MILITARY FITNESS FOR PSYCHOLOGY’S PURPOSE OR VICE VERSA?

A RETROSPECTIVE

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A Keynote Address for IMTA Conference, Hamburg, 28th October 2014
EXECUTIVE SUMMARY

This detailed paper comes to the following conclusions, after reviewing military recruitment models and attrition research within NATO.

1. Since 1917, cognitive tests have been the backbone of armed service recruitment models around the world.
2. Additional biodata security and medical information is collated and considered in interviews.
3. Internationally, no data collected prior to enlistment predicts either
   a. Failure to complete initial training (attrition rate 30%).
   b. How long the recruit will serve in the service.
4. Since 1970 there have been numerous research studies of attrition many with very promising results including:
   a. Personality screening.
   b. Occupational interest inventories.
   c. Health-related quality of life.
   d. Job satisfaction follow-up.
5. Nevertheless, there has been no operational reorganisation of training to make use of the findings, except in new approaches to dealing with mental illness following deployment.
6. Conditions of service in the 21st Century mean that infantry drills and combat skills are now a specialty for the minority, but that essential technical, human relations and applied knowledge are much in demand.
7. There is now an overwhelming case for training recruits in their specialist roles before equipping them with drills and secondary combat capabilities during the first months of doing the job required (perhaps using reserve camps for this purpose to lessen expense).
8. An extended trial of this approach as a precursor to reorganisation of the training structure is recommended.
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Psychology’s Quest for the Fit Soldier
Ever since the First World War, the production and use of recruitment tests designed to measure cognitive abilities prior to induction have commanded continuous operational research and development - and many publications beginning with the historical summary of reports at APA (1919). In a comprehensive account (Irvine 2014) of modern computerised psychological test construction and use in a number of NATO countries the successes and failures of aptitude test use are clear. Even more pertinent, however, is the consummate study by Tapsfield (2004) who followed fifty thousand British army personnel recruited in 1997 to assess the extent and nature of attrition among those who signed up for three or four year contracts. While details of this restricted report are not in the public domain, his conclusions have already been reported by others (Riley, Kallmeier-Hatch, Das & Walker-Smith, 2006). Simply put, the existing selection methods used by military organisations cannot effectively distinguish those soldiers who stay to complete their minimum commitment period from those who do not. Why is this so? Is psychology, and its applications, to blame?

A recent study (Kubisiak et al. 2009), rightly identifies attempts to reduce attrition rates as belonging to one of three categories, pre-enlistment, remedial once in service, and organisational. This pattern is enlarged in a comprehensive analysis of 38 different attempts to deal with attrition in the US armed services, invariably with no nation-wide operational use thereafter.

Table 1: Attrition Intervention Frameworks

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Pre-Enlistment</td>
<td>Realistic Job Previews</td>
</tr>
<tr>
<td></td>
<td>Smart Allocation Systems</td>
</tr>
<tr>
<td>2: Remedial</td>
<td>Quality of Life Early Warnings</td>
</tr>
<tr>
<td></td>
<td>Counselling</td>
</tr>
<tr>
<td></td>
<td>Academic Interventions</td>
</tr>
<tr>
<td></td>
<td>Physical Fitness Interventions</td>
</tr>
<tr>
<td>3: Organisational</td>
<td>Leadership Strategies and Policies</td>
</tr>
<tr>
<td></td>
<td>Radical Training Regimen Relativity</td>
</tr>
<tr>
<td></td>
<td>Incentive Programs</td>
</tr>
</tbody>
</table>

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Moreover, NATO (2011) provides a contemporary summary of support for service personnel from the social sciences, in which psychology features prominently, particularly in the acquisition of mental toughness, or more populist resilience required for short-term success and long term survival. Given the scope of military life, how fit is psychology to measure the various constructs, cognitive, motivational, interests and social factors seen to be involved in predicting survival against the odds? One may begin a retrospective by stating one overwhelming conclusion. Attempts to find answers to attrition in all its forms and at different stages of military careers outside the boundaries of cognitive tests have a long history of extensive study by social scientists followed by no operational use.

The July edition of The Psychologist is then all the more remarkable for its focus on the apparent success of clinical interventions for military personnel with mental illness. Accounts of keynote speakers’ contributions (pp.484-485) to the Annual Conference are admirably supplemented by a historical perspective on Boring’s 1943 compendium Psychology for the Fighting Man by Ben Harris (p.554); and, displayed in two symposiums (one organised by President Elect Dr. Jamie Hacker Hughes, the other by Imogen Sturgeon-Clegg). In these, various individual perspectives are offered on combatting stress induced by basic training, separation, deployment, not forgetting seeking help for mental illness: above all with particular emphasis on organisational shifts within MOD about how to address the consequences of stress. The participants make much of the effects of PTSD and SUD (Post Traumatic Stress Disorder, Substance Use Disorder) in veterans and report progress in implementing procedures to deal with these and similar conditions.

However, these are specific examples of the much larger Tapsfield problem endemic in all military forces, attrition for all sorts of reasons, not just mental illness. How fit is modern psychology for the purpose of reducing attrition at all levels and in every form of armed service? The question is all the more important when non-military sources such as the Rand Corporation, devote much time and effort in reviewing classical studies of attempts to find solutions (Orvis et al. 1996; Meredith et al., 2011). Moreover, the history of actual research on identifying non-cognitive attributes associated with attrition is perhaps exemplified best in North America, but amplified in all NATO countries. Successes there were, but they were never introduced operationally.

Psychology’s Fitness for Predicting Attrition

There are several classic United States examples of successful research, begun a quarter of a century ago, including Trent (1987), Trent, Atwater & Abrahams (1986), Trent, Folchi & Sunderman, (1991), Trent & Laurence (1993), Trent & Quenette (1992), Walker (1988), Waters, (1989), Wise, Hough, Szena, Trent, & Keyes (1989). Despite disclosures by Trent & Quenette (loc. cit.), who followed up more than 50,000 recruits listing reasons for the dismissal of 28 percent of acceptances within 3 years of enrolment, not one of a number of different interventions tried during this period was implemented by the US Department of Defense. Moreover, presentations at the IMTA annual conferences since 2004, namely, Aubecq (2010), Bownds & Mehay, (2004), Fang & Bender (2010), Fisher (2011), Harris, White, Eshwar & Mottern, J. A. (2005), Irvine (2004), Koundakjian (2012), Lane (2006), Latchman (2008), Latchman & Michaud (2010), Latchman & Arseneau, (2012), Lee (2010), and Lescrève (2007) confirm that, across found that national boundaries, services and personnel ranks, psychologists are in every respect searching for and identifying the means to predict attrition and to deal with it in ways that are fit for purpose. Nevertheless, there is no evidence of an effective policy of implementation following research.

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Computerised Tests Era 1990 Onwards

When new sets of tests based upon computer-delivered principles were introduced first throughout Britain, including Northern Ireland, and then in the US, Germany and Belgium, they proved capable of dealing with gender, sectarian, linguistic and ethnic diversity among recruits, with no ill-effects and minimal need for item alterations. Unlike their predecessors they were, above all, capable of daily exposure in computers nationwide without fear of compromise or undue influence due to coaching for the test used. Moreover, additional checks on health, security and motivation were part of the accepted screening process. With such an achievement, one might be expected to leave the matter of selection of recruits right there: and to draw a line under what was at first a challenge and thereafter a successful campaign to devise a new generation of tests (Irvine, 2014).

Some optimism might have been expected when follow up revealed promising results in prediction of second-phase training outcomes. For example, Table 2 shows the various follow-up validity coefficients mainly in second-phase training, using the evidence-centred BARB (British Army Recruit Battery) multiple parallel form computer-delivered tests, after their operational use in 1992 (Jacobs 1996, Jacobs Cape & Lawton 1997).

<table>
<thead>
<tr>
<th>Source</th>
<th>Number</th>
<th>Reliability</th>
<th>Validity Concurrent</th>
<th>Validity Construct</th>
<th>Validity Predictive</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMY</td>
<td>27</td>
<td>.78-.97</td>
<td>.71</td>
<td>WM, V.Ed.</td>
<td>.19-.65</td>
</tr>
<tr>
<td>NAVY</td>
<td>18</td>
<td>.74-.92</td>
<td>.68</td>
<td>WM, K, V,Ed</td>
<td>.27-.76</td>
</tr>
<tr>
<td>AIR Force</td>
<td>1</td>
<td>.88</td>
<td>.65</td>
<td>K</td>
<td>-</td>
</tr>
<tr>
<td>Australian Air Force</td>
<td>3</td>
<td>.78 -.91</td>
<td>.72</td>
<td>WM, V.Ed.</td>
<td>.14 -.36</td>
</tr>
<tr>
<td>US Air Force</td>
<td>1</td>
<td>.77 -.89</td>
<td>.46</td>
<td>WM, V.Ed.</td>
<td>.48</td>
</tr>
</tbody>
</table>

The validities were many and varied, attributable in many cases, to the nature of unverifiable criterion measures (Irvine 2013). But the tests did work and in many instances, where expensive training costs are involved, their use would reduce attrition by implementing them. No similar conclusion could be reached about the outcome of BARB in initial, particularly infantry training. Hampson (1997) followed more than 5,000 British Army personnel and found that there was only a minor, and operationally redundant effect size difference in their general training index between those who left and those who stayed (Cohen’s d = 0.21). The most striking example was contained in an answer to a parliamentary question (Hansard, (2009, p.414W) about the number of infantry recruits who failed to complete basic training in the previous five years. A total of 18,950 men commenced their basic training at the United Kingdom Infantry Training Centre at Catterick (ITC(C)) and 5997 failed to complete, a 32.3 percent dropout. One third of all those assessed at pre-enlistment as suitable by BARB (The British Army Recruit Battery) of cognitive tests and completing other medical and security checks from 2004 to 2010 failed to complete the infantry training course.

Similar failure rates are reported for all volunteer armies for front-line soldiers, confirming the enduring proportions of recruits (30% more or less) who either fail to complete basic training, or exercise their options to leave the service after an initial short term involvement. What is it about specialised infantry training, and indeed ‘boot camp’ experiences of a parallel type that turn one in three qualified entrants into recruit failures? If such a large failure rate were experienced in any private organisation, it would not be tolerated for long by its shareholders. Would the addition of motivational tests and biodata make any difference?

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Pre-Enlistment and Pre-Deployment Screening

No comment is necessary on the need for scrutiny of computer-based pre-enlistment strategies because Lescréve (loc. cit.) in his early work on smart systems has led the way. On the other hand it would be remiss to omit recent reviews and reports of the effectiveness of applying non-cognitive measures to predict military attrition. They have not been lacking in advocacy or controversy (Irvine, 2006). Historical, policy-making psychiatric overviews and anecdotes of past failures to identify psychological risk factors (Jones, Hyams & Wessely, 2003; Rona, Hooper, Jones, French and Wessely 2004; Wessely, 2004) conclude that psychological risk factors are not proven. Hence, the use of psychological profiles to exclude those who are likely to be seriously at risk by the emotional, and for many, traumatic, demands of initial training and subsequent deployment on active service is not justified. This conclusion cannot go unchallenged when research by Hoge et al. (2002) shows that among a one-year cohort of US personnel, almost half of those hospitalised for the first time for a mental disorder left the service, compared with only one in eight admitted for any other reason. Waiting until breakdown happens is the risk associated with a high level of attrition, if not its cause. However, one may more usefully examine the available psychological evidence, first by looking at what others have emphasised: and then by summarising the outcomes of a number of empirical studies. This seems only proper, because depth analysis of the references in the Jones et al. (2003) publication nevertheless reveals that 84 percent were published before 1990; and not one reference is made to a psychology journal.

What Psychological Screening Evidence Has Been Available?

There are several published sources providing detailed empirical findings that identify non-cognitive positive and negative psychological factors for those who wish to enrol in military organisations. For specific examples of complete empirical studies, the following sources are indicated. Talcott, Haddock, Klesges, Lando, & Fiedler (1999) found that a critical risk factor was instability. Other well-identified personal dispositions portending early attrition included a lack of maturity and motivation (Jensen, 1961), emotional instability (Plag, 1962), overdependence (Quick, Joplin, Nelson, Mangelsdorff, & Fiedler, 1996), and, most frequent of all, depression (Carbone et al., 1999; Cigrang, Carbone, Todd, & Fiedler, 1998; Lubin, Fiedler, & Whitlock, 1996, 1999). Positive training outcomes were marked by optimism (Carbone, Cigrang, Todd, & Fiedler, 1999), and self-confidence (Turner, Dixon, Caulfield, & Wolfe, 1999). Among the most authoritative and technically complete publications, however, is Holden’s study of the effectiveness of a short personality inventory in predicting attrition in the Canadian forces (Holden & Scholtz, 2002; Magruder et al., 2002). Holden reports that recruits differed significantly from civilians in terms of psychological adjustment. Recruits who failed to complete training were more similar to civilians than those who were successful; and the inventory Depression scale significantly predicted recruit training course release. Equally, notable among completed studies is the work of Cigrang, Carbone, Todd, & Fiedler (1999) on mental health attrition from Air Force basic military training. Recruits recommended for discharge often had a history of depression, expressed a lack of motivation to continue in the military, were reporting suicidal ideation, and typically had withheld information on their mental health history during their Military Entrance Processing Station interviews.1

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1 This is reported in Sackett and Mavor (2006) as a single question about having a history of mental illness and they recommend a comprehensive questionnaire(p.190)
Similar risk factors are identified in a survey of 67,000 US Naval recruits by Larson, Booth-Kewley & Ryan (2006) using a simple 40 item questionnaire, the most important of which, apart from current physical ailments, were depression/anxiety, previous criminal records and tobacco use. Complementary mental health studies are evident in Hoge et al., (2002, 2005), Creamer et al. (2003), Barrett et al. (2005). These severally address the aetiology of psychiatric disorder in military contexts and include attention to measures of health-related quality of life (Voelker et al. 2002, Booth-Kewley et al. 2003) with recommendations that HRQOL surveys should be periodic for military personnel. In short, there is a comprehensive body of evidence for including personality items validated on military personnel in a medical history of recruits to all military branches. Reluctance to employ them may continue to be a fact of military life. Remedial intervention during training may be the only sanctioned option, regardless of science.

Biodata and Social Pre-Enlistment Measures

Just as complex is the range of reported attempts to reduce attrition effects by isolating possible social background causes. Perhaps the most intense national scrutiny related to background in recent times is evident in Kiernan’s (2011) landmark unpublished study, where signs emerge of a British infantry recruit population that has special characteristics. One in nine did not know their father; but more than eight out of ten came from homes where their father was in employment, and fewer than one in twenty from homes where fathers had not worked. More than half left secondary school with below average grades, and only one on seven had superior grades in all subjects. Most notable was that over half of all respondents (53.3%) reported being in trouble with the police prior to enlistment. In spite of meticulous combing of the comprehensive data set, not enough substantial correlation of biodata variables was found to increase the prediction of failures and to reduce attrition. Typically, studies such as these have formed the basis of relatively inconclusive attempts to predict outcomes from self-report biodata questionnaires, social background checks, criminal records, interest inventories, situational exercises. Examples of how they might succeed, however, are provided in the visionary compensatory screening models, introduced 20 years ago by Lescrève, (1993, 1995a,b, 1996,1997, a, b, 1998) but evident only in their unique use in Belgium.

The Lescrève Question and Schneider’s Laws

All of these approaches raise a basic question, which in deference to his role in the area of attrition, one might define as: The Lescrève Question

What is it about first phase recruit training that makes assessment redundant?

Seeking an answer is all the more important because of the evidence of the relative, even if variable, success of cognitive tests in predicting second-phase training outcomes, once survival is assured. Briefly, recruit basic training must today be recognised as a near-random intervening variable that nullifies all attempts to use it as a criterion of selection success or failure. Does this mean that all attempts are doomed to failure because the nature of the variable is, like weather, an empirical one without any theory for its definition or accurate forecasting? In Table 1 the conceptual key to the comprehensive Kubisiak review assembles the large array of attempts to combat attrition into three broad categories, pre-enlistment, remedial, and organisational. The first two can proceed without changing the basic training status quo. The last would mean a radical shift in policy that
would directly contradict the essential foundation of army recruit training, first described with complete accuracy by Schneider (1947 pp. 323-326), who produced more than sixty years ago what might be termed his two fundamental laws of life in army contexts.

**Schneider’s Law 1:** Army training is...the efficient execution of the masculine role of toughness, ruggedness, ability to ‘take it’ – which is the aim of successful combat.

**Schneider’s Law 2:** From the cultural perspective alone, the sick role is the direct negation of the major goal of army basic training culture’. As a potential threat to the major goal, the disvaluation (sic) of that role is a functional necessity and not an arbitrary assignment of cultural value. This threat is neutralized by isolating it and insulating the group from it.’

According to Schneider, all those belonging to medical and voluntary withdrawal categories do not, and indeed cannot, achieve membership status within platoons by the very nature of the functional necessity of the role. Where comradely sympathy and support may be extended in initial stages to the soldier having difficulties, this turns to aggression, scapegoating and exclusion from platoon membership when individuals hinder the platoon in its quest for approval and status, signalled by ‘toughness ruggedness and the ability to take it’. These acute observations largely dictated the current approach to understanding recruit attrition; and to finding a remedial alternative to the normal method of insulating recruits from ‘sickness’ that includes the likelihood of failure, namely, outcasting. (Irvine, 2004,a, b, 2005, 2006, 2010). The basic framework for the research was constructed along three guiding principles.

- Military training constitutes a unique and universal acculturation experience, closed to outsiders.
- Military training confers status in a total 24/7 command environment.
- Achieved and ascribed group status determine recruit self-esteem, a critical determinant of individual training survival.

Given these parameters, and the unlikely event of any immediate radical organisational change, an exploration of what might be achieved by simple psychological procedures with safeguards against deception, tantamount to modest remedial intervention, is summarised now. The emphasis is on the major intervening variable in all military experience, health-related quality of life.

**Remedial Indicators: Confronting the Random Variable**
The first advance came when a group of 1512 USAF recruits, of whom 500 were women, was given a comprehensive battery of personality, vocational interest, quality of life, circadian rhythm and cognitive tasks that supplemented their ASVAB scores (Irvine, 2000, 2004a, 2006). At first, there was a simple test of effectiveness. How accurately could we identify men and women from the pattern of test responses? The answer was reassuring because the criterion, unlike many in military studies, was both recognisable and verifiable. A small number of ability test, vocational interest and personality items correctly identified 97% of males and 89% of females. Moreover, checks against faking from internal patterns of item responses were powerful, enabling discrepancies to be identified for interview or counselling. Had admission been restricted only to those who...
fitted a male pattern, 55 women would have been admitted and 29 men excluded, but success rate of 1428 correctly identified. Had these results been interpreted as a means to end attrition it would have reached an all-time low of six percent.

Thus encouraged, a second strand of evidence emerged from a single pertinent question from a quality of life inventory constructed and standardised for use with Lackland recruits. Although the participants had all survived basic training, there was one key question in a HRQOL scale designed for military use that permitted detailed analysis of relevant data.

QUAL060 Wanted to quit because life was not what you expected?

The frequency response distributions for this question showed that 11% had wanted to quit in the frequency range Often-Always. They must be seen to be among those most likely to have found military life hard to accept. Surprisingly perhaps, only a little over half (52% of the sample) had never thought of quitting at any stage; 23% had rarely thought of quitting, while the remainder, a quarter of them, had thought of quitting at some time or other. This, it might be noted, in a six-week training environment regarded as benign compared with many. Replies to this single question could then be referenced to the whole array of responses, in particular indicators of motivation, personality, vocational interests and quality of life. The results of comparisons of the salient response category groups on the quality of life scales were definitive.

Table 4: HRQOL Scale Differences by Wanting to Quit categories

<table>
<thead>
<tr>
<th>Quit Category</th>
<th>Emotional QOL</th>
<th>Physical QOL</th>
<th>Social QOL</th>
<th>Coping Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>74.3</td>
<td>32.9</td>
<td>42.4</td>
<td>39.8</td>
</tr>
<tr>
<td>Usually</td>
<td>65.4</td>
<td>29.1</td>
<td>38.9</td>
<td>42.0</td>
</tr>
<tr>
<td>Often</td>
<td>58.7</td>
<td>27.8</td>
<td>37.3</td>
<td>42.3</td>
</tr>
<tr>
<td>Sometimes</td>
<td>52.5</td>
<td>26.6</td>
<td>36.3</td>
<td>43.7</td>
</tr>
<tr>
<td>Rarely</td>
<td>45.2</td>
<td>24.2</td>
<td>32.7</td>
<td>46.2</td>
</tr>
<tr>
<td>Never</td>
<td>36.8</td>
<td>21.0</td>
<td>30.8</td>
<td>49.6</td>
</tr>
<tr>
<td>High v. Low Effect Size</td>
<td>2.62</td>
<td>1.65</td>
<td>1.43</td>
<td>1.40</td>
</tr>
</tbody>
</table>

Moreover, there were concomitant differences in motivation and vocational interest scales. Nevertheless, concentration on quality of life during training was the rational approach given that loss of self-esteem was most likely to be flagged from quality of life responses.

Short Scales for Identifying Coping and Outcasts

These general trends led to a further refinement, the provision of short scales for use in early warning interviews, as a prelude to counselling or supportive intervention. HRQOL item analyses identified three factors, emotional, physical and social. Using key items, an attempt was made to first to construct a short scale of General Coping Skills in recruit training. At the same time, an Outcasts scale was derived from only five items. These are contrasted in Table 5

The General Coping Scale is an overall short quality of life composite derived from factor analysis of all of the items. It was also subjected to microanalysis by
regression using non-cognitive measures. It was possible to predict the general coping skills scale scores (R=.679) using the scores from the three independent HRQOL factors, the score on Interest in Military Service, BANDS Morning Tendency, sex/gender and age. Basic training coping skills were, to sum up, accompanied by greater interest in Military Service, preferring to be active in the morning, being male and being older on entry. Hence, an internal check on coping was possible.

Table 5: General Basic Training Coping and Outcasts Scales

<table>
<thead>
<tr>
<th>SHORT GENERAL COPING SCALE</th>
<th>OUTCASTS SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt confident, sure of yourself?</td>
<td>Been blamed for letting the flight down?</td>
</tr>
<tr>
<td>Been accepted by others in the flight?</td>
<td>Felt threatened (picked on) by people in the flight?</td>
</tr>
<tr>
<td>Increased your self-respect?</td>
<td>Had difficult day-to-day relationships in the flight?</td>
</tr>
<tr>
<td>Remained in good spirits (active, upbeat)?</td>
<td>Been made fun of by people in the flight?</td>
</tr>
<tr>
<td>Physically felt strong?</td>
<td>Taken a personal dislike to person(s) in the flight?</td>
</tr>
<tr>
<td>Coped with new people easily?</td>
<td></td>
</tr>
<tr>
<td>Felt happy?</td>
<td></td>
</tr>
<tr>
<td>Done parade ground drills correctly?</td>
<td></td>
</tr>
<tr>
<td>Coped with service demands?</td>
<td></td>
</tr>
<tr>
<td>Been able to keep pace with the workload?</td>
<td></td>
</tr>
</tbody>
</table>

Mean 47.2 Mean 10.1
N 1512.0 N 1512.0
Std. Dev. 7.0 Std. Dev. 4.2
Cronbach’s Alpha .80 Cronbach’s Alpha .73

Confirming Schneider’s Outcasts

For Schneider (1947), outcasts are necessary conditions of military life, because they represent threats to the fundamental aim of military life, toughness, resilience and the ability to take it. The creation of a five item sub-scale to identify potential outcasts was possible from the HRQOL questionnaire. Scale intercorrelations with the Health Related Quality of Life scales were calculated; and a factor analysis replicated the work done with the General Coping Skills subscale. The results are similar, with a general factor showing that outcasts are identifiable in the context of military Health Related Quality of Life. For a five item screen, its reliability was acceptable at .73.

The key politically defensible question following all studies of attrition risk has always been how well could other responses predict the likelihood of being outcast, contrasted with pretending to be one? Regressing on the remaining items of the HRQOL scales and the personality subscales produced a multiple correlation of .74 using 24 variables. So questions not obviously related to outcast status in the personality inventory could verify or provide an alternative to the outcast scales if necessary. A built in report function would identify outliers from the correlation function, so that they could be interviewed. Moreover, using only 5 other variables, a correlation of .70 was reached. Here are the measures in the equation, in addition to the personality scale indicating a nervous disposition.

2 The items in the short scales were removed from the three basic QOL factors before calculating the correlations.
Deliberately avoided someone in the flight?
Been accepted by others in the flight?
Lost your temper?
Been hassled by the pace of life around you?

In summary, two short and well-defined operational scales were produced, capable of indicating adaptive and maladaptive tendencies during initial training, and capable of being used in a counselling interview.

United Kingdom: Predicting Royal Marine Commando Success and Failure

These results could be said to be hypothetical, because they were not produced against actual success or failure in recruit training. In Table 2, some very high correlations with specialised combat training are reported. The highest results were obtained with detailed and rigorous criterion measures of progress in Royal Marine Commando training (Cawkill, 1992, Cawkill & Collis, 1991). Given criterion stability, it was possible independently to analyse self-report questionnaire data recently collected from a company of Royal Marines in training in the UK. The M_HRQOL questions were made available and with minor modifications for use in Marine contexts, were applied with other measures of perceived instructor empathy, the main focus in Macpherson’s (2013) research.

Here are the questions.

1. Personally praises me when I do outstanding work
2. Do you find that living in the grot makes you feel uncomfortable?
3. I have a say in my own work speed
4. Have you or do you take a personal dislike to others in the troop?
5. Have you found the physical side of training too hard to do?
6. Relationships in training are strained
7. Have you felt threatened (picked on by people in the troop)?
8. Encourages recruits to be team players

His was a detailed and pioneering study of occupational stress (cf. Hacker-Hughes et al. 2004) and empathy between training staff and recruits who passed or failed to be accepted as front-line commandos. A similar study by Jackson et al. (2011) showed that reported personal stress was a powerful indicator of infantry recruits who were asked to leave the service, but not those who left of their own accord. When a discriminant function was calculated on the Royal Marine self-reports, using all the empathy and quality of life questionnaire items available in the study, the correct identification percentage of passes and failures was 83.2%. More importantly, perhaps, only eight questions were needed to identify those who passed first time and those who did not. The three elements in these statements are intuitively certain: physical strength, social acceptance and positive reinforcement of achievements by the platoon corporal. Major differences in cognitive ability have little or no effect on the random intervening treatment-as-a-recruit variable. While no more than a confirmation of what might have been predicted from the Lackland studies is claimed for this attempt at applying M_RQOL to Royal Marine combat recruits, Macpherson’s work, as an insider’s approach welcomed by the men and approved by

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3 Macpherson first asked for and received permission to use and adapt locally the situations in M_RQOL forms, for example, troop for flight, grot for dorm and so on.
training staff, is unlikely to be repeated often, if ever. Its virtue is the trust that can be placed in the veracity of the data collected in such circumstances. This example, landmark though it might yet prove to be, is only a small contribution to the rest of his thesis, exemplary in scope and execution.

Nevertheless, Macpherson is not alone in emphasising the extent of instructor influence on recruit success and failure. Recent reviews (Lucas et al. 2008, 2010) reveal that the intervening variable has much to do with social support from ‘significant others’ but perhaps most of all from instructors and squad members. Perhaps even more compelling, historical landmarks on the influence of confidential instructor ratings on pass/fail outcomes among pilots that could never be applied operationally (Waag, Shannon & Ambler, 1973, p.9) must bear witness to generations of insider knowledge that success and failure have more to do with instructors’ perceptions and support for recruit self-esteem than measureable attributes. Mental toughness is an adaptation to circumstances, not an inherited attribute or one learned in infancy (cf. Meredith et.al. 2011).

I Walked. I Wasn’t Pushed: Alley’s VOICE and Job Dissatisfaction Unheard

Very little is known about the actual use of interests in allocating roles in the military, how they are assessed and how they enter into job allocation. However, there is one enterprise that those who counsel veterans should know about. The United States Air Force have a VOICE in all of this (Alley, Berberich, & Wilbourn. 1977; Alley, Wilbourn, & Berberich 1976; Alley & Matthews, 1982). Alley’s VOICE, (Vocational Interest Career Examination) perhaps the most comprehensive military vocational interest inventory ever devised, is described in immaculate technical detail by Alley and his associates. Within it was a Predicted Job Satisfaction Score (PJS) devised by relating VOICE scores to subsequent ratings of job satisfaction by the recruits.

A vast, virtually unreported study using the VOICE Predicted Job Satisfaction Score by Matthews (1982) followed 36,759 male and 12,909 female entrants for 36 months in their initial tour of duty. At each 12 month interval there was a linear increase in the numbers who left the service corresponding to the degree of predicted dissatisfaction with the job. VOICE was used to compare the job allotted with the interests expressed: and then to predict the likelihood of being unhappy with the job. Lowest job satisfaction scorers rates for leaving were 16, 32, and 40 percent at 12, 24 and 36 months respectively. Corresponding leaving rates for the highest Predicted Job Satisfaction Scorers who were happy at their work were 5, 15 and 26 percent, yielding substantial odds-ratios. Search of the literature shows no sign of operational implementation of the Predicted Job Satisfaction Score subsequently, although studies with forms of VOICE adapted for army use showed that vocational interest scores had value in predicting job efficiency (Campbell & Knapp., Chs. 10, 16). In short, was the job the right one for the veteran needing counsel? If not, and leaving the service was for this reason, then feelings of resentment and lack of self-worth are predictably normal consequences. However, no systematic use of a reliable interest inventory is in place for any branch of the US Armed Services. There are today various web-based interest questions emanating from official recruitment sources cross-nationally; but research with random response numbers (Irvine, 2006) to these invariably produces occupational choices redolent of the famous paper by Burnham and Crawford (1935) on the occupational and personality preferences of a pair of dice.
Organisational Change the Key to Fitness for Purpose

If psychological screening is not permitted in the UK, one must know how to go about measuring what is necessary for integration within a computer-delivered system that leaves a very important, but strictly defined role for recruiting and training officers. Initial interpretation of biodata is nowadays easily within the compass of an expert system in the computer. The recruiting officer role can be as wide as is necessary where clarification of doubtful issues is concerned: but computer-based tests or not, recruiting officers of today remain accountable for those admitted when failure is highly probable for stress-induced personal qualities that have nothing to do with abilities.

Given people in reasonably good health, the centrality of motivation to succeed in recruit training is widely acknowledged. The Lackland and Macpherson studies showed that scales could be constructed on military personnel to predict the frequency with which recruits either left, or expressed a wish to leave, the service during training. They identify those of a disposition for whom requirements were unattainable, surroundings disturbing and treatments unrewarding; and they provide counsellors with useful diagnostic tools. Moreover, and perhaps crucially, in view of reluctance to introduce valid and reliable non-cognitive measures, their computer-delivered focus permitted checks on the consistency, even the veracity, of response patterns in critical scales. The present material from international sources serves as an example of what might be achieved with short and sensitive inventories to combat, if not defeat, the ancient enemy, attrition.

No comment on the need for radical organisational reform has been forthcoming thus far. Common sense, if personnel psychology is to be applied (taking Matthews’ study as the necessary landmark) may see nothing wrong in first finding out whether a recruit can succeed in second-phase training, especially for hi-tech roles. Then offering pay and recognition incentives when skills as a front-line soldier are added during week-end training also makes sense. Such proposals are wholly consistent with a number of official remedial recommendations for reducing attrition that Lescrève broached more than a decade ago (Lescrève 2000, p.515). The extensive efforts of the US services to deal with screening for attrition, so ably represented in Kubisiak et al. (2009) are extraordinary in scope and energy. The report has three organisational change conclusions (loc. cit. pp. 56-57), given that pre-recruitment cognitive tests prevail, and little else is used from the psychological research available.

1. The best way to address attrition is to prepare recruits for adjustment to military life, assisting them with resolving issues that they encounter after enlistment.
2. The best approaches will build on the instruments and interventions that are already operational and have been demonstrated effective.
3. The resources applied to understanding and decreasing first-term attrition should be deployed in a more strategic, systematic manner.

Regardless of their undoubted technical soundness and administrative convenience, one suspects that, for those in command, the unspoken political defensibility of the Schneider laws of military training is the deciding factor, as it has ever been. In short, even if these practices continue to exist, psychology may have proven itself since 1919 to be fit for military purpose. The unmistakeable conclusion, however, is that military purpose cannot see fit to operate the undoubted proven successes of decades of ignored research in the psychology of individual differences dealing with attrition involving huge sums of money annually. Without organisational changes, such as those introduced for dealing with mental illness, psychology will make little progress.
References


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PSYCHOLOGY FOR MILITARY PURPOSE


