is interviewed by two psychologist; one for the short interview and one for the long interview. The psychologists have access to all test results and other information on the candidate. After the interviews, the psychologists discuss the case of each candidate until consensus is reached. The psychologists evaluate the candidate's personality to see if it will fit the officer profile.

The decision process

The end product of the psychological selection process is an approximately three quarter page verbal personality description and suitability evaluation, as well as quantitative ratings. The targets of the psychological assessment are twofold: to predict success in academic training (*the training prediction*) and to forecast how well the candidate will be able to perform as an officer after graduation from the academy (*the career prediction*). The results of the psychological assessment are presented to the selection board. The chairman of the selection board is an officer, appointed by the Army, Air Force, or Navy Command. Typically, the chairman will be the commander of the Officer Academy or his second-in-command.

Together with the results from the tests of physical proficiency and the ratings from the candidates' military service, the selection board will use the psychological report as the basis for the final evaluation. The chairman of the board makes the final decision. He can decide against the psychological report; this happens in only a few cases, for example, when the ratings from the candidate's military superiors seem to contradict the psychological evaluation.

The system utility

The attrition rate from the academies is very low, less than 10 %, which is less than what is seen in most civilian training and education centres such as universities, nursing schools, or the police training school. This is taken as partly as proof of the effectiveness of the selection procedure and partly as proof of the effectiveness of the education at the officer academies. Data from the selection process are recorded in order to compare these data with the examination

results of the cadets and to evaluate the validity of the measurements of the selection procedure.

An investigation of the predictive validity showed that it is possible to forecast the examination result of the officer training with a rather high precision.

The investigation included 4 classes from the three Officer Academies, a total of 489 cadets. By comparing the actual examination results with different data (previous examination results and results from the selection tests) from the selection procedure the following correlation coefficients were found:

Selection data:	Correlation coefficient:
Examination result from the NCO-training	0.30
Upper secondary school leaving examination	0.28
IQ test (verbal, mathematical, spatial and analytical)	0.30
IQ test (logical-abstract reasoning)	0.25
Danish spelling test	0.22
Danish vocabulary test	0.24
General knowledge test	0.10
English grammar and vocabulary test	0.26
Mathematics Test	0.35

Through a multiple regression analysis it was possible to calculate a prognosis for the examination result from the Officer Academy, where the multiple correlation coefficient with the actual examination result is 0.57 for those, who complete the officers training. If all the rejected attendees had had the possibility to get an examination result, the correlation for all attendees would be a little higher. The correction for the restricted range shows that the right correlation can be estimated to approximately 0.64.

To test the validity of the *career-prediction*, a follow-up study was done on all commissioned army officers trained from 1953 to 1963. The criterion used was whether the individual officer, 25 years after completion of officer training, had or had not been promoted beyond the rank of major. On average, 32% of these officers were promoted to Lieutenant Colonel. The table gives the proportion of officers with a given psychological assessment promoted to Lieutenant Colonel.

Psychological Assessment and Promotion

	Psychological Assessment							Total
	2-3	4	5	6	7	8	9	
Number of officers	17	63	89	84	75	33	7	368
Percent Promoted	24	19	27	29	40	55	57	32

As is seen in the table the promotion percent is rising with increasing psychological assessment. Only the 17 officers who despite low psychological assessment (2 = unfitted, 3 = not very fitted) was admitted to the Officers Academy surprised with a higher promotion percent than expected.

With these data in mind, there are no strong reasons for making any radical changes to the psychological assessment procedure.