

1

Acknowledgements

The members of the IMTA – NATO 2004 Conference Committee wish to express their appreciation to the Belgian Minister of Defense, André Flahaut, for having authorized the organization of the double conference. We also wish to acknowledge our conference hosts, the *Directorate General Human Resources* of the Belgian Defense Staff and the *Centre de Recherches du Service de Santé des Armées* from France and their representatives: Major General Baudouin Somers and Dr Corinne Cian.



Directorate General Human Resources
Belgian Defense Staff



Centre de Recherches du Service de Santé
des Armées, France

We'd further like to thank our keynote speakers: Major General Roger Van Hoof, Professor Dr Wayne Cascio and Captain (USN) Gary Dye for their excellent contributions.

It is our pleasure to extend our gratitude to the Chair and the Members of the NATO Research Task Group 034 on 'Recruiting and Retention of Military Personnel' for having accepted to host their meeting in conjunction with this IMTA conference.

We would also like to express our many thanks to all presenters and session chairs, the various Belgian Defense support services, the management and staff of the Royal Military Museum and of the Hotel President WTC and to our sponsors: PsyTech Ltd, SHL and RTI International.

The expertise and dedication of the following individuals also ensured the success of the 46th Annual Conference of the International Military Testing Association and the NATO meeting on Recruiting and Retention.

Scientific Program

- Prof Dr Filip Lievens, University of Ghent
- Mr Willem Delaere, HRP-W/R&T
- Mr Bert Schreurs, HRP-W/R&T

Registration and On-Site Support

- Mr Kevin Buch, DOO/SAO
- Mr Jeroen Storme, DOO/SAO
- Ms Jane Debauche, DOO/SAO
- Ms Anouk Lepinoy, DOO/SAO

- Ms Tilly Hongenaert, DOO/SAO

Steering Committee

- Mr Thomas Bossuyt, HRP-W/R&T
- Mr Maarten Andriessen, HRP-W/R&T

Conference Gifts and Documents Layout

- Ms Liliane Heylen, HRP-W/MC

Web-site

- Mr Monty Stanley, USA

Registration Software, Banquet and Financial Aspects

- Mr Ives Deryck, HRP-W/R&T

Reception, Hotel Contacts and Excursion to Bruges

- Mr Jan Demarré, HRP-W/R&T

The Undefined Myriad Things To Do

- Ms Jenny De Maret, HRP-W/R&T

Transportation, Communication and Roadbook

- Mr Guy Geysens, HRP-W/MC
- Mr Serge Beckers, HRP-W/R&T

Hospitality Suite

- Mr Yves Devriendt, HRP-W/R&T
- Mr Frankie De Wilde, DOO/SAO

IT Support

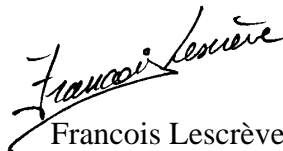
- Mr Daniël Bauval, HRT
- Mr Michel Petry, HRT
- Mr Jean-Michel Aelbrecht, HRT
- Mr Marc Schoukens, HRT

Audio Support

- Mr Stefaan Bunckens and his team, MR CIS

Proceedings

- Dr Corinne Cian, CRSSA



Francois Lescrève
IMTA 2004 Steering Committee Chair

Minutes
International Military Testing Association (IMTA 2004)
STEERING COMMITTEE MEETING
25 Oct 2004

The IMTA Steering Committee met before the 46th annual conference at 1700 hours, October 25th 2004 at the President WTC Hotel, Brussels, Belgium. LtCol Psych Francois Lescreve, Belgium, chaired the meeting.

1. Welcome – introduction

The participants (See Annex A) presented themselves. The Steering Committee specially welcomed the Harry Greer awardees, who – in accordance with the modified ByLaws – were invited as non-voting members of the Steering Committee for the first time.

The agenda (See Annex B) was approved.

2. Review of previous minutes

No comments were made: the 2003 minutes were approved.

3. 2004 Conference administration

This IMTA conference is in joint venture with NATO. The Research Task Group 034 on ‘Recruiting and Retention of Military Personnel’ belonging to the Human Factors and Medicine Panel of NATO’S Research and Technology Organization agreed to hold its extended meeting in conjunction with the IMTA.

The double-conference is hosted by the Directorate General Human Resources of the Belgian Defense Staff and the Centre de Recherches du Service de Santé des Armées, France. There was excellent support from France for this conference. Also from the Belgian Defense, there was significant support. The choice of the hotel was not easy. The good hotels in the city centre are too expensive. We have chosen this hotel as a compromise: not too expensive and quite close to the city centre.

There are 240 attendees expected and more than 100 papers will be presented.

There were a lot of suspicious registrations from African persons, who wanted to register merely in order to get a visum.

Program highlights:

- Hospitality suite for networking and reasonably priced drinks;
- Keynotes on Tuesday: Major General Roger Van Hoof, Prof. Dr. Wayne Cascio and Captain (USN) Gary Dye;
- Reception on Tuesday night in the WWI room of the Royal Military Museum;
- The IBTA on Wednesday night;
- The banquet on Thursday night at the Château de la Rocq;
- Tour of Bruges (optional) on Friday.

4. Financial report

We received 21.752,95 € from the Pensacola team. In addition, the 2003 team took care of the costs for the maintenance of the website in 2004 (to avoid money transfers).

Brussels is an expensive place to host conferences. For instance, we have to pay over 10.000 € to rent the required rooms in the hotel and 7,5 € per person per coffee-break!

We expect to pass 5.000 to 10.000 € to the Singapore team (IMTA 2005).

5. Membership affairs

a. Organizational changes in The Netherlands

Dr Renier van Gelooven asked to give the Steering Committee an update about current organizational changes in The Netherlands. (See distributed document in Annex C. The given PowerPoint presentation is included in the PowerPoints section of the Proceedings CD-ROM)

b. Application for membership by Croatia

The Croatian Assistant Minister for Human Resources, Prof. Zeljko Gorsic, has proposed that the Croatian Military Psychology Service become a member of IMTA (See his letter in Annex D). LtCol Psych Tomislav Filjak, head of the Croatian Military Psychology Service, attended the Steering Committee and presented his Service (The given PowerPoint presentation is included in the PowerPoints section of the Proceedings CD-ROM). More information about publications of his Service can be found on www.morh.hr/hvp. The Psychology Service organizes training seminars and military psychological symposiums on a regular basis, for example IAMPS 2000 (the website still exists: visit www.morh.hr/iamps for abstracts) and NATO's HFM-081 RTG 020 on 'Stress and Psychological Support in Modern Military Operations'.

Results of the vote of the steering committee: 16 votes in favour, 0 votes against. The IMTA Steering Committee accepts the membership of the Croatian Military Psychology Service. Congratulations!

6. Publication of IMTA materials

a. Scanning of the previous proceedings: update

Dr Marty Wiskoff gives an update about the ongoing effort to scan previous IMTA proceedings. A set of CD's with the proceedings of the 17th-38th conference is collected by Marty Wiskoff in collaboration with the colleagues of Singapore. They are close to completion. The CD's can be made available to qualified users. The steering committee agrees that all the papers of IMTA conferences can be posted on the Internet.

b. ICODAP initiative

Mr. Johnny Weissmuller mentioned that it might be possible to post all available IMTA proceedings on the ICODAP website (www.icodap.org). The steering committee agreed that this was a valuable offer and recommended that Johnny Weissmuller and Marty Wiskoff remain in contact to pursue this goal.

c. The AUSBAT case

Dr Alan Twomey requested that a paper by Stanton Bongers and Jiantao Pei, presented in Canberra in 2001, would be removed from the proceedings on the website. The paper was titled 'The Australian Basic Ability Tests (AUSBAT)'. The reason is that while it was considered suited for unlimited distribution at that time, it now appears that unlimited distribution is no longer appropriate. Dr Twomey indicated that both authors agreed with the removal of their paper from the proceedings. The article has now been removed from the website. The steering committee agreed that the authors should be aware that papers and PowerPoints are posted on the Internet but they keep the right to ask their removal, when unlimited distribution doesn't seem appropriate any longer.

7. Website update

Mr Monty Stanley, our webmaster sends his regards and apologizes for not being able to attend the Steering Committee and the Conference. He sent his report (see Annex E).

8. Future conference timetable

The sequence of locations as was foreseen last year (Belgium 2004 – Singapore 2005 – Australia 2006) appeared to be less appropriate for it would take IMTA away from North America for three years. The steering committee felt that this would put the participation of US and Canadian participants at risk. Therefore, following timetable is agreed:

2005: Singapore, November 8th to 10th, there is approval from the Ministry of Defense;

2006: Kingston - Canada, proposed by Susan Truscott. This looks like being a good choice to this steering committee;

2007: Australia, who volunteered to organize IMTA 2006, is requested to consider hosting IMTA 2007. Other possible options may be put forward in due time.

9. Harry H. Greer Award

Ms Susan Truscott is nominated for the Harry Greer Award. The committee agrees to give her that award with 17 votes (0 votes against). The nomination text is given in Annex F.

10. AOB

p.m.

11. Closing comments

It's Ray Waldkoetter's 76th Birthday today, so there is coffee and a birthday cake!

IMTA 2004 STEERING COMMITTEE – LIST OF ATTENDEES

PRESENT	
Name	Represented Member Organization
Col Bernd HORN	Canadian Defence Academy Headquarters
Ms Susan TRUSCOTT	Directorate of Strategic Human Resources – Department of National Defence – Canada
LtCol Star SOH	Applied Behavioural Sciences Department – Ministry of Defense – Singapore
Dr Corinne CIAN	Centre de Recherche du Service de Santé des Armées – Unité de Psychologie – France
LtCol drs John DE BRUIJN	Defense Organization for Recruitment and Selection – The Netherlands
Dr James RIEDEL	Defense Personnel Security Research Center – United States
Ms Joanne SUDDABY- SMITH	Development Projects and Research Group – HQAG (Personnel and Training Command) – United Kingdom
LtCol Psych Francois LESCREVE	Directorate General Human Resources – Accession Policy Research & Technology Section – Belgium
Mr Jim McCUTCHEON	Directorate of Military Human Resource Requirements – Department of National Defence – Canada
LtCol MSc Christian LANGER	Austrian Military Psychological Service
Dr Berit CARLSTEDT	National Defense College – Sweden
Dr Mike LENTZ	Navy Education and Training Professional Development and Technology Center – Navy Advancement Center – United States
Prof Dr Jacques MYLLE	Royal Military Academy of Belgium
Dr Hubert ANNEN	The Military Academy at the Swiss Federal Institute of Technology – Switzerland
Mr John KAMMRATH	US Air Force Occupational Measurement Squadron – United States
Mr Johnny WEISMULLER	US Air Force Personnel Center – United States
Dr Renier VAN GELOOVEN	Behavioural Sciences Services Centre – The Netherlands

EXCUSED	
Name	Represented Member Organization
Col Anthony COTTON	Defence Health Service Branch – Australian Defence Force – Australia
Col Cheryl LAMERSON	Directorate Human Resources Research and Evaluation – Department of National Defence – Canada

EXCUSED	
Name	Represented Member Organization
Ms Justine GREIG	Directorate of Strategic Personnel Planning and Research – Australia
Mr Bernd MEINARDUS	Federal Ministry of Defense – Germany
Ms Mary NORWOOD	COMDT HQ U.S. Coast Guard – United States
Mr Paul Stanley	IMTA Webmaster

PRESENT HARRY GREER AWARDEES	
Name	Represented Member Organization
Dr Raymond WALDKOETTER	Recipient of the H. Greer Award in 1983
Dr Marty WISKOFF	Recipient of the H. Greer Award in 1987

INVITED GUESTS	
Name	Represented Member Organization
LtCol Psych Tomislav FILJAK	Croatian Military Psychology Service - Croatia
Capt Dijana DENAËLÆ	Croatian Military Psychology Service - Croatia
Mr Thomas BOSSUYT	Administrative support
Mr Maarten ANDRIESSEN	Administrative support



**THE INTERNATIONAL MILITARY TESTING ASSOCIATION
46th Annual Conference
26-28 October 2004, Brussels, BELGIUM**

STEERING COMMITTEE MEETING – 25 Oct 2004

AGENDA

- 1. Welcome – Introduction** (Chair – LtCol Psych F. Lescreve)
- 2. Review of previous minutes** (Chair)
- 3. 2004 Conference administration** (Chair)
- 4. Financial report** (Chair)
- 5. Membership affairs**
 - a. Organizational changes in The Netherlands (Dr Renier van Gelooven)
 - b. Application for membership by Croatia (LtCol Psych Tomislav Filjak)
- 6. Publication of IMTA materials**
 - a. Scanning of the proceedings: update (Dr Marty Wiskoff)
 - b. Codap initiative (Mr. Johnny Weissmuller)
 - c. The AUSBAT case
- 7. Website update** (Chair)
- 8. Future Conference Timetable** (Chair)
- 9. Harry H. Greer Award** (Chair)
- 10. AOB**
- 11. Closing comments**



Visit address:
Frederikkazerne
Van der Burchlaan 31
Postal address:
MPC 13 A
P.O. Box 20702
2500 ES The Hague
The Netherlands
www.landmacht.nl

Author:
R.M.W. van Gelooven (PhD)
Telephone 0031 (70) 3165450
Fax 0031 (70) 3165452

E-mail:
Renier.gelooven@mindef.nl

To To whom it may concern

Date 24 October 2004
Our reference GW/2004/102
Subject New Dutch Behavioural Sciences Services Unit

THE NEW DUTCH BEHAVIOURAL SCIENCES SERVICES UNIT

Dear Colleagues,

I am proud to introduce to you, through this letter, the new Dutch Behavioural Sciences Services Unit (BSSU). This letter was specifically written for the attendants of the 46th IMTA in Brussels, October 2004.

Introduction

The Ministry of Defence of the Netherlands and the Armed Forces are currently going through a major restructuring operation. The restructuring is accompanied by considerable downsizing. One of the leading principles in this restructuring is to combine units with the same tasks which belong to the different Services into one unit which provides services for the Ministry of Defence and the entire Armed Forces. This principle was also applied to the Behavioural Sciences Services Units in the four Services. Actually, combining the behavioural sciences support elements has been the first of many projects in the restructuring operation, which is called SAMSON.

The behavioural sciences support for the Dutch defence organisation has traditionally been organised along the lines of the separate forces. Since several decades Royal Netherlands Navy and the Royal Netherlands Army and Royal Netherlands Air Force have had their own behavioural sciences or social sciences departments. These departments have concentrated on psychological selection and social sciences practical research and advice. For the Royal Netherlands Air Force, flight psychology has developed from this department. And since a number of years (originating in the armies' department) a separate unit was established within the Royal Netherlands Marechaussee. These departments have been ordered to combine into a new Behavioural Sciences Services Unit. This restructuring operation had to yield a 33% reduction in the number of employees.

Please quote date, our reference and subject when replying.



Date 24 May 2004
Our reference GW/2004/102

Mission

The new Dutch Behavioural Sciences Services Unit consist of military and civilian social scientists with a longstanding experience within the Dutch Defence organisation.

The Behavioural Sciences Services Unit (BSSU) supports and improves the entire Dutch defence organisation through practical social sciences research and advice.

Principles

The work of the new Dutch Behavioural Sciences Services Unit (BSSU) is first and always:

- directed at effectiveness for our clients,
- scientifically sound and
- efficient.

Tasks

We work at accomplishing our mission through the following main fields:

- Practical social sciences research and advise
- (Improving) Psychological selection
- Social sciences research co-ordination and knowledge and quality management
- Other tasks

Practical social sciences research can be specified according to the main clients: policy makers on the one hand and (operational) commanders on the other hand. Part of the social sciences research is directed at the operational military process: morale measurement and studies into the psychological effects of missions abroad (aftercare) or the use of, and confrontation with, violence. Another part of the research generates management information or is used within the context of developing and evaluation of policies, especially considering personnel.

Tasks in the field of the psychological selection are performed in close alliance with the institute for selection in Amsterdam. The BSSU concentrates on setting the standards and evaluating these through research (do the tests predict what we want them to predict).

Social science co-ordination and knowledge and quality management tasks include keeping a close eye on all kinds of requests to do studies within the defence organisation, support and supervision of research granted to external partners such as universities or commercial research firms and also supporting students within the forces or staff. Finally this kind of support can be screening others' questionnaires or interview protocols or even it can be of a very down to earth nature, such as performing data entry for other parties (using our advanced scanning equipment).

Originating from the departments are a number of services that do not fit into the main categories described above. Examples are the organisation of end of mission debriefing for the Royal Marines,



Date 24 May 2004
Our reference GW/2004/102

and the collegial support group for the Royal Netherlands Marechaussee.

Organisation

The BSSU has 17.5 employees, 50% military. The workforce of the BSSU consists of a head, 15 researchers ranging from captain to lieutenant-colonel or equivalent civil service ranks and the secretarial support (1,5 full-time equivalent).

Subjects

The BSSU works on a broad spectrum of subjects, all oriented at practical application of research results:

- Morale
- Psychological effect of mission abroad (aftercare)
- Psychological aspect of modern warfare, the soldier modernisation program
- Recruitment and retention (all stages, all categories)
- Well-being and job satisfaction
- Psychological selection
- PICTURE (Periodic Information for Commanders through unit specific reports)
- Absenteeism
- Corporate image
- Numerous opinion polls amongst Defence personnel
- Quality management

We are enthusiastic about sharing knowledge, results and methods and working together with our foreign counterparts. Therefore I gladly invite you to contact *us* so that we can give *you* more information and to inform *us* about what *you* are doing.

On behalf of all personnel of the Dutch Behavioural Sciences Services Unit,

yours sincerely

Renier van Gelooven (PhD)
Head Dutch Behavioural Sciences Services Unit



REPUBLIC OF CROATIA
MINISTRY OF DEFENCE
ZAGREB

HUMAN RESOURCES MANAGEMENT

Zagreb, 14th October 2004

INTERNATIONAL MILITARY TESTING ASSOCIATION Steering Committee

Based on the former participation of the Croatian Armed Forces representatives on the International Military Testing Association conferences, observation of the work of your association and also on the mutually expressed readiness for further cooperation, we herewith submit our application for the membership in the International Military Testing Association.

On behalf of the Ministry of Defence of the Republic of Croatia we are proposing that the Croatian Military Psychology Service become a member of IMTA. Our Military Psychology is one of the supportive services inside the Ministry of Defence and Armed Forces of the Republic of Croatia. It has well established inner structure consisting of military psychologists and it is executing usual psychological duties in selection area, readiness assessment and psychological support and prevention, including researches in the area of military psychology.

We would like to emphasize that we agree to undertake all obligations that are arising from the full membership, which includes at least participation of our representative at IMTA annual conferences and Steering Committee meetings. We are also accepting hosting of the annual conference in the terms decided by the IMTA Steering Committee.

Our representative, at disposal for representing Croatian Military Psychology Service at the Steering Committee meeting (October 25th, 2004), is LtCol. Tomislav Filjak, head of the Section for Military Psychology of the Personnel Department, Ministry of Defence of the Republic of Croatia.

With best regards,

Assistant Minister for Human Resources



Zeljko Goršić
Zeljko Goršić, prof.

IMTA Website
2004 Steering Committee Report
(all currency amounts in US dollars)

Dear Steering Committee Members –

Greetings from the Wild West, my new retirement home in San Angelo, Texas. To make a long story short: love San Angelo, hated retirement. So I started working again in May, as the Assistant Director of Human Resources for Tom Green County. That's why I can't be with you in lovely Belgium this year. I must confess that my wife, Dinah, is not happy about missing a trip to Europe. Now, down to business...

WEBSITE STATUS

In November 2003, Francois paid the IMTA 2004 website bills in advance through IMTA Pensacola, in order to save the hassle of currency exchange. So, basically, the website is paid up through June 2005. This includes the **future** task of compiling the 2004 papers into a single, fully indexed and cross-referenced document in PDF format (but does not include preparation and dissemination of proceedings as a CD).

WEBSITE EXPENSES

Total Cost (2003): \$1465

Total Cost (2004): \$1365

Projected Cost (2005): \$1365:

Domain registration
500 MB web space
Dedicated e-mail accounts
Website design
Website maintenance
Internet registration forms
Immediate changes and updates as required (just ask Francois)
Compile proceedings from Word files submitted by conference presenters
Convert Word proceedings to PDF format
Prepare Table of Contents and Author Index
Bookmark and cross-reference all papers to Table of Contents and Author Index
Post conference proceedings on IMTA website
Post conference PowerPoint files on IMTA website

★★★IMPORTANT STEERING COMMITTEE ISSUES★★★

Timely publication of proceedings. SiteCrafters can post proceedings within 1 month of receiving **all** files (including steering committee minutes, acknowledgments, by-laws, etc.). Recommendation for Steering Committee: Announce a drop-dead date for paper submission and stick to it.

Harry Greer Award page on website. We still need a photo of Mike Lentz receiving his award!

IBTA rules! Have a beer for me!

Monty Stanley
monty@ospsitecrafters.com
4001 Green Meadow
San Angelo TX 76904

Nominee for the Harry Greer Award

Motivation for the nomination of Susan Truscott for the Harry Greer Award 2004

Susan has a passion and dedication that drives the work that she does everyday. She is currently heading the Directorate Strategic Human Resources (D Strat HR) of the Department of National Defence in Canada, and as good as she is an ambassador of her own organisation, she is also for our community.

Susan has shown very active support for the IMTA for many years indeed. IMTA is an extra curricular activity that she has unstintingly dedicated much of her spare time to since becoming a member several years ago. She has become one of the linchpins that has played a significant role in progressing IMTA, by consistently enriching the program with excellent presentations and symposia and by being very actively involved in organizing IMTA conferences. We all remember what central role she played in hosting the 2002 IMTA in Ottawa. She also recently took the initiative to seek support for hosting IMTA in Canada again in 2006!

She has earned the respect and admiration of not only her fellow IMTA members, but also her colleagues and network around the world. Susan is staunch advocate in promoting the aims and accomplishments of IMTA with her contacts in the international arena.

Susan is truly one of the driving forces of our beautiful association! A very good "companion in arms", by whom we are always in good company.

Based on the above, Susan Truscott is an ideal choice to receive the Harry Greer Award for 2004.



46th Annual Conference of the IMTA



NATO RTG on Recruiting and Retention

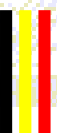
Brussels, Belgium

Monday, 25 October 2004

1600 - 2000	Registration and Paper Submission	President: Hall/Registration Room
1700 - 1800	Annual IMTA Steering Committee Meeting	President: VIP room
2000 - 2400	Hospitality Suite open	President: Waterloo Room

Tuesday, 26 October 2004

0730 - 1600	Registration and Paper Submission	President: Hall/Registration Room
0900 - 1215	Opening Session	President: Fabiola Room
0900 - 0905	Introduction and Administrative Announcements by LtCol Psych François Lescreve, Conference Team	
0905 - 0915	Welcome and Opening of the Conference by Major General Baudouin Somers, Director General Human Resources, Belgian Defense Staff, Conference Host	
0915 - 1000	Keynote Address 1: Major General Roger Van Hoof, M.D., Belgian RTB-representative "Emerging Challenges in Familiar HR Areas"	
1000 - 1030	Coffee	Lobby
1030 - 1115	Keynote Address 2: Prof. Dr. Wayne Cascio, University of Colorado at Denver "New Realities of Attracting and Retaining Talent"	
1115 - 1200	Keynote Address 3: Capt (N) Gary Dye, Chief of Staff, U.S. Navy Training Command "The U.S. Navy's Revolution in Training"	President: Fabiola Room
1200 - 1215	Introduction to the NATO track by Maj Psych Robert Morrow, NATO RTG on "Recruiting and Retention of Military Personnel"	
1215 - 1330	Lunch	Restaurant
1330 - 1500	Conference Sessions	Session Rooms
1500 - 1530	Coffee	Lobby
1530 - 1700	Conference Sessions	Session Rooms
1830	Busses leave from President for Reception at the Royal Military Museum	
1900 - 2100	Reception at the Royal Military Museum <i>Dress: Jacket and tie (or equivalent)</i>	
2115	Busses leave Museum for Hotel President	
2150	Busses arrive at Hotel President	
2200 - 2400	Hospitality Suite open	President: Waterloo Room





46th Annual Conference of the IMTA



NATO RTG on Recruiting and Retention

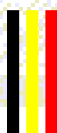
Brussels, Belgium

Wednesday, 27 October 2004

0730 - 1800	Registration and Paper Submission	President: Hall/Registration Room
0830 - 1030	Conference Sessions	Session Rooms
1030 - 1100	Coffee	Lobby
1100 - 1230	Conference Sessions	Session Rooms
1230 - 1400	Lunch	Restaurant
1400 - 1530	Conference Sessions	Session Rooms
1530 - 1600	Coffee	Lobby
1600 - 1730	Conference Sessions	Session Rooms
2000 - 2400	IBTA meeting in Hospitality Suite	President: Waterloo Room

Thursday, 28 October 2004

0730 - 1730	Registration and Paper Submission	President: Hall/Registration Room
0830 - 1030	Conference Sessions	Session Rooms
1030 - 1100	Coffee	Lobby
1100 - 1230	Conference Sessions	Session Rooms
1230 - 1400	Lunch	Restaurant
1400 - 1530	Conference Sessions	Session Rooms
1530 - 1600	Coffee	Lobby
1600 - 1730	Conference Sessions	Session Rooms
1845	Busses leave from President for Banquet at Château de la Rocq	
1930 - 2300	Aperitif and Banquet at Château de la Rocq <i>Dress: Jacket and tie (or equivalent)</i>	
2300	Busses leave Château for Hotel President	
2340	Busses arrive at Hotel President	
2340 -	Hospitality Room open	President: Waterloo Room





46th Annual Conference of the IMTA

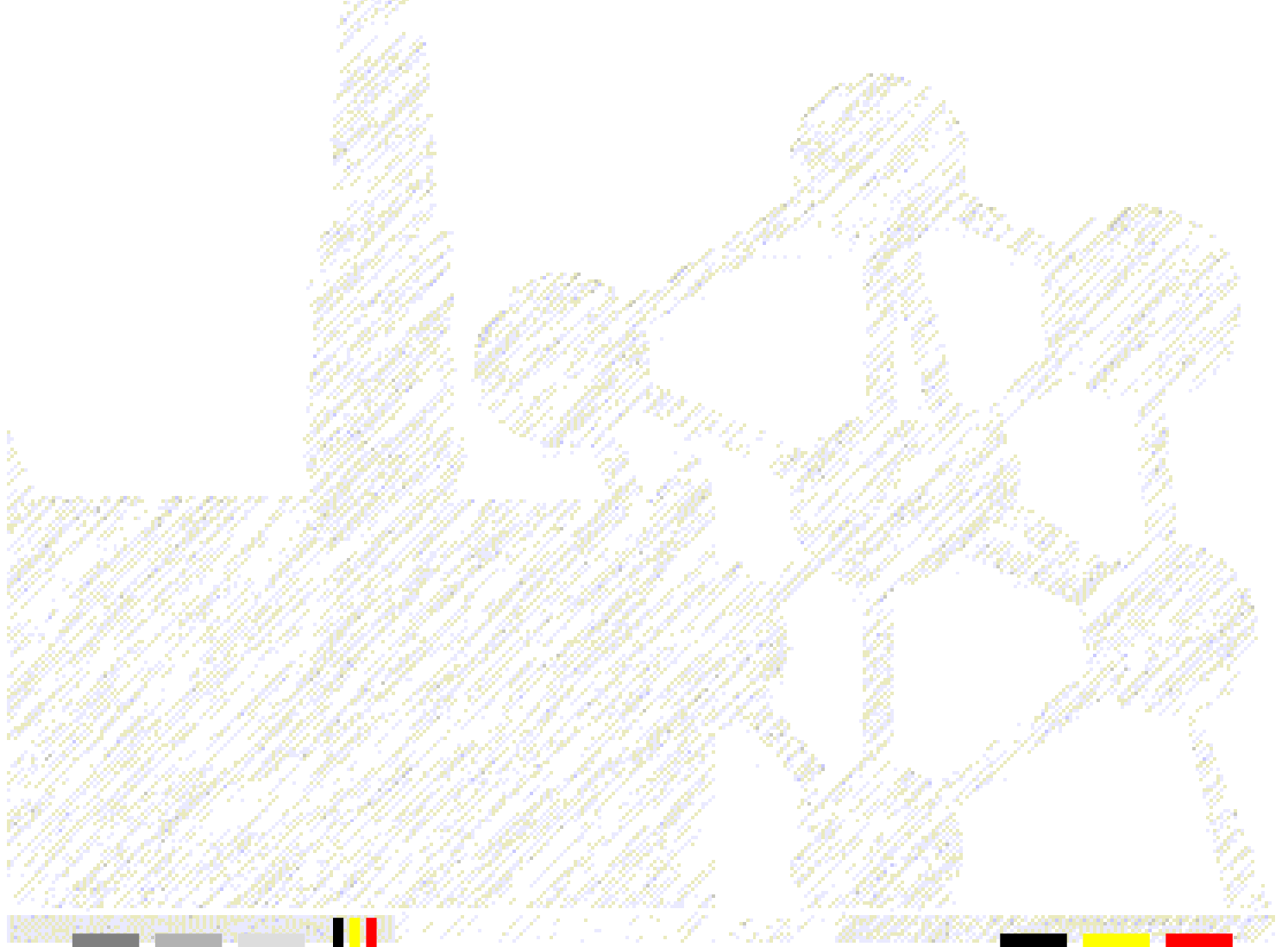


NATO RTG on Recruiting and Retention

Brussels, Belgium

Friday, 29 October 2004

- | | |
|-------------|--|
| 0830 | Busses leave from President for Tour of Bruges (Brugge) |
| 1000 | Arrival at Bruges |
| 1015 - 1200 | Guided Tour of Bruges |
| 1200 | Visit of Home Brewery 'De Halve Maan' |
| 1245 - 1400 | Lunch at 'De Halve Maan' |
| 1400 - 1645 | Several possibilities for you to choose from, for instance visiting a museum, shopping, etc. |
| 1715 | Busses leave Bruges for Hotel President |
| 1830 | Busses arrive at Hotel President |



Tuesday, 26 October 2004

Time	Paola	Laurence/Aurelie	Brugge/Liège
	Subject: Testing and Behavioral Measurement	Subject: Technology in Testing	Subject: NATO Task Group - Recruiting
1330-1355	Pommerich, M. - USA <i>Using Item Response Theory to Develop an Interest Inventory</i> ID 79	Burke, E. – UK <i>Myths and Facts About Online Testing</i> ID 100	Chapman, D. S. – Canada <i>Theory-Based Recruiting Practices</i> ID 99
1400-1425	Kamata, A. – USA <i>Examination of Military College Scholarship Selection Model Validity</i> ID 111	Baisden, A.G. – USA <i>A New Era in U.S. Navy Testing: Multimedia Navy Enlisted Advancement Exam</i> ID 32	Chapman, D. S. – Canada <i>Implications of a Meta-analytic Review of Recruiting Correlates for Military Recruitment</i> ID 90
1430-1455	Borman, W.C. – USA <i>U.S. Army Recruiter Selection Research: Another Update</i> ID 123	Kyllonen, P.C. - USA <i>Trends in Testing: Simulations, Situational Judgment, Video and ICT Literacy</i> ID 128	van Amelsfoort, D. - The Netherlands <i>The Relationship Between Recruitment, Selection and Turnover of Dutch Soldiers</i> ID 12
1500-1530	Coffee		
	Subject: Leadership Assessment	Subject: Organizational Behavior	Subject: NATO Task Group - Retention
1530-1555	Horey, J. - USA <i>Leadership Competencies for Contemporary Army Operations: Development, Review and Validation</i> ID 80	Norton, S. - Canada <i>The Canadian Forces Your-Say Survey: Methodology and Findings</i> ID 88	Chernyshenko, O.S. - New Zealand <i>Applicability of Civilian Retention Theory in the Military: Predicting Retention in New Zealand</i> ID 86
1600-1625	Aude, S.N. - USA <i>Development and Validation of Leadership Assessment Instruments for United States Army Commanders, Staff Officers, and Non-Commissioned Officers</i> ID 145	O'Shea, P.G. – USA <i>Contextual Performance in Military Settings: What Role Does Commitment Play?</i> ID 15	Lancaster, A.R. – USA <i>U.S. Department of Defence Retention Trends</i> ID 70
1630-1655		Gutknecht, S.P. - Switzerland <i>The Role of Leader-Member Exchange During Organizational Changes</i> ID 92	Keller-Glaze, H. – USA <i>Predictors of Retention Decisions Across Ranks in the U.S. Army</i> ID 144

1830	Busses leave from President for Reception at the Royal Military Museum
1900 - 2100	Reception at the Royal Military Museum Dress: Jacket and tie (or equivalent)
2115	Busses leave Museum for Hotel President
2150	Busses arrive at Hotel President
2200 - 2400	Hospitality Suite open President: Waterloo Room

Wednesday, 27 October 2004

Time	Paola	Laurence/Aurelie	Julie	Brugge/Liège
	Subject: Testing and Behavioral Measurement	Subject: Testing and Behavioral Measurement	Subject: Subject: Postmodernism and the Military	Subject: NATO Task Group - Recruiting
0830-0855	Weissmuller, J.J. - USA <i>Recent Developments in USAF Officer Testing and Selection</i> ID 57	SYMPOSIUM: Selection of Special Operations Forces Personnel Chair: Mills, L., & Sanders, M.G. – USA	SYMPOSIUM: Military and the Challenge of Postmodernism Chair: Fleck, G. – Austria	SYMPOSIUM: A Closer Look at Recruitment Issues in the Belgian Defense' Chair: Lievens, F. – Belgium
0900-0925	Bowden, T.B. - USA <i>Creating the U.S. Army Interpersonal Skills Assessment (AISA) Battery</i> ID 09	Scholtz, D.C. – Canada <i>The Development of a Psychological Screening Program for Sniper Selection</i> ID 45	Fleck, G. – Austria <i>Varieties of Postmodern Individuality: Implications for Soldierly Self-Definition</i> ID 117	Lievens, F. – Belgium <i>Investigating Employer Image Dimensions and Attractiveness of the Armed Forces</i> ID 20
0930-0955	Miranne, P.G. - USA <i>Single vs. Multiple Subject Matter Experts for Test Development</i> ID 59	Mills, L. - USA ID 126 <i>Optimizing US Navy SEAL Selection</i> Woodrow, F. - UK ID 137 <i>Are Special Forces Candidates as Well Prepared as Expected?</i>	Toiskallio, J. – Finland ID 118 <i>Military Pedagogy and the Postmodern Transformation of Soldiership</i> Keller, J. – Germany ID 119 <i>Warrior, Helper, Adventurer? Soldierly Self-Identity in Missions</i>	Derous, E. – Belgium ID 23 <i>Development of an Applicant Reaction Questionnaire for the Belgian Military</i> Schreurs, B. – Belgium ID 21 <i>First Impressions of Recruiters: Do They Really Matter?</i>
1000-1025	Modjeski, R.B. – USA <i>Networked Military Simulations: Measures of Reliability and Validity</i> ID 62	Sanders, M.G. - USA ID 134 <i>U.S. Army Special Operation Forces (SOF) Assessment and Selection</i>	Slop, H. – Austria ID 120 <i>Motivation of Austrian Soldiers to Engage in International Military Operations</i>	Andriessen, M. – Belgium ID 24 <i>Perspectives on the Quality of the Hiring Process</i>
1030-1100	Coffee			

Wednesday, 27 October 2004

Time	Paola	Laurence/Aurelie	Julie	Brugge/Liège
	Subject: Testing and Behavioral Measurement	Subject: Cognition	Subject: Occupational Health	Subject: NATO Task Group – Turnover
1100-1125	<p>SYMPOSIUM: Innovations for Military Personnel Selection and Retention</p> <p>Chair: Lescreve, F. - Belgium</p> <p>Devriendt, Y. - Belgium <i>The Belgian Client-Based Decision Model: Progress and Prospects</i> ID 65</p>	<p>Soetens, E. – Belgium <i>Endogenous and Exogenous Attention in Vigilance Tasks</i> ID 110</p>	<p>Meijer, M. - The Netherlands ID 85 <i>Military Mental Health: Self-Selected, Mission Related or Selection Biased?</i></p>	<p>Norris, M.E. – Canada <i>Turnover in the military: Impact of Workplace Stressors'</i> ID 43</p>
1130-1155	<p>Ippel, M.J. - USA <i>A New World: New Aptitudes Require New Measures</i> ID 66</p> <p>Irvine, S.H. - UK ID 67 <i>New Test Formats for the Selection and Allocation of Military Personnel in Germany</i></p> <p>Kyllonen, P.C. - USA <i>The Standardized Letter of Recommendation (SLR): Rating Military Personnel on Non-Cognitive Factors</i> ID 68</p>	<p>Darabi, A. – USA ID 11 <i>Measuring Motivation in Instruction and Training: A Cognitive Load Perspective</i></p>		<p>Bilgic, R. – Turkey <i>Determinants of Turnover Intentions among Non-Commissioned Officers</i> ID 25</p>
1200-1225	<p>Irvine, S.H. – UK ID 69 <i>Innovative Self-Reports of Health-Related Quality of Life in Basic Training: Their Measurement and Meaning for Attrition</i></p>		<p>Chambel, M.J. – Portugal ID 146 <i>Burnout in a Peacekeeping Mission</i></p>	<p>Dobrova-Martinova, T. <i>Predicting Turnover in the Canadian Forces Using Structural Equation Modeling</i> ID 30</p>
1230-1400	Lunch			

Wednesday, 27 October 2004

Time	Paola	Laurence/Aurelie	Julie	Brugge/Liège
	Subject: Technology in Testing	Subject: Testing and Behavioral Measurement		Subject: NATO Task Group – Recruitment and Retention
1400-1425	Partchev, I. - Germany <i>Scale Shift in CAT: Should We Fix Anything At All?</i> ID 114	SYMPOSIUM: International Validation of a Computerized Battery For Pilot Selection Chair: Kokorian, A. - UK Kokorian, A. - UK <i>Generalisability of the Psychometric Properties of a Pilot Selection Battery</i> ID 129 Serusi, C. - Italy <i>Validity of Computer-Based-Testing and Psychological Assessment in Controlling False Positives</i> ID 130 Kokorian, A. - UK <i>Generalisability of the Criterion Validity for a Pilot Selection Battery</i> ID 131		Michavila, N. – Spain <i>The Transformation into an All-volunteer Force: Lessons Learned in Spain</i> ID 105
1430-1455	Truhon, S.A. - USA <i>Comparing Computerized and Paper-and-Pencil Versions of the DEOCS</i> ID 34			Neill, D. – New Zealand <i>Recruitment of a Minority Group in the Royal New Zealand Air Force</i> ID 60
1500-1525	Oubaid, V. – Germany <i>Cross Cultural Use of Computer Assisted Testing System</i> ID 77			
1530-1600	Coffee			

Wednesday, 27 October 2004

Time	Paola	Laurence/Aurelie	Julie	Brugge/Liège
	Subject: Attitudes Toward Threat and Terrorism	Subject: Testing and Behavioral Measurement		Subject: NATO Task Group - Culture & Diversity
1600-1625	van den Bergh, C. - The Netherlands <i>International Military Collaboration under Threat: A Field Study in Kabul</i> ID 16	Burke, E. – UK <i>Predicting Safety and Service Orientation: Screening Applicants for Dependability</i> ID 107		Yanakiev, Y. – Bulgaria <i>Managing Ethnic, Cultural and Gender Diversity in the Bulgarian Armed Forces</i> ID 13
1630-1655	Filjak, T. - Croatia <i>Terrorism Fighting Readiness Related to "Classic" Psychological Combat Readiness in the Croatian Armed Forces</i> ID 125	Gade, P.A. - USA <i>Sixty Years of U.S. Army Selection and Classification Test Development</i> ID 147		Coard, H. – USA <i>'Organizational Commitment Impact on Satisfaction on Equal Opportunity Complaints</i> ID 139
1700-1725		Held, J.D. – USA ID 140 <i>Knowledge and Skill Tests as Measures of Motivation and Interest</i>		

2000 - 2400	IBTA meeting in Hospitality Suite	President: Waterloo Room
-------------	-----------------------------------	--------------------------

Thursday, 28 October 2004

Time	Paola	Laurence/Aurelie	Brugge/Liège
	Subject: Strategic Personnel Management	Subject: Testing and Behavioral Measurement	Subject: NATO Task Group
0830-0855	Van Gelooven, R. - The Netherlands <i>Low Workload Amongst Soldiers in the RNLA: Measurement and Consequences</i> ID 143	SYMPOSIUM: Promoting Junior U.S. Army Noncommissioned Officers Chair: Heffner, T.S. – USA Heffner, T.S. - USA ID 73 <i>Promoting Junior Noncommissioned Officers: Research for Current and Future Systems</i> Sager, C.E. - USA ID 74 <i>A Promotion Assessment's Transition from Paper to Computer Based Administration</i> Campbell, R. - USA ID 75 <i>Development of an Army Competency Assessment Test: Experiences and Lessons Learned</i> Keenan, P.A. – USA ID 76 <i>A Self-Assessment Tool to Prepare Soldiers for Promotion</i>	Blackstone, T. – USA <i>Recruiting and Retention Strategies</i> ID 55
0900-0925	Thompson, B.R. - Canada <i>The Career Field Structure Implementation Process</i> ID 93		Schreurs, B. – Belgium ID 47 <i>"I Think They Mised Me": About the Informational Value of Recruitment and Selection</i>
0930-0955	Gibbons, P. – New Zealand <i>Strategic HR Tools</i> ID 148		van de Ven, C - The Netherlands ID 50 <i>Psychological Contract: A Big Deal?</i>
1000-1025	Truscott, S.R. - Canada <i>Canadian Forces Human Resource System Transformation</i> ID 71		Lescreve, F. – Belgium ID 49 <i>Decision-making in Selection and Classification for the Military</i>
1030-1100	Coffee		

Thursday, 28 October 2004

Time	Paola	Laurence/Aurelie	Brugge/Liège
	Subject: Strategic Personnel Management	Subject: Testing and Behavioral Measurement	Subject: NATO Task Group
1100-1125	Soh, S. - Singapore <i>Applications of Psychology in HR and Training in a Conscript Army</i> ID 58	SYMPOSIUM: Selecting Future Soldiers: Update on the U.S. Army's Select21 Project Chair: Knapp, T.J. – USA Knapp, T.J. - USA ID 141 <i>Select21 Project Criterion Measures</i> Sager, C.E. - USA ID 142 <i>Select21 Project Predictor Measures</i>	Blackstone, T. – USA <i>Compensation: U.S. Navy Research Initiatives and Applications</i> ID 102
1130-1155	Lee, D. – Singapore <i>Social Network Analysis: A Diagnostic Feedback Tool to Enhance Organizational Connectivity</i> ID 104		Morrow, R. – Canada ID 14 <i>Quality of Life and PersTempo Influences on Recruiting and Retention</i> Syed, F. – Canada ID 89 <i>Influence of Gender and Minority Issues on Recruiting and Retention</i>
1200-1225	Lim, B-C - Singapore <i>Team Mental Models and Team Performance: A Field Study of the Effects of Team Mental Model Similarity and Accuracy</i> ID 112	Bowman, W.R. - USA ID 132 <i>Selection Criteria for Officer Applicants: An Analysis of Admissions to the U.S. Naval Academy</i>	Sumer, C. – Turkey ID 35 <i>Individual Needs and Military Turnover</i>
1230-1400	Lunch		
	Subject: Performance Appraisal	Subject: Occupational Analysis and HR Allocation	Subject: NATO Task Group
1400-1425	Schwerin, M.J. - USA ID 33 <i>Comparing Subjective and Objective Results of Usability Testing for the U.S. Navy's Performance Management</i>	Brady, E.J. - USA ID 97 <i>Occupational Analysis in the United States Army: Past and Present</i>	Blackstone, T. – USA ID 31 <i>Transition</i>
1430-1455	Thomaz, J.P.C.F. - Portugal ID 115 <i>Decision Conferencing within a Multimethodological Framework: Developing a Performance Appraisal Model for the Portuguese Army Officers</i>	McCutcheon, J.M. - Canada ID 136 <i>Military Job Analysis and its Automation for the 21st Century</i>	Syed, F. – Canada ID 53 <i>A Model of Military Recruitment</i>
1500-1525	Nokes, S.R.J. - UK ID 124 <i>Army Personal Development Record: Simply a Personal Tool for Development?</i>	Watson, S.E. - USA ID 109 <i>The U.S. Navy's Rating Identification Engine: Optimizing Human Resource Allocation</i>	
1530-1600	Coffee		

Thursday, 28 October 2004

Time	Paola	Laurence/Aurelie	Brugge/Liège
	Subject: Ethics & Values	Subject: Testing and Behavioral Measurement	Subject: NATO Task Group
1600-1625	Kyllonen, P.C. - USA <i>Assessing Cultural Attitudes, Values and Beliefs</i> ID 127	Banderet, L.E. - USA <i>Medical Indicators of Successful United States Military-Speciality Training</i> ID 41	Sumer, C. – Turkey <i>A Model of Military Turnover</i> ID 36
1630-1655	Dursun, S. – Canada <i>Individual Values and Ethical Climate: An Empirical Study of the Canadian Forces</i> ID 72	Short, K.G. - USA <i>Effect of Sea/ Shore/ Overseas Rotation on Enlisted Examination Results</i> ID 103	
1700-1725		Mehay, S.L. – USA <i>Educational Credentials and the Success of First-Term Sailors</i> ID 48	

1845	Busses leave from President for Banquet at Chateau de la Rocq
1930 - 2300	Aperitif and Banquet at Chateau de la Rocq Dress: Jacket and tie (or equivalent)
2300	Busses leave Chateau for Hotel President
2340	Busses arrive at Hotel President
2340 -	Hospitality Suite open President: Waterloo Room

Friday, 29 October 2004

0830	Busses leave from President for Tour of Bruges (Brugge)
1000	Arrival at Bruges
1015 - 1200	Guided Tour of Bruges
1200	Visit of Home Brewery 'De Halve Maan'
1245 - 1400	Lunch at 'De Halve Maan'
1400 - 1645	Several possibilities for you to choose from, for instance visiting a museum, shopping, etc.
1715	Busses leave Bruges for Hotel President
1830	Busses arrive at Hotel President



Conference Abstracts

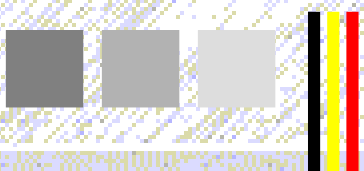
This document contains the abstracts for the papers presented at the International Military Testing Association conference. They will help you tailor the program. Each paper received an ID. In the table below you will find all paper titles sorted by the senior author's last name. The last two columns refer to the paper ID and the page on which you can find the abstract.

Some papers are embedded in a symposium. After the table below, you will find descriptions of the symposiums and the paper ID's that belong to each one.

Upon registering, you received a program overview. The schedule also includes the paper ID's. If you want to check the abstract for a specified paper, look for the abstract in this document. The abstracts are sorted by their ID.

We hope you'll enjoy the conference.

Senior author (In alphabetical order)	Paper title	Paper-ID	Page
Mr. ANDRIESSEN	Perspectives on the Quality of the Hiring Process	24	19
Dr. ANNEN	Personnel Marketing in Turbulent Times : Recruitment and Retention Activities for Military Personnel in the Swiss Army	101	51
Dr. AUDE	Development and Validation of Leadership Assessment Instruments for United States Army Commanders, Staff Officers and Non-Commissioned Officers	145	76
Ms. BAISDEN	A New Era in U.S. Navy Testing : Multimedia Navy Enlisted Advancement Exam	32	22
Dr. BANDERET	Medical Indicators of Successful United States Military-Specialty Training	41	26
Dr. BILGIC	Determinants of Turnover Intentions among Non-Commissioned Officers	25	20
Dr. BLACKSTONE	Recruiting and Retention Strategies	55	32
Dr. BLACKSTONE	Compensation : U.S. Navy Research Initiatives and Applications	102	52
Dr. BORMAN	U.S. Army Recruiter Selection Research : Another Update	123	62
Mr. BOWDEN	Creating the U.S. Army Interpersonal Skills Assessment (AISA) Battery	09	11
Prof. BOWMAN	Selection Criteria for Officer Applicants : An Analysis of Admissions to the U.S. Naval Academy	132	69
Dr. BRADY	Occupational Analysis in the United States Army : Past and Present	97	49
Mr. BURKE	Myths and Facts About Online Testing	100	50
Mr. BURKE	Predicting Safety and Service Orientation : Screening Applicants for Dependability	107	55
Dr. CAMPBELL	Development of an Army Competency Assessment Test : Experiences and Lessons Learned	75	42
Dr. CHAMBEL	Burnout in a Peacekeeping Mission	146	77





Senior author (In alphabetical order)	Paper title	Paper-ID	Page
Dr. CHAPMAN	Implications of a Meta-analytic Review of Recruiting Correlates for Military Recruitment	90	48
Dr. CHAPMAN	Theory-Based Recruiting Practices	99	50
Dr. CHERNYSHENKO	Applicability of Civilian Retention Theory in the Military : Predicting Retention in New Zealand	86	46
Mr. COARD III	Organizational Commitment Impact on Satisfaction on Equal Opportunity Complaints	139	73
Dr. DARABI	Measuring Motivation in Instruction and Training : A Cognitive Load Perspective	11	12
Dr. DEROUS	Development of an Applicant Reaction Questionnaire for the Belgian Military	23	18
Capt. DEVRIENDT	The Belgian Client-Based Decision Model : Progress And Prospects	65	35
Dr. DOBREVA-MARTINOVA	Predicting Turnover in the Canadian Forces Using Structural Equation Modeling	30	20
Ms. DURSUN	Individual Values and Ethical Climate :An Empirical Study of the Canadian Forces	72	39
Lt-Col FILJAK	Terrorism Fighting Readiness Related to 'Classic' Psychological Combat Readiness in the Croatian Armed Forces	125	63
Dr. FLECK	Varieties of Postmodern Individuallity : Implications for Soldierly Self-Definition	117	59
Dr. GADE	Sixty Years of U.S. Army Selection and Classification Test Development	147	78
Mr. GUTKNECHT	The Role of Leader-Member Exchange During Organizational Changes	92	48
Dr. HEFFNER	Promoting Junior Noncommissioned Officers : Research for Current and Future Systems	73	40
Dr. HELD	Knowledge and Skill Tests as Measures of Motivation and Interest	140	73
Mr. HOREY	Leadership Competencies for Contemporary Army Operations : Development, Review and Validation	80	44
Mr. IPPEL	A New World : New Aptitudes Require New Measures	66	36
Prof. IRVINE	New Test Formats for the Selection and Allocation of Military Personnel in Germany	67	36
Prof. IRVINE	Innovative Self-Reports of Health-Related Quality Of Life In Basic Training : Their Measurement And Meaning For Attrition	69	37
Dr. KAMATA	Examination of Military College Scholarship Selection Model Validity	111	57
Mr. KAR	Intelligence to specific cognitive functions : Selection of Indian Armed Forces	18	16
Dr. KEENAN	A Self-Assessment Tool to Prepare Soldiers for Promotion	76	43
Lt-Col KELLER	Warrior, Helper, Adventurer ? Soldierly Self-Identity in Missions	119	60
Dr. KELLER-GLAZE	Predictors of Retention Decisions Across Ranks in the U.S. Army	144	76
Dr. KNAPP	Select21 Project Criterion Measures	141	74
Mrs. KOKORIAN	Generalisability of the Psychometric Properties of a Pilot Selection Battery	129	66
Mrs. KOKORIAN	Generalisability of the Criterion Validity for a Pilot Selection Battery	131	68
Dr. KYLLONEN	The Standardized Letter of Recommendation (SLR) : Rating Military Personnel on Non-Cognitive Factors	68	37
Dr. KYLLONEN	Assessing Cultural Attitudes, Values and Beliefs	127	65
Dr. KYLLONEN	Trends in Testing : Simulations, Situational Judgment, Video and ICT Literacy	128	65



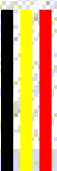


Senior author (In alphabetical order)	Paper title	Paper-ID	Page
Dr. LANCASTER	U.S. Department of Defense Retention Trends	70	38
Mr. LEE	Social Network Analysis : A Diagnostic Feedback Tool to Enhance Organizational Connectivity	104	53
Lt-Col Psych LESCREEVE	Decision-making in Selection and Classification for the Military	49	29
Prof. Dr. LIEVENS	Investigating Employer Image Dimensions and Attractiveness of the Armed Forces	20	17
Lt-Col Dr. LIM	Team Mental Models and Team Performance : A Field Study of the Effects of Team Mental Model Similarity and Accuracy	112	57
Mr. MCCUTCHEON	Military Job Analysis and its Automation for the 21 st Century	136	71
Prof. Dr. MEHAY	Educational Credentials and the Success of First-Term Sailors	48	29
Commander Dr. MEIJER	Military Mental Health : Self-Selected, Mission Related or Selection biased ?	85	45
Major Dr. MICHAVILA	The transformation into an All-volunteer Force : Lessons Learned in Spain	105	54
Dr. MILLS	Optimizing US Navy SEAL Selection	126	64
Mr. MIRANNE	Single vs. Multiple Subject Matter Experts for Test Development	59	33
Prof. Dr. MODJESKI	Networked Military Simulations : Measures of Reliability and Validity	62	34
Major MORROW	Quality of Life and Perstempo Influences on Recruiting and Retention	14	14
Mr. NEILL	Recruitment of a Minority Group in the Royal New Zealand Air Force	60	34
Mrs. NOKES	Army Personal Development Record : Simply a Personal Tool for Development ?	124	63
Capt. NORRIS	Turnover in the military : Impact of Workplace Stressors	43	27
Mr. NORTON	The Canadian Forces Your-Say Survey : Methodology and Findings	88	46
Dr. O'SHEA	Contextual Performance in Military Settings : What Role Does Commitment Play ?	15	15
Dr. OUBAID	Cross Cultural Use of Computer Assisted Testing System	77	43
Dr. PARTCHEV	Scale Shift in CAT : Should We Fix Anything At All ?	114	58
Dr. POMMERICH	Using Item Response Theory to Develop an Interest Inventory	79	44
Capt. Psych PUENTE	Values Research	135	70
Dr. SAGER	Select21 Project Predictor Measures	142	75
Dr. SAGER	A Promotion Assessment's Transition From Paper to Computer Based Administration	74	41
Dr. SANDERS	U.S. Army Special Operation Forces (SOF) Assessment and Selection	134	70
Major SCHOLTZ	The Development of a Psychological Screening Program for Sniper Selection	45	27
Mr. SCHREURS	First Impressions of Recruiters : Do They Really Matter	21	18
Mr. SCHREURS	I Think They Misled Me : About the Informational Value of Recruitment and Selection	47	28
Mr. SCHREURS	A Model of Military Recruitment	53	31
Dr. SCHWERIN	Comparing Subjective and Objective Results of Usability Testing for the U.S. Navy's Performance Management System	33	23
Lt-Col Psych SERUSI	Validity of Computer-Based-Testing and Psychological Assessment in Controlling False Positives	130	67
Ms. SHORT	Effect of Sea/Shore/Overseas Rotation on Enlisted Examination Results	103	53
Mr. SLOP	Motivation of Austrian Soldiers to Engage in International Military Operations	120	61





Senior author (In alphabetical order)	Paper title	Paper-ID	Page
Prof. Dr. SOETENS	Endogenous and Exogenous Attention in Vigilance Tasks	110	56
Lt-Col Dr. SOH	Applications of Psychology in HR and Training in a Conscript Army	58	33
Dr. STORM	Transition	31	21
Dr. SUMER	Individual Needs and Military Turnover	35	25
Dr. SUMER	A model of Military Turnover	36	25
Ms. SYED	Influence of Gender and Minority Issues on Recruiting and Retention	89	47
Lt-Col THOMAZ	Decision Conferencing within a Multimethodological Framework : Developing a Performance Appraisal Model for the Portuguese Army Officers	115	58
Mr. THOMPSON	The Career Field Structure Implementation Process	93	49
Lt-Col Dr. TOISKALLIO	Military Pedagogy and the Postmodern Transformation of Soldiership	118	60
Dr. TRUHON	Comparing Computerized and Paper-and-Pencil Versions of the DEOCS	34	24
Ms. TRUSCOTT	Canadian Forces Human Resource System Transformation	71	38
Ms. VAN AMELSFOORT	The Relationship Between Recruitment, Selection and Turnover of Dutch Soldiers	12	12
Drs. VAN DE VEN	Psychological Contract : a big deal ?	50	30
Lt-Col VAN DEN BERG	International Military Collaboration under threat : A field study in Kabul	16	16
Dr. VAN GELOOVEN	Low workload Amongst Soldiers in the RNLA, Measurement and Consequences	143	75
Dr. WATSON	The U.S. Navy Rating Identification Engine : Optimizing Human Resource Allocation	109	55
Mr. WEISSMULLER	Recent Developments in USAF Officer Testing and Selection	57	32
Capt. WOODROW	Are Special Forces Candidates as Well Prepared as Expected ?	137	72
Capt. (N) Dr. YANAKIEV	Managing Ethnic, Cultural and Gender Diversity in the Bulgarian Armed Forces	13	13





Symposiums

A Closer Look at Recruitment Issues in the Belgian Defense

Chair: Filip Lievens, Ghent University, Belgium
Co-chair: Greet Van Hoye, Ghent University, Belgium

The Armed Forces are increasingly facing difficulties in attracting and retaining qualified personnel. In many European countries, the importance of attracting new recruits has also been bolstered by the transition to a voluntary military service. To cope with these attraction and retention problems, each year a considerable percentage of the military budget is spent on recruitment. Contrary to these costly recruitment efforts, relatively little is known about which specific factors determine people's attraction to the Armed Forces as an employer. This symposium focuses on key recruitment issues in the Belgian Defense. More specifically, we examine a number of factors that relate to the attractiveness of the Belgian Defense as an employer. Therefore, presentations are included about the instrumental and symbolic image dimensions of the Belgian Defense as an employer, about the effects of initial face-to-face contacts with career office personnel, about the social acceptability of recruitment and selection practices, and about the quality of the hiring process.

Papers included in this symposium:

- ID 20: Investing Employer Image Dimensions and Attractiveness of the Armed Forces
- ID 21: First Impressions of Recruiters: Do They Really Matter?
- ID 23: Development of an Applicant Reaction Questionnaire for the Belgian Military
- ID 24: Perspectives on the Quality of the Hiring Process





Selecting Future Soldiers: Update on the U.S. Army's Select21 Project

Chair: Deirdre J. Knapp, Human Resources Research Organization

The U.S. Army is undertaking fundamental changes to transform into the Future Force. This transformation will involve development and fielding of future combat systems to achieve full-spectrum dominance through a force that is responsive, deployable, agile, versatile, lethal, and fully survivable and sustainable under all anticipated combat conditions. However, Army leadership recognizes first and foremost the importance of its people—Soldiers—to the effectiveness of transformation. In this regard, the Army is seeking to ensure future transformation through Soldier and unit training, leader development, and the preparedness of Soldier systems.

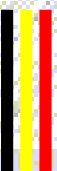
The Select21 project, conducted by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) with the Human Resources Research Organization (HumRRO), concerns future Soldier selection and classification, with the goal of ensuring the Army acquires Soldiers with the knowledge, skills, and attributes (KSAs) needed for performing the types of tasks envisioned in a transformed Army. The ultimate objectives of the project are to (a) develop and validate measures of critical attributes needed for successful execution of Future Force missions and (b) propose use of the measures as a foundation for an entry-level selection and classification system adapted to the demands of the 21st century.

This symposium will provide an overview of the Select21 project and give an up-to-date description of the predictor and criterion measures that have been developed for use in a concurrent criterion-related validation data collection scheduled for 2005.

Papers included in this symposium:

ID 141: Select21 Project Criterion Measures

ID 142: Select21 Project Predictor Measures





Promoting Junior U.S. Army Noncommissioned Officers

Chair: Tonia S. Heffner, Senior Research Psychologist
U.S. Army Research Institute for the Behavioral and Social Sciences

Papers included in this symposium:

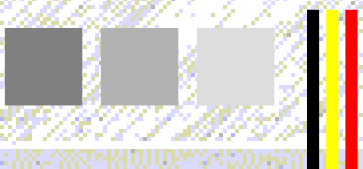
- ID 73: Promoting Junior Noncommissioned Officers: Research for Current and Future Systems
- ID 74: A Promotion Assessment's Transition From Paper to Computer Based Administration
- ID 75: Development of an Army Competency Assessment Test: Experiences and Lessons Learned
- ID 76: A Self-Assessment Tool to Prepare Soldiers for Promotion

Innovations for Military Personnel Selection and Retention

Chair: Lt Col Psych Francois J. Lescreve
Directorate General for Human Resources, Belgian Defense Staff

Papers included in this symposium:

- ID 65: The Belgian Client-Based Decision Model: Progress And Prospects
- ID 66: A New World: New Aptitudes Require New Measures
- ID 67: New Test Formats for the Selection and Allocation of Military Personnel in Germany
- ID 68: The Standardized Letter of Recommendation (SLR): Rating Military Personnel on Non-Cognitive Factors
- ID 69: Innovative Self-Reports Of Health-Related Quality Of Life In Basic Training: Their Measurement And Meaning For Attrition





Selection of Special Operations Forces Personnel

Chair: Dr. Lisa Mills, US Navy Selection & Classification Office
and Dr. Michael G. Sanders, Army Research Institute

As modes of warfare evolve to meet new threats in the global war on terrorism, so must our selection systems develop to identify the best personnel to face these emerging challenges. Our elite military forces are critical to our success in modern conflict and are at the forefront of our strategy for effectively engaging in unconventional warfare. Yet identifying these personnel presents unique issues in selection and classification, and sometimes defies traditional methods for empirical investigation. The purpose of this symposium is to highlight some of these issues and discuss relevant strategies. Topics for discussion may include:

Criterion Development

Defining Special Operations Forces' performance domain – What are the true requirements of the job? What is the context in which the job is performed? What are the stressors encountered and how do these affect job performance?

Identifying Predictors & Instruments

What are the cognitive requirements of special forces work? How do these requirements compare with the physical requirements of the job (i.e., do they demonstrate incremental validity)? Are personality / temperament constructs predictive of job performance? If so, are they valid qualifiers / disqualifiers / both? What kinds of cognitive / physical / personality measures are being used to predict job performance? Are some of these measures prone to faking?

Practical issues such as policy and implementation procedures may also be addressed. A superordinate goal for this meeting is to promote collaboration and coordination among allies for staffing these special requirements, not only as individual services, but also as joint forces.

Papers included in this symposium:

- ID 45: The Development of a Psychological Screening Program for Sniper Selection
- ID 126: Optimizing US Navy SEAL Selection
- ID 137: Are Special Forces Candidates as Well Prepared as Expected?
- ID 134: U.S. Army Special Operations Forces (SOF) Assessment and Selection





International Validation of a Computerized Battery For Pilot Selection

Chair: Agnes Kokorian, People Technologies, UK

This symposium looks at recent validation research on military pilot selection and in particular:

- How validity and therefore cost-benefits can be achieved with efficient computer-based testing processes
- The incremental validity of computer-based testing over existing pilot selection methods
- Whether validities can be transported from one national site to another

Data are presented from sites across Europe and South America for a total of 4,487 applicants to military pilot on the reliability of a computerised pilot test battery covering psychomotor, cognitive and workload measures. This data shows how consistent the battery performs despite translations into languages other than UK English and across different applicant populations. Criterion validity data are also presented on 439 military pilot trainees across four sites: Chile, Italy, Portugal and UK. The second paper in this symposium evaluates the efficacy of computer-based-assessment associated with a psychological interview in controlling false positive rates.

Papers included in this symposium:

- ID 129: Generalisability of the Psychometric Properties of a Pilot Selection Battery
- ID 130: Validity of Computer-Based-Testing and Psychological Assessment in Controlling False Positives
- ID 131: Generalisability of the Criterion Validity for a Pilot Selection Battery





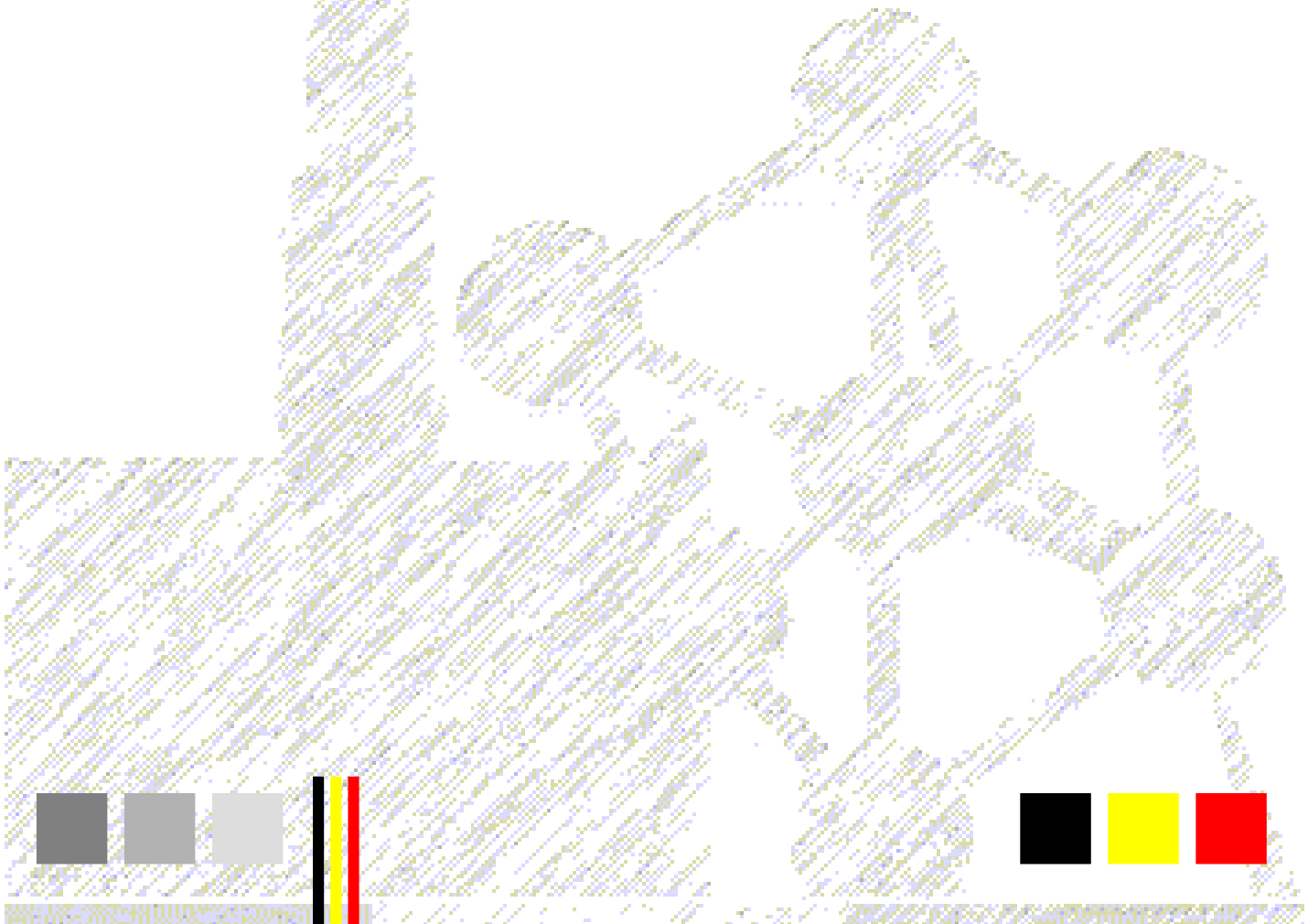
Military and the Challenge of Postmodernism

Chair: Dr. Guenther Fleck, Institute for Human and Social Sciences, National Defense Academy, Vienna, Austria

With the fragmentation of the Soviet Empire and the collapse of the “Iron Curtain” at the beginning of the 90ies, the traditional self-understanding of soldiers in the West and East has started to undergo a dramatic change. The old doctrines which called for defending Western democracy and values against communism, and vice versa of defending communism against Western capitalism became obsolete. Changes in society (postmodernism) and the appearance of new enemies (international terrorism and transnational organized crime) threatening democracies all over the world, have lent special urgency to the need of shaping a new orientation of the role and self-understanding of soldiers in particular and the armies in general. In this symposium philosophical, social and psychological aspects of the new roles and the self-understanding of soldiers are analyzed and proposals how to handle some problems are discussed.

Papers included in this symposium:

- ID 117: Varieties of Postmodern Individuality: Implications for Soldierly Self-Definition
- ID 118: Military Pedagogy and the Postmodern Transformation of Soldiership
- ID 119: Warrior, Helper, Adventurer? Soldierly Self-Identity in Missions
- ID 120: Motivation of Austrian Soldiers to Engage in International Military Operations





Abstracts

ID 9

Creating the U.S. Army Interpersonal Skills Assessment (AISA) Battery

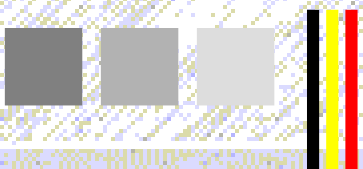
Timothy B. Bowden
Carolyn Bowen
Micro Analysis and Design, Inc.

Patricia Keenan
Deirdre J. Knapp
Human Resources Research Organization

Tonia S. Heffner
Michelle Wisecarver
U.S. Army Research Institute for the Behavioral and Social Sciences

The future of military forces will present a multitude of emerging challenges for the men and women who serve. In order to respond to those challenges, the shape of these future forces is shifting. One major change coming is the move away from large units to smaller task organizations. These smaller teams will require each member to work closely with every other team member to accomplish the task at hand. The move to smaller teams, coupled with the increasing frequency and importance of interaction with indigenous people, will require Soldiers to possess a greater degree of competence in dealing with other individuals. The Army Interpersonal Skills Assessment (AISA) project aimed to identify the interpersonal/interaction knowledge, skills and attributes (II/KSAs) that future Soldiers will need to successfully navigate future military situations and to devise a method for assessing these KSAs in the future soldiers. The AISA represents an innovative approach to assessing ability to work with others by blending traditional assessment techniques with current technology.

This paper describes the II/KSAs measured by the AISA, the AISA development process, and the final assessment battery as well as preliminary results of pilot studies to validate the assessments. The AISA will provide a valid and reliable method for identifying areas in need of improvement for Soldiers who will work closely with others and will aid in the identification of those best suited to perform duties requiring key interpersonal skills.





ID 11

Measuring Motivation in Instruction and Training: A Cognitive Load Perspective

Abbas Darabi, Ph.D.

The Learning Systems Institute, Florida State University

Until now, Cognitive Load Theory (CLT) has exclusively been concerned with developing instruction that is aligned with and appropriate for the human cognitive architecture. Contrary to its appealing features used in training of complex cognitive skills, CLT has not recognized the need for learners' motivation to be coupled with their instructional experiences. The purpose of this paper is to discuss a new motivational perspective using the two constructs essential to CLT: mental effort and performance (Pass, Tuovinen, van Merriënboer, and Darabi, 2004). These constructs have been used in the past to define the efficiency of an instructional condition (Pass & van Merriënboer 1994). Acknowledging the constructs' cognitive attributes, the approach presented in this paper uses their motivational properties for measuring training participants' motivation.

The computational method for doing this measurement will be discussed and comparing the learners' involvement in instructional conditions will be illustrated on the basis of an existing data set. It is the goal of this paper to provide the cognitive load theorists and instructional designers with a method that enables them to compare instructional formats not only in terms of their efficiency but also in terms of their effects on learners' motivation. The paper also discusses the theoretical and practical implications of this method.

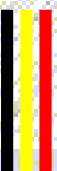
ID 12

The Relationship Between Recruitment, Selection and Turnover of Dutch Soldiers

D.J.C. van Amelsfoort, M.Sc. & A.J. van Vliet, PhD
TNO Human Factors, Department of Team Solutions
Email: vanamelsfoort@tm.tno.nl / vanvliet@tm.tno.nl

In the year 2000, the Royal Netherlands Army (RNLA) had a shortage of personnel, particularly in combat functions. They suspected that this shortage was partly due to the recruitment and selection process, which was not optimized and possibly led to unnecessary dropouts during this process and in the initial training. The RNLA requested TNO Human Factor to investigate the relationship between recruitment, selection and retention of new RNLA personnel.

This year, TNO Human factors concluded this initial research on recruitment, selection and retention. In co-operation with the Behavioral Science Department of the RNLA Personnel and Organization Service, three studies were conducted during a period of three years. First, the selection process of the RNLA was evaluated, involving interviews and document analysis.





Research was then conducted on the relationship between selection and retention during initial military training. Using regression analysis on the data, we investigated whether psychological selection characteristics predict retention during initial training.

In addition to this research, a regional recruitment operation called Black Horse was evaluated on its effectiveness. A questionnaire was developed to measure the commitment and satisfaction of soldiers (psychological contract). Data was collected from both Black Horse soldiers and regular soldiers at two moments in time and at two locations.

In combination, these three studies supply valuable insights into the relationship between recruitment, selection and retention of RNLA personnel. The results demonstrate why operation Black Horse was a success, why the psychological selection characteristics do not predict the retention in the initial training and why the selection process needs improvements. With these insights, TNO Human factors suggest how the current recruitment and selection process can be improved.

ID 13

Managing Ethnic, Cultural and Gender Diversity in the Bulgarian Armed Forces

Capt. (Bul-N), Yantsislav Yanakiev, Ph. D.
Defense Advanced Research Institute,
yanakiev@md.government.bg

The rationale:

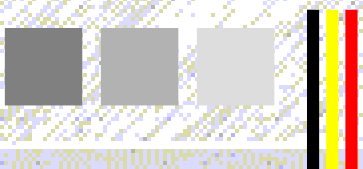
The equality in employment and integration of minority groups and females in the military is a comparatively new research topic in Bulgaria. There are a few empirical sociological surveys in the military focused on the spread of inter-ethnic stereotypes and prejudices, inter-ethnic distances and attitudes towards minorities' rights and a research project focused on female officer's integration into the military, which is currently being implemented.

The surveys among the military revealed that their awareness about ethnic, cultural and gender diversity is lacking and the attempts to recognize and to accommodate differences are sporadic. In addition, there exist comparatively widespread stereotypes and prejudices in the society towards some of minority groups, which could produce tensions in the introduction of effective Equal Opportunity Policy in the Bulgarian armed forces.

The aims of the paper:

First, to investigate how possible organizational/systemic and cultural/attitudinal barriers operate and influence the successful development of Equal Opportunity and Diversity Management Policy in the Bulgarian armed forces.

Second, to summarize some recommendations for the development of equal opportunity policy in the Bulgarian armed forces based on critical analysis of domestic practice and lessons learned from the comparative study on the European and the North American experience.





Methodology:

The conclusions in the paper are based on the results from a research project carried out by the author in 2003-2004 on the topic “Managing Ethnic, Cultural and Gender Diversity in All-Volunteer Forces: Applicability of the US Model to the Bulgarian Armed Forces”.

Conclusions:

First, the reach of a higher representation of the basic ethnic communities among the active duty servicemen is among the most important steps in the equal opportunities principle implementation in the Armed Forces.

Second, the successful realization of an equal opportunity policy in the Armed Forces requires a review and actualization of the active duty service legislation according to recently accepted national anti-discrimination legislation.

Third, the realization of the Armed Forces equal opportunities for professional realization policy will not be successful without the establishment of a specialized institutional body for coordination, analysis and control of the equal opportunities' principle implementation process.

Next, some consideration should be given to the establishment of a system for personnel training in working in multiethnic and multicultural environment.

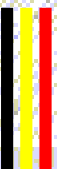
Last but not least, some consideration should be given also to the Bulgarian Armed Forces units staffing with specialists which to assist the commanders work with their subordinates, the so called “human relations management specialists”, which will have an additional training in Bulgarian basic ethnic groups' customs, culture, traditions and psychology.

ID 14

Quality of Life and Perstempo Influences on Recruiting and Retention

Major Rob Morrow
Directorate of Strategic Human Resources
Canada

Two key constructs that were identified in the terms of reference for the NATO Research Task Group (RTG) 034 on Recruiting and Retention of Military Personnel were quality of life (QoL) and personnel tempo (perstempo). QoL refers to those non-monetary benefits, such as base housing that impact positively or negatively on the wellbeing and morale of members and their families. However, as will be discussed in this paper, QoL can include many factors. This tends to complicate attempts to define the term. Ops tempo refers to the deployment of members of an operation. Pers tempo refers to all activities, including Ops tempo, that removes a member from their home unit for a period of time. The higher the optempo, the more missions, deployments and operations are being carried out. The purpose of this paper is to present research linking the influence of perstempo on retention and then linking the influence of QoL on recruiting and retention. Research in this area has focussed on the influence of these topics on retention with little focus on recruiting. Most of the research conducted was based in the U.S and Canada. As such, the paper presents considerable linkages between QoL and retention but very few linkages with recruiting. Conclusions made are based upon North American research.





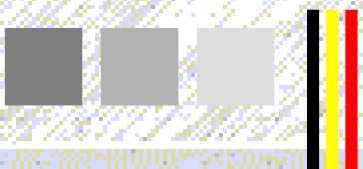
ID 15

Contextual Performance in Military Settings: What Role Does Commitment Play?

Patrick Gavan O'Shea
American Institutes for Research
Gerald F. Goodwin
U.S. Army Research Institute
James E. Driskell
Florida Maxima Corporation
Eduardo Salas
University of Central Florida
Sharon D. Ardison
U.S. Army Research Institute

Recent research and theorizing indicates that work-related commitment has many facets. For example, individuals may be committed to their supervisor, work team, organization, or company division. Furthermore, according to Allen and Meyer (1990), the motives that drive commitment may also differ: individuals may be committed because they identify with and experience an emotional connection to an organization (*affective commitment*), because they perceive few alternative potential jobs or a lack of skill transferability (*continuance commitment*), or because they believe it is the right or morally correct course of action (*normative commitment*). Here, we examined relations among various forms of team- and military-focused commitment, contextual performance, and several types of interpersonally oriented work behavior among 193 first- and second-tour enlisted personnel in the U.S. Army and their direct supervisors. The supervisors rated each soldier using behaviorally anchored rating scales (BARS) developed to assess a range of both positive and negative performance dimensions culled from the literature (Driskell, Hogan, & Salas, 1987): responsibility to others, sociability, cooperative work ethic, controlling tendencies, and negativity.

Quite consistently, team-focused commitment was a stronger predictor of the various performance facets than military-oriented commitment. For example, soldier-rated team-focused affective commitment was correlated with supervisor performance ratings for five of the six criteria (r s from $-.18$ to $.23$), while military-focused affective commitment correlated with one (military-oriented commitment was negatively related to supervisor-rated behaviors indicative of a negative world view). Moreover, both affective and normative team-focused commitment correlated positively with supervisor ratings of contextual performance.





ID 16

International Military Collaboration under Threat: A Field Study in Kabul

Coen van den Berg,
Royal Netherlands Military Academy, The Netherlands
Mark Dechesne,
Rijksuniversiteit Groningen, The Netherlands
Joseph Soeters,
Royal Netherlands Military Academy, The Netherlands

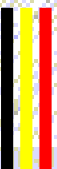
The attitude of Dutch military personnel towards international military collaboration were examined under threatening (Kabul, Afghanistan) and non-threatening (Munster, Germany) circumstances. The Royal Netherlands Land Army (RNLA) participates in the bi-national 1 German Netherlands Corps (1GNC) and has therefore experience in bi-national co-operation both under threatening and non-threatening circumstances. In our study we administered a questionnaire in which the attitudes of Dutch military towards international military collaboration were asked as well as subjects as self-esteem, need for closure, acceptance of risk of death, fear of death, communication about death and identification with the RNLA. Factor analyses, multivariate analyses and regression analyses showed results towards the willingness for international military co-operation that support the Terror Management Theory (TMT). The TMT was designed to come to a better understanding of the role of death in social functioning. From TMT we might predict that role of threat will deteriorate vital international military collaboration. Findings indicate that attitudes towards co-operation were significantly more negative in Afghanistan, and concerns about death threat were found to play a mediating role.

ID18

Intelligence to Specific Cognitive Functions: Selection of Indian Armed Forces

B.C. Kar, Scientist 'C'
Services Selection Board, Selection Centre East,
Allahabad, India.

The selection system of the army personnel needs to be updated in face of unpredictable emergencies. Officers in the 21st century will need to operate in progressively complex, fast paced, technologically advanced and unstructured environments. In Indian context, selection at the Services Selection Boards aims at assessment of qualities of military leadership in two stages. Three assessors assess each candidate independently--interviewing officers use the interviewing technique, group-testing officers use group tasks and the psychologists use intelligence and personality tests. It consists of the assessment of general intelligence and personality using verbal and nonverbal intelligence tests and projective techniques. Cognitive abilities i.e., planning and decision-making are examined by three assessors through personality tests, and interview during the selection process. Specific cognitive abilities may or may not manifest in the personality assessment. What is





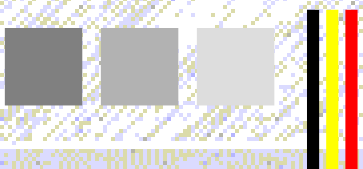
missing in the present Indian selection system is the formal assessment of cognitive functions i.e., focused and divided attention, decision-making, visuoperceptual ability, and executive functions i.e., planning, working memory, inhibitory control, strategy use, task selection and task switching. In the current scenario particularly in the Indian context with highly unpredictable and challenging situations faced by the army personnel cognitive/executive control is a prerequisite for selection of officers. The current selection system was evaluated to examine the efficacy of the selection procedure in predicting final selection. We have taken up a major project to develop specific cognitive tests to be incorporated in the present selection system for army officers and also for follow-up assessments to monitor their performance.

ID 20

Investigating Employer Image Dimensions and Attractiveness of the Armed Forces

Filip Lievens, Ghent University, Belgium
Greet Van Hove, Ghent University, Belgium
Bert Schreurs, Belgian Ministry of Defense, Belgium

Recent recruitment research has pointed out the key role of potential applicants' impressions of organizations as employers in determining organizational attractiveness early in the recruitment process. In this study, we propose the instrumental-symbolic framework as a possible conceptualization of the employer image of the Belgian Defense. The basic premise of this framework is that factors determining the perceived attractiveness of an organization as an employer encompass both instrumental attributes (i.e., concrete job and organizational characteristics) and symbolic attributes (i.e., applicant imagery in the form of trait inferences about organizations). In addition, it was investigated whether the perceptions of potential applicants about the Belgian Defense as an employer were realistic. To this end, two different samples were used: 576 potential applicants (high-school seniors) and 306 current military employees. Results showed that the attractiveness of the Belgian Defense was related to both instrumental (task diversity and social activities) and symbolic image dimensions (excitement, cheerfulness, and prestige). The perceptions of potential applicants and experienced military employees differed significantly on 11 out of 15 attributes, indicating that potential applicants generally had a romanticized perception of the Belgian Defense as an employer.





ID 21

First Impressions of Recruiters: Do They Really Matter?

Bert Schreurs
Belgian Ministry of Defense, Belgium

This study attempted to examine whether prior conclusions on applicant reactions to recruiters conducting the initial screening interview also apply to other forms of initial face-to-face contacts. In Belgium, defense career offices are typically manned with career counselors whose main duty it is to attract and inform job seekers about job opportunities and organizational characteristics. We surveyed job seekers visiting these career offices for the first time about their perceptions of career counselor warmth, informativeness, and competence. The results showed positive relationships between warmth and attitude toward the organization; between warmth and intentions to apply; and between competence and application behavior. Negative relationships were observed between informativeness and intentions to apply; and between informativeness and application behavior. Consistent with Fishbein and Ajzen's theory of reasoned action, we found that the relationship between the set of career counselor characteristics and potential applicants' intentions to apply was fully mediated by attitude toward the organization, and that intentions fully mediated the relationship between career counselor characteristics and application behavior. Suggestions for strengthening organizational recruitment programs and for directing further research are discussed.

ID 23

Development of an Applicant Reaction Questionnaire for the Belgian Military

Eva Derous
Erasmus University Rotterdam, The Netherlands
Bert Schreurs
Ministry of Defense, Belgium
Maarten Andriessen
Catholic University of Leuven, Belgium

Since the nineties applicant reactions towards recruitment and selection have increasingly attracted attention. Staffing systems of organizations can be evaluated and improved by taking applicant reactions into consideration (Anderson, 2004). Till today, the theoretical models of Schuler (1993) and Gilliland (1993) have largely driven research on applicant reactions. This study attempts to apply existing models to recruitment and selection practices within a military context. The goal is to develop a questionnaire on the social acceptability of recruitment and selection practices of the Belgian Defense. 221 items were formulated on the basis of existing questionnaires and interviews held with 250 applicants. Items related to three procedural hurdles, namely recruitment, initial intelligence screening and extended screening. SMEs (53 military recruitment and selection officers) sorted all items in as many mutually exclusive piles as seemed relevant to them. They labeled each pile according to the underlying meaning of the items. Classic multidimensional scaling





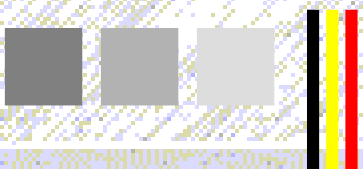
revealed two-dimensional configurations for the first two hurdles and a three-dimensional solution for the third hurdle, comprising specific regions for each hurdle. Corroborative evidence for the regional structure was found on the basis of additive tree modeling. To estimate the degree of consistency in labeling, the `consistency in meaning`-index was calculated. Although experts were not informed about the research goal, both the graphic solution and labeling task came close to theoretical categories of existing applicant reaction models. Very specific regions were also revealed, which are relevant for military contexts. Based on the results an adapted applicant reaction model is presented.

ID 24

Perspectives on the Quality of the Hiring Process

Maarten Andriessen
Thomas Bossuyt
Bert Schreurs
Ministry of Defense, Belgium

To broaden the perspective on the hiring process within the Belgian Defense, we started our research with theories on multiparty collaboration. In line with those theories, we assume that different stakeholders within an organization have different objectives and diverging perspectives on how to reach these objectives. In order to investigate those specific and different perspectives on the hiring process, we selected all key figures (in)directly involved in this process. Therefore, an action research method was chosen, so we could increase commitment and lay the foundations for later organizational changes. We used focus groups, interviews and workshops in the different research phases. In this paper, we will discuss the first results of the interview phase. Results show that the different stakeholders define quality in accordance with their perceived objectives and their role in the hiring process. The stakeholders define multiple criteria of quality on different levels of abstraction, ranging from a general policy level indicating the role of Defense within the society to very specific and concrete criteria. The implications of these results for accession policy are discussed.





ID 25

Determinants of Turnover Intentions among the Noncommissioned Officers

Reyhan Bilgiç, Ph.D
H. Canan Sümer, Ph.D
Tuğba Erol, MS
Middle East Technical University

This study utilized a group of attitude questions added to an open-ended data collection instrument aiming at collecting critical incidents associated with work-related personality attributes for the noncommissioned officers (NCO) in the Turkish Armed Forces. The main purpose of this study was to determine the factors related to turnover intentions for NCOs. Two-hundred fourteen NCOs from different forces and ranks completed the questionnaire. The questionnaire included items tapping into job satisfaction (intrinsic-extrinsic), perceived success of the self and the supervisor, and thinking about quitting the job. A principle component analysis on the attitudinal questions yielded three factors. The first factor was related to extrinsic satisfaction, the second one was related to intrinsic satisfaction, and the third factor was related to perceived performance. Internal consistency reliabilities of the scales were satisfactory. A hierarchical regression analysis pointed out that the demographic variables of interest contributed significantly to the prediction of turnover intentions. Above and beyond the demographic variables, both extrinsic factors and intrinsic factors were found to be significant determinants of turnover intentions; the R^2 change was found to be .24. The performance was not related to the turnover intentions. The implications, limitations, and generalizability of the study are discussed.

ID 30

Predicting Turnover in the Canadian Forces Using Structural Equation Modeling

Dr. Tzvetanka Dobрева-Martinova, Dr. Martin Villeneuve, LCol
Canadian Forces
Elizabeth Sharp, Nancy Otis, & Dr. Daniel Coulombe
University of Ottawa

Retention is a key consideration for the Canadian Forces (CF). In addition to factors facing the broader workplace, the CF is particularly affected by retention issues given drastic budget cuts in the past, concerns over conditions of service and a peculiar demographic profile.

A retention survey was developed to explore work and non-work issues and their impact on whether a member intends to leave the organization in the next few years. The survey was administered electronically in 2003 to a total of 6456 members. The present results





are based on a sample of 2760 respondents, from 13 officer and 6 non-commissioned member occupations.

A comprehensive model of antecedents to turnover intentions in the CF was developed and empirically tested using structural equation modeling statistical analysis. The model comprises factors that influence the intentions to leave the CF as well as antecedents to these factors. Three factors directly predicted turnover intentions: (1) emotional commitment (affective and normative), (2) continuous commitment (a calculative involvement in the organization), and (3) confidence in senior leadership. While a significant relationship between organizational commitment and turnover intentions has been evidenced in the literature, the significant relationship between confidence in senior leadership and turnover intentions is a contribution of the present research. Antecedent variables in the model are procedural justice, career opportunities, work-family conflict and job satisfaction. This presentation offers a discussion of the CF Retention Model and its application in the development of retention strategies directed toward building retention culture in the CF.

ID 31

Transition

Dr. E. Gerhard Storm

Chairman of HFM 107 – RTG 034 on “Recruiting & Retention of Military Personnel”
Streitkraefteamt (German Armed Forces Office)
Gruppe Wehrpsychologie Dezernat Personalpsychologie

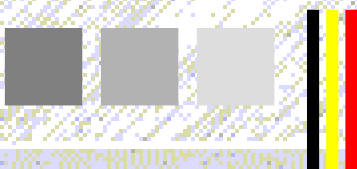
In many countries, achieving recruitment and retention (R&R) goals has become increasingly challenging and a major concern for the Military. With respect to this, the main goal of the R&R Research Task Group (RTG) is to foster a true understanding of the mechanisms that influence R&R outcomes. In order to achieve this goal, a generic military model will be developed by the RTG.

In the first phase, the theoretical evidence has been addressed. A set of topic areas has been identified to be crucial with respect to R&R and the generic model. One of this areas is the concept of “transition”. It refers to encompassing the reaction (positive or negative) to significant changes in life circumstances, which relates to individuals and organisations.

A literature review with respect to the concept of transition has been conducted and its results will be incorporated into the generic model. Transition is insofar relevant for the generic model because when it fails, then early turnover is one likely result, and if it is successful, then it eases the entry of newcomers and helps retaining incumbents.

In order to understand the process of transition, it is helpful to conceptualise the step from outside to inside the organisation by identifying the relevant factors of this phase. The literature provides a distinction into four phases separated for the perspective of the newcomer and the organisation. The first two pre-entry phases are *recruitment* and *selection*, followed by the two post-entry phases *orientation* and *socialisation*.

One of the most important topics of transition is the matching of the individual and the organisation. With respect to this, two models have been chosen, which conceptualise the step from outside to inside by means of an interaction of the main factors which are relevant in this phase.





The first one, called matching model, was developed by Wanous (1992). It focuses on organisations especially with respect to the entry process. The crucial variables are *job performance* and *job satisfaction*. Evidence is given, that *job performance* is related to the match of *capabilities/potential abilities* between individual and organisation. This reflects the traditional viewpoint of the organisation with respect to selection and classification. Evidence is also given, that *job satisfaction* is directly and *organisational commitment* is indirectly related to the match between the *specifically wanted job outcomes* and the capacity of *organisational climates* to reinforce those wants.

The second one, called conceptual model, was developed by Kammeyer-Mueller & Wanberg (2003). It is based on three sets of variables: *Distal Adjustment Outcomes* (commitment, work withdrawal, turnover), *Proximal Adjustment Outcomes* (task mastery, role clarity, work group integration, political knowledge) and *Antecedents of Newcomer Adjustment* (pre-entry knowledge, proactive personality, influence of socialising agents, perceived alternatives). The model was examined by means of LISREL, which confirmed the majority of its relations.

The literature review will be continued in order to find additional recent models of transition within the framework of R&R. These findings will be incorporated into the generic military model of R&R.

ID 32

A New Era in U.S. Navy Testing: Multimedia Navy Enlisted Advancement Exam

Annette G. Baisden, Kirk Schultz, and Shirley Lewis-Brown
Naval Education and Training Professional Development and Technology Center
Pensacola, Florida USA

In September 2004, the U.S. Navy entered a new era of testing when Sailors in the Aerographer rating used a computer to take their enlisted advancement exam. The shift from a paper and pencil format to an interactive, multimedia exam provided the means to move from traditional assessment of subject matter knowledge to a more performance-based assessment. This paper reviews the processes from the exam's inception to its implementation. These processes include the selection of authoring tools, evaluation of delivery options, design and beta testing of prototypes, establishing criteria for selecting the first rating for multimedia exams, hardware solutions and procurement decisions, multimedia design and development, and formative evaluation. Because Sailors Navy-wide take their advancement exams on the same day, unique administrative procedures, shipping, and security requirements for equipment, exams, and results had to be addressed to ensure exam timeliness and fairness to candidates. Test day evaluation data and candidate feedback data demonstrate the effectiveness and feasibility of this new approach. A discussion of lessons learned during the evolution to computerized assessment includes not only the successes but also the problems encountered and their solutions.





ID 33

Comparing Subjective and Objective Results of Usability Testing for the U.S. Navy's Performance Management System

Dr. Michael J. Schwerin, Ph.D.

Ms. Elizabeth Dean, M.A.

Ms. Kimberly M. Robbins, M.A.

RTI International

3040 Cornwallis Road, Research Triangle Park, NC 27709-2194

CDR Mark J. Bourne, MSC, USN

Navy Personnel Command (PERS-48)

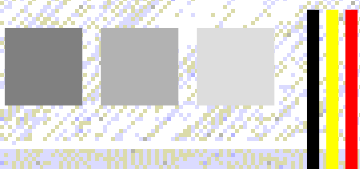
5720 Integrity Drive, Millington, TN, 38055-4800

The Chief of Naval Operations chartered the “Executive Review of Navy Training” (ERNT, 2001) which led to the formation of a Task Force for Excellence through Commitment to Education and Learning (EXCEL). Task Force EXCEL’s goal was to identify new ways for the U.S. Navy to train, grow, place, and utilize personnel that maximize the Navy’s ability to accomplish their Navy mission while making for a more productive, satisfying workplace. One of the five components of Task Force EXCEL – the Performance Vector – was assigned the task of developing a behaviorally-based, web-based performance appraisal system that is aligned with the changing workplace performance needs of the Navy

A number of research studies have shown a strong relationship between the performance appraisal process and job satisfaction, organizational commitment, and retention plans (Blau, 1999; Daily & Kirk, 1992; Ellickson & Jogsdon, 2002; Levy & Williams, 1998; Jones, 1998). Additionally, several studies with Navy personnel (Olmsted & Farmer, 2002; Wilcove, Schwerin, & Wolosin, 2003) show a strong relationship between job satisfaction, organizational commitment, and retention plans. Any system that affects the performance appraisal process could have implications for Sailor job satisfaction, organizational commitment, and retention intent.

Developing an efficient performance appraisal process that has low respondent burden is of paramount importance. The objective of this study was to conduct on-site usability testing of the Navy’s pilot Human Performance Feedback and Development (HPFD) and ePerformance performance appraisal systems. Quantitative usability data, subjective focus group data, and user satisfaction with these pilot performance management systems were collected.

A total of sixty-one ($N = 61$) Sailors were tested on-site from the aviation ($n = 21$), surface ($n = 20$), and submarine ($n = 20$) communities at three Navy bases. Usability scenarios simulated tasks that Navy non-supervisors and supervisors are likely to encounter in the performance appraisal process. Self-administered pre-test and post-test surveys were administered to obtain subjective impressions of ease of use, professional value, personal value, and overall satisfaction. Focus groups were conducted as a means of identifying features of the HPFD or ePerformance systems that users liked or features that needed to be improved.





Preliminary results from iterations 1 and 2 indicate a number of types of usability errors in terms of system navigation errors and system performance errors. Focus group results indicate several functionality and process concerns for Navy leadership to consider. Data are currently being collected for iteration 3 and all quantitative and qualitative analyses of usability errors will be completed in September, 2004.

Results of this study will provide Navy leadership with recommendations for system improvements that should enhance the usability of the HPFD and ePerformance systems. Recommendations range from the simple (e.g., more clearly labeling system menus and function buttons, options for a printer-friendly version of the form for use off-line, development of a "Quick Reference Guide" to aid with system navigation) to the complex (e.g., including onboard servers for afloat platforms for system use underway). Additional analyses will describe user satisfaction with the pilot system.

ID 34

Comparing Computerized and Paper-and-Pencil Versions of the DEOCS

Stephen A. Truhon, Ph.D.
Winston-Salem State University

The process of updating the MEOCS (Military Equal Opportunity Climate Survey) has resulted in a new version called the DEOCS (DEOMI Equal Opportunity Climate Survey), which uses items from the MEOCS-EEO (Equal Employment Opportunity) version. The DEOCS has been presented in both paper-and-pencil (P&P) and on-line (OL) versions. But are these two versions equivalent? A three-step process was performed to examine measurement equivalence by comparing their items: 1) analysis of difficulty and discriminability through item response theory; 2) linking these analyses through the use of a common scale; and 3) comparison of their difficulty and discriminability through differential item functioning (DIF) and differential test functioning (DTF). DIF was found in two items, but overall differences were small. No DTF was found for any scale. The P&P and OL versions of the DEOCS appear to have measurement equivalence.





ID 35

Individual Needs and Military Turnover

H. Canan Sumer, Ph.D.
Middle East Technical University

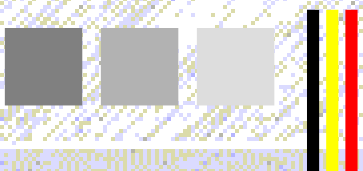
The purpose of this paper is to review individual differences factors that are likely to play a role in the process of military withdrawal. Most turnover models are based on civilian samples/organizations and are in general attitude-centered. Yet, theoretical and empirical literatures indicate the role of individual differences factors other than attitudes in the turnover process. Four broad categories of factors relevant to military turnover have been identified. These are unmet expectations, work- concerning more visible job aspects/characteristics are likely to have an influence on especially early turnover. Work-family concerns, as part of broader quality of life factors, constitute a critical group of individual differences variables associated with voluntary military turnover. That is, frequent and long deployments, overnight duty, long work hours, high tempo, and work overload, typical of most military jobs are likely to play a critical role in the decision to join and to leave the military. Job-related attitudes, namely satisfaction and commitment, have been consistently shown to be related to variables associated with employee withdrawal. Finally, theoretical and empirical evidence lends support for the criticality of person-environment fit in the turnover process. This paper presents an overview of the literature concerning these factors as well as a discussion of how these four groups of factors are linked within the military turnover process. family concerns, job related attitudes, and person-job fit. These factors are assumed to be interrelated. Unmet expectations expressed in the form of post-entry experiences.

ID 36

A Model of Military Turnover

H. Canan Sumer, Ph.D.
Middle East Technical University

A conceptual model of military turnover has been proposed in this paper. This model has been developed based on the reviewed literature and the work done by the members of the NATO task group on military recruitment and retention. Factors expected to play a critical role in military turnover are grouped under three categories: distal factors (i.e., job/organizational characteristics and perceived job alternatives), mediating factors (i.e., quality of life -QoL- concerns and work attitudes, namely job satisfaction, continuance commitment -CC-, and affective commitment -AC), and proximal factors (turnover intentions and unemployment rate). Job and organizational characteristics are hypothesized to influence turnover through their effects on quality of life concerns and job attitudes. Consistent with the literature, probability of finding a satisfactory job alternative is expected to influence turnover intentions both directly and indirectly through work attitudes. QoL factors are hypothesized to mediate the effects of job and organizational characteristics on job satisfaction and continuance commitment. Both organizational commitment and job





satisfaction are stated to contribute to turnover intentions. Furthermore, the nature of the relationship between AC and satisfaction is hypothesized to be cyclical in nature. In this model, turnover intentions mediate the relationship between job-related attitudes and turnover behavior. Finally, unemployment rate is expected to influence voluntary turnover both directly and through perceived job opportunities. Avenues for testing the model are discussed along with implications of having a generic military turnover model.

ID 41

Medical Indicators of Successful United States Military-Specialty Training

Louis E. Banderet, Ph.D.

U.S. Army Research Institute of Environmental Medicine
Kansas St., Natick, MA 01760-5007

Louis.Banderet@us.army.mil

Valerie J. Rice, Ph.D.

ARL-HRED AMEDD Field Office (AMSRD-ARL-HR-MM)
1750 Greely Road, STE 219
Ft. Sam Houston, TX 78234-5002

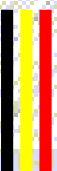
Valerie.Rice1@us.army.mil

Stephen C. Allison, Ph.D., Joseph F. Creedon, Ph.D., Marilyn A. Sharp, M.S.

U.S. Army Research Institute of Environmental Medicine
Kansas St., Natick, MA 01760-5007

allisonsteve@juno.com ; Joseph.Creedon@us.army.mil ; marilyn.sharp@us.army.mil

Attrition of military personnel during training is costly and increases requirements for staff and facilities. Attrition also impacts unit readiness. This study was conducted to identify predictors of success/failure and to document sources (and times) of greatest stress in four military medical training programs. Military students (n=692) at Fort Sam Houston, Texas, pursuing the Mental Health Specialist, Occupational Therapy Specialist, Physician Assistant, or Physical Therapy Specialist program were studied during training (classroom phase). Questionnaires were administered at the initial, midpoint, and final portions of training. Student (volunteer) reactions were surveyed to determine perceived stress, rigors of the curriculum, students' adjustment to their programs, and demands imposed by examinations, deadlines, and homework. Sleep, mood, quality of life, medical complaints and illnesses were also assessed. Each medical specialty had substantial attrition (11-22%) during classroom training. Academic success/failure was associated with factors such as Armed Services Vocational Aptitude Battery scores, age, years of military service, sleepiness, moods, ratings of quality of life, and marital status. Internal locus of control (belief that one can influence events that affect him/her) was only associated with two of the medical specialties. This study identified both demographic and psychological factors that are associated with academic success/failure of military personnel pursuing medical specialty training.





ID 43

Turnover in the Military: Impact of Workplace Stressors

Marie E. Norris

Directorate of Human Resource Research and Evaluation
Canadian Armed Forces

In order for organizations to make prudent policy decisions to reduce voluntary turnover, they must understand the reasons for this attrition, which causes the loss of experience and expertise, and impacts on operations. Based on Hom-Griffeth's Model of Attrition, this study considers workplace stressors as antecedents to job satisfaction and turnover intentions. The goals of this study were to assess: (1) the relationships of role stressors with job satisfaction and turnover intentions; (2) whether attitudes toward changes in organizational values and recruiting incentives explain incremental variance in the outcome variables beyond role stressors; and (3) possible moderating effects of organizational level factors (i.e., commitment, perceived organizational support, and voice) on the relationship of workplace stressors with the outcome variables. Members of the Canadian Forces (n = 2,748) completed the Retention Questionnaire. Moderated multiple-regression was used to assess relationships of interest in this study. Controlling for age, role stressors were significant unique predictors of job satisfaction and turnover intentions. Attitudes towards changes in organizational values and feelings toward recruiting incentives explained incremental variance. There was no evidence for a strong moderator effect of commitment, perceived organizational support and voice on the relationship between workplace stressors and outcome variables. This study contributes to the understanding of the complexity of the antecedents of job satisfaction and turnover intentions by considering the role of non-traditional stressors. These findings emphasize the importance of considering the impact on existing employees when implementing new programs or changing existing policy with respect to job satisfaction and turnover intentions.

ID 45

The Development of a Psychological Screening Program for Sniper Selection

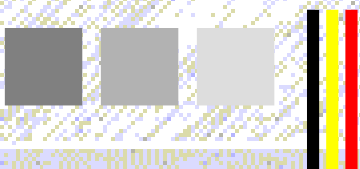
Major David C. Scholtz, M.Sc.

Captain Marcel L. Girard, M.A.

Lieutenant(N) Michael A. Vanderpool, M.Sc.

Director Human Resources Research and Evaluation

The purpose of this study was to develop a psychological screening process for sniper selection. The study was conducted in three phases. First, a selection model was developed to meet the needs of the infantry while adhering to professional psychological testing guidelines. Second, job analyses, based on two methods, were conducted to identify the personality traits and psychological characteristics related to successful sniper performance. Third, personality and psychological screening measures were administered to a sniper sample to develop normative data.





Results of the study suggest that the psychological screening process should employ a multi-method assessment format. This assessment should include valid psychological screening measures to ‘flag’ areas of concern to be addressed in a follow-up interview. It is recommended that a Personnel Selection Officer conduct the screening, adopting a ‘select-out’ approach.

Findings of the job analyses indicate that the personality traits of Conscientiousness and Neuroticism are related to sniper performance. The NEO Personality Inventory-Revised and the Holden Psychological Screening Inventory are recommended to assess these traits and the psychological suitability of sniper candidates.

ID 47

**“I Think They Misled Me”:
About the Informational Value of Recruitment and Selection**

Bert SCHREURS
Belgian Defense Staff
Human Resources Directorate General
Accession Policy Research Section

Recruits dropping out of basic military training very often complain that they were misinformed during recruitment and selection. The NATO Research Task Group (RTG) 034 on Recruiting and Retention of Military Personnel acknowledged the importance of providing realistic information in aid of the retention of new recruits. In this paper, the various facets of information that might have an effect on post-hire consequences are looked at. Firstly, Realistic Job Previews (RJPs) are discussed, undoubtedly the most well-known recruitment procedure pertaining to provision of information. Through the use of RJPs, both favorable and unfavorable information is provided to applicants in order to reduce post-hire turnover. The theoretical rationales for RJPs are described and an overview of recent empirical evidence on the effects of RJPs is presented. To conclude this topic, some alternative information strategies to RJPs get a chance. Secondly, the recruitment source effectiveness literature in relation to early turnover is reviewed. Although there is a large overlap with RJPs, research on recruitment source effects is broader and therefore deserves separate treatment. Thirdly, other types of information, which are more implicit and often unintended, such as selection techniques, recruiter behaviors and personality, and interview focus, are discussed. It is hypothesized that because in early recruitment stages applicants often have incomplete information, they will interpret a variety of recruitment practices as providing signals concerning working conditions in the organization. Based upon the literature review, recommendations for military recruitment and selection practitioners are formulated.





ID 48

Educational Credentials and the Success of First-Term Sailors

Stephen L. Mehay
Christopher D. Bownds

U.S. Naval Postgraduate School
Monterey, California USA

Prior research has established the importance of educational attainment on the success, generally defined as completion of the first term of service, of military recruits. Consequently, the U.S. Department of Defense adopted a three-tiered classification system to categorize the education backgrounds of military applicants. This system categorizes applicants into those with a high school diploma, those with no diploma, and those with a General Equivalency Degree (GED). This system became the basis of the U.S. Navy's Recruit Quality Matrix, which combines Armed Forces Qualification Test scores and education to determine enlistment eligibility of applicants. However, there has been a rapid growth in the number and variety of citations, certificates, and degrees that are now available to non-high school graduates other than the GED. The growth in the types of educational certificates raises the question as to whether the current three-tiered system is an accurate predictor of recruit success

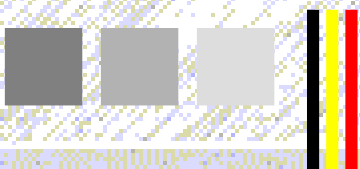
This study analyzes the impact of different educational credentials on attrition of sailors in the U.S. Navy. The study uses data provided by Navy Recruiting Command data base to analyze bootcamp attrition patterns, and data provided by the Defense Manpower Data Center to analyze first-term attrition. Non-linear multivariate models are specified and estimated to identify differences in attrition probabilities for recruits with different educational credentials within the general tiers. The results find that predicted attrition probabilities differ significantly by type of educational credential. These differences are used to construct a more refined recruit quality matrix for screening military applicants.

ID 49

Decision-making in Selection and Classification for the Military

Francois J. LESCREEVE
Belgian Defense Staff
Directorate General for Human Resources

After having defined recruitment objectives and hopefully having had some success in attracting applicants, the Military face a situation in which there are a number of applicants for a number of usually different positions. The question that needs to be addressed is who is to be enlisted and for what position? To answer the question, selection and classification processes are designed. In essence, these processes contain the assessment of an applicant and decisions concerning the enlistment of the person. The paper will focus on the decision-making during these processes.





Topics that will be addressed in this paper are conceptual rather than empirical and include:

- Decision-making related to the eligibility of a person for a position;
- Quantifying the suitability of a person for a position;
- Including the applicants' preferences into the decision-making process;
- Allocation of applicants to the vacant positions.

The decisions made during the selection and classification process for the Military strongly affect the quality of person-job fit both in terms of aptitude and motivation. Since this is known to have a strong bearing on turnover and job-performance, it is highly important to understand and acknowledge the mechanisms involved in the decision-making during selection and classification.

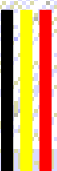
ID 50

Psychological contract; a big deal?

Drs Cyril van de Ven
Behavioural Sciences Services Centre
Ministry of Defence - The Netherlands

Psychological contracts are defined as the beliefs individuals hold regarding the terms and conditions of the exchange agreement between themselves and their organisations. The individual commits to making certain sacrifices and in return obliges the organisation to compensate fairly for the labour given. If the organisation fails to meet the expected obligation by the individual s/he will either (try to) terminate the working relationship or reduce his/her effort to the level at which s/he believes the contract is more properly balanced. On the other hand, a positive evaluation of the psychological contract will lead to enhanced commitment and effort and reduces turn-over intentions and actual turn-over.

A literature research is conducted to explore the contribution of taking the psychological contract into account in understanding and managing the recruitment and retention process within the armed forces. Special attention will given to the development of the contract, types of contracts, violations and consequences, and the emerging of a "New Deal".





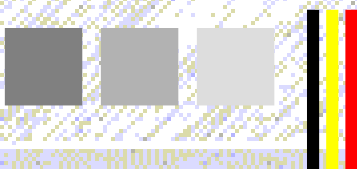
ID 53

A Model of Military Recruitment

Bert Schreurs
Belgian Ministry of Defense

Fariya Syed
Department of National Defence – Canada

A conceptual model of military recruitment has been proposed in this paper. This theoretical model has been developed based on a literature review and input from members of the NATO HFM 107/ RTG 034 Task Group on military recruitment and retention. Recruitment variables that are expected to play a critical role in applicant attraction to the military were identified and relationships between these variables are hypothesized in the model. The ultimate recruitment outcome variable is considered an applicant's decision to enlist. Yet, during the recruitment and selection process applicants may decide at any time to withdraw from the enlistment process. Therefore, organizational attractiveness, job pursuit intentions, and pursuit behavior are included in the model. A loop from these outcome variables to the recruitment, selection and classification practices is included to emphasize the continuous nature of the attraction process. Theory of reasoned action is applied to model the outcome variables: besides organizational attractiveness, the influence of significant others is included as a contributor to job pursuit intentions, which, in turn, affects pursuit behavior. Hypothesized predictor variables indirectly influencing job pursuit intentions through attractiveness are applicants' perceptions of job and organizational attributes, perceptions of hiring (recruitment, selection and classification) practices, and perceived fit. In accordance with signaling theory, it is hypothesized that perceptions of job and organizational attributes mediate the relationship between perceptions of hiring practices and perceived fit. The latter is assumed to have a direct influence on organizational attractiveness. Since all applicants enter the recruitment process with some prejudice, applicants' pre-process knowledge of the organization, a concept similar to organizational image, is also included. It is hypothesized that these initial perceptions of the organization relate to their later perceptions of job and organizational attributes. Finally, applicants' perceptions of labor market conditions (perceptions of job alternatives and expectancies of receiving a job offer) are expected to influence job pursuit intentions. Perceptions of job alternatives are hypothesized to have a direct influence on job pursuit intentions, while expectancies of receiving an offer are expected to influence job pursuit intentions through organizational attractiveness. Avenues for testing the model are discussed along with implications related to a generic military recruitment model.





ID55 Recruiting and Retention Strategies

Tanja F. Blackstone, Ph.D.
Navy Personnel Research Studies and Technology
5720 Integrity Drive, Millington, TN 38055-1000
Tanja.Blackstone@navy.mil

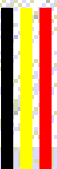
During the course of the existence of NATO's Research Task Group on 'Recruiting and Retention of Military Personnel', the members of participating nations were requested to review what strategies were currently used in their countries to tackle the problems concerning recruiting and retention. A number of documents were produced and will be integrated in the task group's final report. This paper presents a compilation of the different strategies that are in use.

ID57 Recent Developments in USAF Officer Testing and Selection

Johnny J. Weissmuller, Kenneth L. Schwartz, and Stanley D. Kenney
USAF Military Testing, HQ Air Force Personnel Center
Randolph AFB, Texas USA
johnny.weissmuller@randolph.af.mil
C. Wayne Shore, Ph.D. and R. Bruce Gould, Ph.D.
Operational Technologies Corporation (OpTech)
San Antonio, Texas, USA
wayne@otcorp.com

Testing in the United States Air Force falls into several categories. Testing associated with *Education and Training* is vital for preparing a team-oriented, mission-ready force. The other forms of testing, collectively known as *Personnel Tests*, have a direct impact on defining an *individual's* official job and level of responsibility. The goal of personnel testing is to select, certify or promote the most qualified individuals. The Air Force Personnel Center at Randolph AFB (HQ AFPC) is charged with managing this force throughout the world to ensure the right person is at the right place at the right time. For this reason, all personnel tests are centrally managed by the Air Force Military Testing Section of AFPC.

This paper provides an overview of tests managed by this section, current interservice cooperation initiatives, and finally discusses the 4-year R&D effort that produced a new, streamlined version of the Air Force Officer Qualifying Test (AFOQT). The new AFOQT now takes less than a half-day to administer and includes experimental sections such as the Self-Description Inventory (SDI), an expanded, "Big Five" instrument. The SDI is a revision of the 1994 work of the late Dr. Raymond E. Christal. Dr. Christal was one of the two authors who launched the "Big Five" factors of personality in the 1950's based on early computerized factor analyses of airmen at Lackland AFB -- just twenty miles from here at AFPC. This new AFOQT, Form "S", is ready to go and will be deployed in the coming months.





ID 58

Applications of Psychology in HR and Training in a Conscript Army

Lt-Col Star Soh, PhD
Ministry of Defence, Singapore

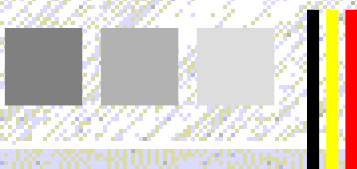
This paper aims to present the human resource and training challenges faced in a conscript Army and how psychological knowledge and methods have been applied to assist HR practitioners and commanders to overcome the challenges. One of the biggest challenge is the commitment of the conscripts to National Service in today's globalised economy. In order to build commitment, there is a need to look at the cognitive, affective and behavioural components of serving National Service. We need to help conscripts understand the importance of National Service, adjust to the rigors of military life, place the right people into the right jobs, and develop and motivate them in their jobs. Ultimately, the conscripts must have a meaningful and positive experience to motivate them to serving National Service. To illustrate the effort to build and sustain commitment, a sampling of projects and the work of psychologists (e.g., selection, programme design and evaluation, adjustment and commitment surveys) will be highlighted.

ID 59

Single vs. Multiple Subject Matter Experts for Test Development

Paul G. Miranne
Naval Education Training Professional Development Technology Center

At the core of every rank-ordering exam is a variety of items whose purpose is to permit inferences to be drawn concerning the knowledge and skills of examinees. Traditionally, the Navy has used a single resident subject matter expert (SME) to select topics, assign weights, and to write items for this purpose. However, the Naval Education Training Professional Development Technology Center (NETPDTC) is currently exploring an alternative to this system that utilizes a diverse group of SMEs that convene on a temporary basis to obtain similar information. To date, there have been approximately 25 such exam-planning conferences (EPCs) at which visiting SMEs have prepared for upcoming exams. Although one other branch of the armed services currently uses this alternative method, it has never before been possible to evaluate the differences between the two systems, and the corresponding advantages or disadvantages in both a qualitative and quantitative manner. The proposed study will begin by evaluating differences between the historical weightings that existed under the single SME model and the weightings that were developed by the alternative multiple SME system. Advantages and disadvantages of each system will then be discussed. Finally, a method of statistically comparing performance on past and future exams will be proposed in which the command can measure the impact of the alternative system. It is hypothesized that for most exams, the alternative system will improve the both the distribution and ability to discriminate.





ID 60

Recruitment of a Minority Group in the Royal New Zealand Air Force (RNZAF).

FG OFF Delwyn Neill
 RNZAF Psychology Unit, New Zealand Defence Force
 Wellington, New Zealand
Delwyn.neill@nzdf.mil.nz

In recent years the Royal New Zealand Air Force (RNZAF) has experienced low recruiting levels and high attrition rates whilst operating in a dynamic environment at high tempo. As a result, personnel is a key issue for the organisation as reflected in Strategic Goal One: "Personnel: To make the Air Force the first choice for a career."¹ It is recognised that in order for the Air Force to achieve its vision of being "an air force that is the best in all that we do" having the right people in the right roles is essential.

This places considerable importance on attraction and selection, being the first steps in the personnel process. As part of its recruiting campaign the RNZAF has identified several target groups that it wants to actively target. One of these is Maori. This paper focuses on why Maori are an important target group for the RNZAF and why biculturalism rather than multiculturalism is an appropriate goal. It will then discuss the benefits to be gained from developing a diverse workforce with equal employment opportunities. The available statistics on Maori representation both in the New Zealand population and the RNZAF are presented and the paper outlines what initiatives the RNZAF has undertaken in relation to this group.

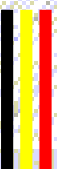
ID 62

Networked Military Simulations: Measures of Reliability and Validity

Richard B. Modjeski, Ph.D
 Xavier Institute of Management
 Bhubaneswar, India
 Raymond O. Waldkoetter, Ed.D
 Educational and Selection Programs
 Greenwood, Indiana

Measuring networked military simulations produces an inherent difficulty due to the highly dynamic environment. To interoperate instrumented live training, electronic networks (Internet) are increasingly used concurrently operating with virtual groups of simulators and closed form mathematical constructive models. A static rather than dynamic model form is assumed by traditional reliability-validity measures used in model Validation, Verification and Accreditation (VVA). Static methodologies are often insufficient for varied criteria and scenarios data that represent such complex battle concepts as reactive

¹ Royal New Zealand Air Force, Strategic Plan 2002 Onwards.





tactics. Data intensive methodologies such as the multi-method Multi-Trait Matrix and Factor Analysis are proposed for use in addressing the dynamic nature of networked models with individuals and crews. Applying a standard reference from the electrical-electronic engineering field offers promise of providing sufficient data input to warrant use of the proposed methodologies. Thereby, the reviewed methodologies can assist in addressing an intractable problem of using judgement developed in combat or combat training.

ID 65

The Belgian Client-Based Decision Model: Progress and Prospects

Yves A. Devriendt, Psychologist
yves.devriendt@mil.be
Belgian Department of Defence
Directorate General of Human Resources
Kwartier Koningin Astrid
Bruynstraat
1120 Brussels
Belgium

Military, technological and methodological advances have greatly influenced traditional military selection procedures. During World War I and World War II solid testing programs were developed in order to select and allocate large numbers of recruits. Traditionally the armed forces have always used large-scale selection programs. Nowadays armed forces all over the world are facing recruiting and retention problems. One of the possible reasons is the use of non-automated, time-consuming selection methods that are not client-centred. Other disadvantages of traditional single-form paper-and-pencil test batteries are elaborated. Some possible solutions to make the process of military selection more attractive in the eyes of the candidates, are item generative and computer-adaptive testing systems. The psychometric advantages of using these systems include: increased security through multiple parallel form production; better reliability and validity; and a more effective and efficient decision-making process. The Belgian Defence Forces have made a blueprint for the validation of an automated testing procedure, which is outlined and discussed. This paper ends with some remarks concerning the positive and negative sides of automation in the field of selection and on future developments concerning computer-based testing.





ID 66

A New World: New Aptitudes Require New Measures

Martin J. Ippel, CogniMetrics, Inc. San Antonio, TX
Jac. N. Zaal, GITP International, B.V., Nijmegen, The Netherlands.

Information Technology has gradually, but radically, reshaped the environment in which we work, communicate, and do business. Successful adaptation in this new environment requires the ability to interact efficiently with systems that have a dynamics of their own. These systems can vary in complexity from relatively simple MS Office software tools to complex information systems monitoring industrial processes. The cognitive skill required for using such devices is called procedural knowledge, or procedural skill.

The Information Technology Aptitude Battery (ITAB) is the world's first battery of completely interactive tests of procedural skill. Essential elements: (1) the tests provide an interactive environment, and (2) actions of the examinee are not scored as singleton answers to distinct problems, but analyzed as sequence patterns. Complete interactivity is achieved by creating an internal representation of the task-environment. Artificial intelligence technology is used to compute the "intelligence" of each step by the examinee. The paper presents reliability and validity information regarding the tests.

ID 67

New Test Formats for the Selection and Allocation of Military Personnel in Germany

Prof. Sidney H. Irvine,
Inpsych Ltd. UK

Johannes Wulf, Sibylle Schambach, Thomas Kutschke,
Ministry of Defence, Germany

Richard F. Walker,
Consultant Systems Engineer San Antonio, Texas, USA

A nation-wide trial of the use and functions of multiple parallel forms of item-generative tests was conducted by the German Ministry of Defence in 2003. The principles and applications of item-generation theory used in developing these tests are specified in a comprehensive volume (Irvine and Kyllonen, 2002). In technical terms, the results of *The Bundeswehr Experimental Test Battery* can be summarised as follows. The tests can be generated in German; and they behave just as the English versions do in similar delivery contexts. Their attributes are psychometrically comprehensive. The parallelism and reliabilities of individual tests range from very good to excellent. The tests, individually and in regression analysis, produce consistent construct validities, convincing concurrent validities, sensitivity to group membership variables; and the results provide coherently differentiated automatic reports of subjects chosen by the German Ministry of Defence Standard 7-point intelligence criterion. Consequently, valid diagnostic information permits





counselling and placement in appropriate training contexts. Finally, in The Bundeswehr Experimental Test Battery the scores of persons tested are not limited by lack of knowledge, only by the capacity to process new information in a short time span: and this is a basic requirement in active service.

ID 68

The Standardized Letter of Recommendation (SLR): Rating Military Personnel on Non-Cognitive Factors

Patrick C. Kyllonen
Educational Testing Service

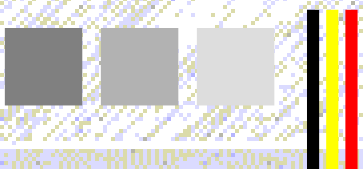
To overcome the problems of fakeability plaguing traditional personality assessments and the inconvenience of paper-based forms, the *Standardized Letter of Recommendation (SLR)* is an entirely web-based system that collects and reports on qualities critical for learning and performance success. The form enables referees to rate candidates on 28 items in seven broad scales—*Knowledge & Skill*, *Creativity*, *Communication Skills*, *Teamwork*, *Motivation*, *Self-Organization*, and *Professionalism & Maturity*. Items and scales emerged from a comprehensive literature review (Kyllonen, Walters, & Kaufman, 2004), and from focus groups, and a telephone survey of over 400 faculty members. Thus far, we have piloted the SLR on students applying to graduate school, interns applying for a summer program in industry, managers being considered for leadership positions, and postdoctoral fellow applicants at a research organization. This presentation reviews the psychometric properties of the SLR and lessons learned, and will suggest ways in which the SLR could be adapted for use in military settings, including enlisted and officer selection and classification, and promotion testing.

ID 69

Innovative Self-Reports Of Health-Related Quality Of Life In Basic Training: Their Measurement And Meaning For Attrition.

Prof. S.H. Irvine, University of Plymouth, UK

Costly attrition in and immediately following basic training is a fact of military life. Its concomitant factors and the means to identify personnel at risk are now available. Extensive development of health-related quality of life (HRQOL) measures for the chronic diseases of asthma, gastric complaints and hypertension identified a generalisable three factor model of HRQOL measurement. This model was found to account for common variance among patient self-reports validated against clinical trial data. (Irvine et al. 1993, Irvine and Wright, 1994, De Carli et al. 1998, Bamfi et al., 1999) The three HRQOL domains were emotional, physical and social (daily living activities) correlating to produce a higher-order general factor of HRQOL. This model was implemented in the construction and validation of a self-report inventory for US Air Force inductees at Lackland Air Force Base during 1997 to 1999, when 1500 recruit respondents provided data that was coordinated with a wide spectrum of cognitive, personality and interest measures.





Internal consistencies for the domains were high. Results show that after six weeks of basic training there were substantial numbers at risk for attrition. In terms of convergent and discriminant validity, the correlates of HRQOL were substantial with certain Big Five Inventory measures, and smaller but consistent with cognitive assessments. Use of the HRQOL inventory identifies recruits for whom supportive counselling could reduce the risk of attrition or serve to place them on 'attrition watch' during their next assignment.

ID 70

U.S. Department of Defense Retention Trends

Anita R. Lancaster, Regan M. Klein, and Eric S. Wetzel
 Defense Manpower Data Center

The Human Resources Strategic Assessment Program (HRSAP), located at Defense Manpower Data Center (DMDC), consists of both Web-based and paper-and-pencil surveys to support the personnel information needs of the Under Secretary of Defense for Personnel and Readiness [USD(P&R)]. These surveys assess the attitudes and opinions of the entire Department of Defense (DoD) community—active, Reserve, civilian employees—on a wide-range of personnel issues.

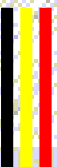
The Web-based surveys field repeated measures that track leading indicators for the Department. One of these is retention intentions – the likelihood of active-duty members, Reservists, and DoD civilians to continue serving the Department if given a chance to do so. This paper will analyze retention intentions for the three populations being administered Web-based surveys. For active-duty members, trends will be shown from 1999 through April 2004; for Reservists from 2000 through May 2004; and for DoD civilians, one data point will be presented for October 2003. The paper will conclude with a summary of the Department's actual retention data, as of the end of the third quarter of the 2004 Fiscal Year, and a discussion of how the actual retention data compare to survey results.

ID 71

Canadian Forces Human Resource System Transformation

Susan Truscott and June Bowser
 Department of National Defence, Canada

In 1968, the Canadian Forces (CF) were unified leading to a centralized HR system. During the 90s, downsizing resulted in the elimination or reduction of critical HR functions and the devolution of some functions to Environmental Commands. The unintended consequences were a weakened overall HR capability. Additionally, the centralized training system was disbanded in 2001, with devolution of managing responsibility to other organizations planned. Devolution ran into implementation problems and a strategic pause was ordered in 2003. However, it was determined that the problems were common





to the entire military HR System, and therefore became the subject of an ongoing HR System Transformation (HRST) project.

Initial issues identified for study by the HRST project included:

lack of recognition of the functional authority of ADM(HR-Mil), "ownership" of the Military Occupational Structure and lack of clarity on HR-Mil Group roles and responsibilities. An evaluation of the HR System was conducted through report reviews, process mapping, interviews and working groups. The findings have been divided into "Internal Integration" Issues, which fall mainly in the domain of the HR-Mil Group itself; and "Horizontal Linkage" issues, which are CF-wide and must be addressed across DND/CF organizations. Problems with the HR Policy process, the lack of a common CF HR Doctrine and highly variable HR expertise and staff experience have been identified as the most important of the Internal Integration Issues. The existing HR-Mil Group Structure often creates a structural separation between those performing related functions.

Horizontal Linkage issues relate to HR governance

, horizontal coordination

, and HR influence on strategic capabilities. Background, the current status and the way ahead will be presented.

ID 72

Individual Values and Ethical Climate: An Empirical Study of Canadian Forces

Sanela Dursun,
Defence Scientist

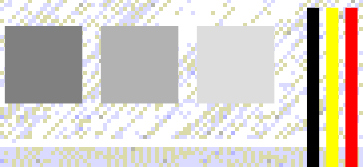
Directorate of Human Resources Research and Evaluation,

National Defence Headquarters
MGen George R. Pearkes Building
Ottawa, ON, K1A 0K2, Canada
Tel : (613) 996-4542

Internet: Dursun.S@forces.gc.ca

The 2003 Defence Ethics Survey was designed to assess ethical decision-making of all members of the Defence Team. The survey was administered to 7000 randomly selected military and civilian personnel. Of 1,839 returned for analysis, 1321 (72%) were Military and 513 (28%) Civilian. The survey was based on a comprehensive assessment of four key predictors of ethical decision making: (1) Individual values; (2) Organizational Ethical Climate; (3) Personal Moral Philosophies; and (4) Moral Intensity of the situations.

This paper will discuss the findings related to Individual values and Ethical climate. The survey measured respondents' views with respect to eleven indices: Rules, Care, Independence, Self-Interest, Job Completion, Supervisor Expectations, Supervisor Behaviours, Coworker Behaviour, Organizational Rules, Organizational Fairness, and Personal Control. Respondents reported their beliefs on "The way things are right now"





and “The way things should be”. The first set of beliefs reflected the respondents’ perception of the ethical climate of the organization. The second set represented their personal values with respect to the same indices. Gap analysis was conducted in order to identify the most significant areas warranting improvement. Organizational Fairness was identified as the factor requiring the most attention, followed by Care of personnel, and Co-workers’ Behaviour. A comparison of the 1999 and 2003 survey results showed an improvement in organizational ethical climate and an increase in ethical expectations for their organization. The organizational implications of this research are also discussed.

ID 73

Promoting Junior Noncommissioned Officers: Research for Current and Future Systems

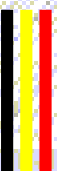
Tonia S. Heffner

U.S. Army Research Institute for the Behavioral and Social Sciences

Lessons learned from past and current operations have demonstrated the importance of a highly skilled noncommissioned officer (NCO) corps for future military effectiveness. Highly-qualified NCOs who have the trust and respect of junior Soldiers can lead, train, and motivate. The U. S. Army Research Institute for Behavioral and Social Sciences (ARI) has engaged in several research efforts designed to identify and promote the most qualified NCOs, those qualified for current needs as well as future demands.

For the Army, an organization that only promotes from within, promotion is about much more than selecting the right Soldier to the next rank. We have to anticipate future situations because we need to promote the right people now to have them available as the future draws near. For that reason, a promotion decision made today may impact the Army 20 years from now.

A recently concluded ARI project that identified the knowledges, skills, and attributes (KSAs) NCOs would need in the first quarter of the 21st century and developed valid assessment techniques for these KSAs provided the foundation for ongoing research on selection and promotion of Soldiers and NCOs. These new projects include a longitudinal examination of the KSA assessment tools, the development of knowledge and situation-based promotion tests, and a self-assessment tool to allow Soldiers to identify their strengths and limitations prior to promotion testing. All of these projects capitalize on computer technology to best identify quality NCOs for promotion.





ID 74

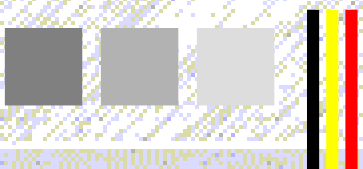
A Promotion Assessment's Transition From Paper to Computer Based Administration

Christopher E. Sager & David A. Katkowski
Human Resources Research Organization

Tonia S. Heffner
U.S. Army Research Institute for the Behavioral and Social Sciences

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) initiated the development of a predictor measure set called the Leadership Assessment Tool (LAT). It was designed to improve promotion decisions for specialists/corporals (E4s) and sergeants (E5s) to the next pay grade, emphasizing the assessment of leadership potential. For example, the LAT's instruments include a situational judgment test and an assessment of relevant experiences. The potential utility of the LAT has been supported by an earlier concurrent validation effort. ARI is presently engaged in a longitudinal validation of this tool. During this study the transition was made from paper to computer administration.

This presentation will discuss the benefits, problems, and lessons learned when moving from paper and pencil instruments to a laptop computer administered assessment. Potential benefits include (a) smoother and less complicated experiences for the participants (e.g., no scantron sheets to fill in), (b) item formats that prevent mistakes and validate responses, and (c) easy collection of precise individual administration time data. Problems to manage and issues to anticipate include (a) the high volume of paper is replaced with the requirement to maintain, manage, and ship computers (if the assessment is not delivered via the internet), (b) computer programs that support the development and administration of instruments are not infinitely flexible, and (c) increased flexibility requires informed choices about optimal item formats. Finally, the paper and computerized versions the LAT will be compared on indices of efficiency such as administration time and amount of missing data.





ID 75

Development of an Army Competency Assessment Test: Experiences and Lessons Learned

Roy Campbell and Karen Moriarty
Human Resources Research Organization

Tonia S. Heffner
U.S. Army Research Institute for the Behavioral and Social Sciences

As the Army transforms, Soldiers at all levels will require the interpersonal, technical, and organizational knowledge, skills, and other attributes to perform effectively in complex technical, information-rich environments, under multiple and changing mission requirements, and in semi-autonomous, widely dispersed teams. The Army needs an integrated Soldier assessment system to support these demands.

To meet the Army's need for job-based measures, the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) instituted a 3-year feasibility research program. The program will identify viable approaches for a noncommissioned officer (NCO) assessment system that is both effective and affordable. The first phase of this project focused on the feasibility and alternative designs of such an assessment. This presentation reviews one aspect of the second phase: the development and administration of an Internet-based prototype assessment.

The development of the DCAP prototype test did not follow the traditional development path. Due to time constraints and the realities of an Army at war, research support was less than ideal forcing us to use abbreviated job analysis and item development procedures. We took advantage of the richer medium that Internet-based testing offers over paper and pencil and included many job knowledge items in non-traditional formats such as "drag and drop," pull-down boxes, and matching items. Also, where applicable, digital photographs and color drawings were used to enhance realism. The benefits of Internet-based testing bring many challenges. This learning and development process will inform future Army assessment decisions.





ID 76

A Self-Assessment Tool to Prepare Soldiers for Promotion

Patricia A. Keenan & Roy Campbell
Human Resources Research Organization

Tonia S. Heffner
U.S. Army Research Institute for the Behavior and Social Sciences

As they begin thinking about their future in the Army, Soldiers face two problems. First, they may not know the requirements for promotion. Second, they often do not know how well their own knowledge, skills, and attributes (KSAs) meet these criteria. The U.S. Army Research Institute for Behavioral and Social Sciences (ARI) funded a study to determine the kinds of information Soldiers can use to identify their strengths and limitations prior to promotion testing.

This study has identified the components for a prototype self-assessment process designed to help Soldiers understand the promotion system better, get a feel for the prototype assessment program, administer and provide feedback on sample test questions, and present exercises designed to help them learn the principles on which they will be tested. For example, a Soldier might read a situation that requires the application of troop leading procedures (TLP) and be asked to describe how best to approach the situation. Assessment feedback will provide a solid answer to the question, emphasizing the important facets of the answer and allowing Soldiers to compare the components of their answers to the example.

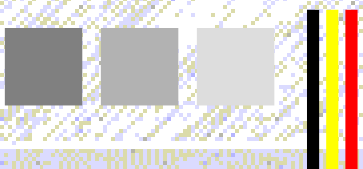
The study is developing a longer-term strategy to move from the prototype self-assessment to a test model that makes self-assessment available to all Soldiers and that can be sustained with reasonable resources. A self-assessment program faces many of the same obstacles as an operational promotion test. Identification and discussion of these challenges is a focus of this project.

ID 77

Cross Cultural Use of Computer Assisted Testing System

Dr. Viktor Oubaid
German Aerospace Center DLR, Hamburg, Germany

The use of computers in the field of psychological testing and assessment has increased noticeably over the past decades. At the psychological department of the German Aerospace Centre (DLR) endeavours are being made to tap the full potential of this medium for the selection of civil and military aviation personnel. A complete database test system was developed with tests in 4 languages. This system is in use for about two years. Cognitive abilities, psychomotor skills and multiple task coordination as well as personality traits are assessed. In cooperation with the Swiss Air Force a shared test battery was composed, taking cross cultural differences into account. First psychometric results and economic effects of this project will be reported.





ID 79

Using Item Response Theory to Develop an Interest Inventory

Mary Pommerich
Defense Manpower Data Center
US Department of Defense

A new interest inventory is being developed for the Armed Services Vocational Aptitude Battery's Career Exploration Program (CEP). The new 90-item interest inventory is designed to help students learn about their work-related interests and explore potentially satisfying occupations, and will replace the longer 240-item interest inventory that is currently in use. The new interest inventory is designed to measure interest in six areas based on Holland's theory of career choice: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). Two separate forms of CEP pretest items were randomly administered in 48 schools throughout the country. One form contained 260 items, while the other contained 255 items. Items were assigned to one RIASEC area. Each student took one CEP pretest form plus the Strong Interest Inventory, which also provided scores in the six RIASEC areas. Matched CEP and Strong records were obtained for a total of 4232 students. Classical statistics were used to eliminate the worst-performing items. Item Response Theory (IRT) methods were then used to evaluate pretest item performance. Within each RIASEC area, the CEP pretest items were calibrated concurrently under a three-parameter logistic model, using a subset of Strong items as anchor items to link the IRT parameters across the two forms. Item information was computed for each item and used in conjunction with content considerations to select items. The application of the IRT methods is discussed, and the IRT results are compared to results based on classical statistics.

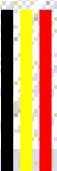
ID 80

Leadership Competencies for Contemporary Army Operations: Development, Review and Validation

Jeffrey D. Horey,
Caliber Associates
Jon J. Fallesen, Ph.D.,
U.S. Army Research Institute

This paper presents the methods and results of a recent effort to revise the existing view of U.S. Army leadership into a future oriented, competency based model and the implications of this model for assessment and leader development. Following a four-year effort that examined Army training and leader development practices and results, the Center for Army Leadership directed a study to better communicate leadership in future operations. The resulting LEVERAGE model consists of eight competencies, 55 components, and over 200 sample actions.

The methodology included conducting an extensive military and private sector leadership literature review, developing projections of future operational requirements, synthesizing





research based leader requirements, gathering feedback from a panel of subject matter experts, and integrating relevant leadership theory and research findings. A select group of experts representing current and retired Army leaders, academia, and other researchers studied and made recommendations to improve the initial framework (competencies and components). This framework was further refined and reviewed by several groups involved in the management of Army leadership initiatives.

The framework is also undergoing validation through the collection of additional ratings on the importance, criticality, and desired amount of emphasis on its elements. Finally, elements have been organized into a model reflecting how competencies are related to one another. The model, methodology, validation results and implications for assessment and development will be described.

ID 85

Military Mental Health: Self-Selected, Mission Related or Selection Biased?

Commander RNLN Marten Meijer Ph.D.

Centre for Research and Expertise of the Veterans Institute, Doorn, The Netherlands.

Victor F. Nederhof MSc

Senior Researcher on Selection Psychology

The centre for Assessment and Selection of the Netherlands Armed Forces
Amsterdam, The Netherlands

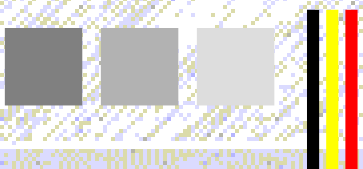
Mark Zamorski, MD, MHSA

Post Deployment Health, Research and Education

Directorate of Medical Policy

Ottawa, Ontario, K1A OK6 CANADA

From research on veterans it appears that the behavior of some veterans is extremely violent, possibly due to mental health problems. They are involved in shootings, robberies, accidents or commit suicide. In this paper we describe a few examples of such violent behavior from Dutch, British and American veterans. We also present statistical analyses of data on violent behavior of armed forces personnel or veterans of the Netherlands and Canada. One explanation regards the self-selection of military personnel and states that the armed forces attract people that are more violent than others. The other explanation for the violent behavior assumes that difficulties in processing wartime experiences result in violent behaviors of veterans. After a discussion of 'the pool of errors' in these data and these analyses we introduce selection biases in mental health as a third explanation for violent behavior. These selections biases are defined as the healthy soldier factor and the deployment selection factor. Finally, we state recommendations for improvements of selection policy and mental health care of military personnel and veterans.





ID 86

Applicability of Civilian Retention Theory in the Military: Predicting Retention in New Zealand

John Capon and Dr. Oleksandr S. Chernyshenko
 Department of Psychology
 University of Canterbury
 Private Bag 4800
 Christchurch, New Zealand

JCapon@hkp.co.nz sasha.chernyshenko@canterbury.ac.nz

Dr. Stephen E. Stark
 Department of Psychology
 University of South Florida
 4202 E. Fowler Ave.
 Tampa, FL 33620
sstark@cas.usf.edu

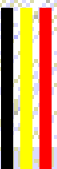
The purpose of this study was to assess the applicability of civilian retention theory in the military by exploring the relationship between established determinants of retention and intentions to remain in the New Zealand Army. Specific hypotheses were made based on the civilian theory and these formed the basis for a preliminary military retention model. The model was then tested on 95 individuals currently enlisted in the New Zealand Army. Regression and path modeling results indicated that job satisfaction and organisational commitment are the proximal predictors of intentions to remain in the military, and that these predictors mediate the relationship between more distal predictors and retention. The results signified the relevance and usefulness of civilian research in predicting retention in the military, and future research directions are discussed.

ID 88

The Department of National Defence and Canadian Forces Your-Say Survey: Methodology and Findings from the 2004 Regular Forces Survey

Sean G. Norton
 Department of National Defence and the Canadian Forces

The Department of National Defence (DND) and the Canadian Forces (CF) has initiated a research project called the Continuous Attitude Survey ("Your-Say"). The first survey has already been developed and recently administered to a stratified random sample of 3,000 Regular Forces members. Separate, tailored surveys are also being developed for Primary Reserves and DND civilians. Together, these surveys will provide time-series data on CF members' and DND employees attitudes about a wide spectrum of strategic human resource (HR) issues. Surveys will regularly provide senior leaders with performance measurement indicators that will be used in combination with other information sources to assess how well DND/CF is meeting its HR goals. Surveys will measure a series of variables over time to allow for comparisons and trend analysis, as well as salient or





pressing issues that are of interest to leaders. This paper describes the project and key decisions that were made regarding questionnaire design, content and sample design for the Regular Forces survey. Preliminary results are also presented by rank group on work-life balance, leadership behaviours, attitudes about DND/CF as a whole, commitment and turnover.

ID 89

Influence of Gender and Minority Issues on Recruiting and Retention

Fariya Syed

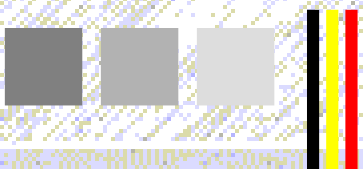
Department of National Defence – Canada

The NATO Research Task Group (RTG) 034 on Recruiting and Retention of Military Personnel identified gender and minority issues as topics related to recruiting and retention of military personnel. The purpose of this paper is to present an overview of research on gender and minority issues in the military with a focus on how these factors are likely to play a role in military recruitment and retention.

Two significant demographic shifts are taking place in most western countries towards an increasingly diverse society and work force. First, there has been a steady growth of visible minority members in the work force. This has led to increasing diversity in culture, language, and belief systems. Second, there has been an increase in female employment.

The demographic shifts mentioned above must be reflected in the composition of nations' militaries to meet recruiting targets. Understanding and acknowledging these shifts is necessary in order to recruit and retain sufficient numbers of minority group members and women to sustain military operations. It is also necessary to ensure that equal opportunities are provided to all members of society who possess the necessary skills to enter careers in the military.

Research on gender and minority issues in the military has examined the potential under-representation of women and minority group members across military occupations and identified potential barriers to recruiting and retaining individuals from these groups. Further research has examined gender and minority issues influences on recruiting and retention of personnel. With regards to recruiting, research findings suggest attraction and marketing strategies can be influenced by gender differences. Research has also been conducted to ensure selection and classification measures are unbiased towards certain groups. Research findings indicate, gender and minority issues are indirectly linked to retention under Organisational Justice Theory and Equity Theory. Research in the above mentioned areas will be discussed.





ID 90

Implications of a Meta-analytic Review of Recruiting Correlates for Military Recruitment

Derek S. Chapman, Ph.D. University of Calgary
 Krista L. Uggerslev, Ph.D. University of Manitoba
 Sarah Carroll, MSc. University of Calgary
 Kelly A. Piasentin, MSc. University of Calgary
 David A. Jones, Ph.D. University of Vermont

Attracting high performing applicants is a critical component of personnel selection and overall organizational success. In this study, we meta-analyzed 667 coefficients from 71 studies examining relationships between various predictors with job/organization attraction, job pursuit intentions, acceptance intentions, and job choice. The moderating effects of applicant gender, race, and applicant versus non-applicant status were also examined. Results showed that applicant attraction outcomes were predicted by job/organization characteristics, recruiter behaviors, perceptions of the recruiting process, perceived fit, and hiring expectancies, but not recruiter demographics or perceived alternatives. Path analyses showed that applicant attitudes and intentions mediated the predictor-job choice relationships. We discuss the implications of these findings in the context of military recruitment.

ID 92

The Role of Leader-Member Exchange During Organizational Changes

Simon P. Gutknecht
 Military Academy at the Swiss Federal Institute of Technology Zurich, Switzerland

The Swiss Army is undergoing profound changes. Findings based on interviews with professional military personnel show that the measures taken have a considerable impact on satisfaction with context factors such as career, pay, etc. Even though all members of the military cadre are equally affected by the measures taken, it seems that the ways these measures are perceived vary considerably.

In the present study these findings are further analysed. We put forward the hypothesis that the assessment / perception of a changed organizational context depends to a considerable extent on the quality of the Leader-Member Exchange (LMX). So, if a person gets along well with his or her direct superior, this also shows in a positive attitude towards the organisation as a whole. This again has an impact on the lower number of instances when, in difficult circumstances, people ruminate on intentions to quit.

We can show in two cross sectional studies that the impact of the LMX variable is substantial and first of all of an indirect nature. Evidence of direct effects can be found in the longitudinal study.

In this context it is important to consider the disposition of the person. The variable „negative affectivity“, which was taken into consideration in this study, has a significant impact on LMX as well as on the context factors and thus influences potential intentions to





hand in one's notice. The paper includes a discussion of the findings and practical implications to be drawn.

ID 93

The Career Field Structure Implementation Process

Mr. Brian R. Thompson and Captain Eric J. Arsenault
Canadian Forces MOSART Project, NDHQ, Ottawa, Canada

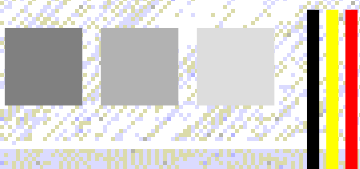
In the Canadian Forces (CF) the current structural entity in force to manage the world of work for the military member is the occupational structure. The Military Occupational Structure Analysis, Redesign and Tailoring (MOSART) Project is currently developing Career Fields. Career Fields are a grouping of Military Occupations and/or common/generic jobs, used for the purpose of both, enhancing operational effectiveness and broadening individual career development to meet the Environmental and CF requirements. This is achieved through the rational grouping and management of occupational and/or professional development functions within a framework serving both the Service and the individual. The process of implementing such a structure has imbedded within it a myriad of challenges. The recruitment, assignment, compensation and management of personnel and positions within the Career Field and their inherent link to the current occupational management entity or in fact the existence of personal and positions autonomous within the Career Field has necessitated a re-think of the entire CF Occupational Management process. This paper will provide an insight into the methodology adapted to put in place this new hieratical structure and the lessons learned through the implementation process.

ID 97

Occupational Analysis in the United States Army: Past and Present

Elizabeth J. Brady, Ph.D.
U.S. Army Research Institute for the Behavioral and Social Sciences

The ways in which occupational analysis has been conducted in the United States (U.S.) Army has changed dramatically over the past decade. It's important to take a look at where we've been and where we are now in order to better gauge where we need to go in the future. In the past, it was not uncommon for a job analysis project to take a year and a half or more to complete. Considerations had to be made for survey development, printing, data collection, analyzing, and reporting the findings. Presently, this process takes a fraction of the time. This is, in part, due to the creation of the Automated Survey Generator (AUTOGEN). The U.S. Army proponent schools are using the AUTOGEN for developing, gathering, analyzing, and reporting information in a timely fashion. Surveys can now be developed in a matter of hours, and sent out via the Internet, E-mail, floppy disks, or local area networks. As technology advances, so will survey development. This paper will focus on conducting job analysis surveys at the present time, but highlights from the past will also be discussed.





ID 99

Theory-Based Recruiting Practices

Derek S. Chapman, Ph.D., University of Calgary
David A. Jones, Ph.D., University of Vermont

We develop a theoretical basis for recruitment research by conceptualizing recruitment as a process of active persuasion. We present a framework in which persuasive techniques are proposed to influence perceptions of person-organization fit and, ultimately, job choice. We apply theories of persuasion (e.g., the Elaboration Likelihood Model) to message source and content variables and offer predictions to inform research and practice across the attraction, maintenance, and offer stages of recruiting.

ID 100

Myths and Facts About Online Testing

Eugene Burke
SHL, UK

This paper pulls together a number of studies and recently published research to look at the opportunities offered by online testing, and myths about the security and validity of scores obtained from Internet assessments.

Specifically, the paper covers:

- Cheat resistant formats that manage socially desirable responding for screening purposes as well as for personality assessment
- Delivery of IRT based ability testing using randomised testlets to manage item exposure
- Results of studies in the UK, Asia and Australia that show:
 - Low incidence of aberrant responding (i.e. cheating) to online screening ability tests
 - Low levels of response distortion to personality questionnaires delivered online

Recent research findings on faking good are reviewed to understand the disposition for applicants to cheat on online tests, and simple methods such as retesting those screened are explored as methods for managing cheating behaviours. Examples of processes blending online and offline (PC or paper-and-pencil) assessments are described along with the financial benefits obtained by organisations such as a 37% reduction in the cost to hire.





ID 101

Personnel marketing in turbulent times: Recruitment and retention Activities for Ailitary Personnel in the Swiss Army

Dr. Hubert Annen

Military Academy at the Swiss Federal Institute of Technology (ETH) Zurich
Switzerland

The fact that the military personnel has always been below regular strength has been an issue in every army reform. Already in the wake of the implementation of “Armed Forces XXI” – a reform that started in 2004 – it was clear that the problem of understaffing could get worse. Therefore, the information campaign “military personnel” was launched in March 2000. On the basis of a representative survey measures were taken to recruit more qualified personnel interested in a career with the army. Yet, general lack of funding constrained those responsible to make adjustments already during the implementation of “Armed Forces XXI”. Faced with a growing dissatisfaction among the military personnel, retention activities came to the fore.

The paper provides an overview of the recruitment activities as well as figures to illustrate the success of the measures taken. A further topic are the findings of a empirical study on attitudes of Swiss professional military personnel regarding their organisation. We have tried to find out the impact of three kinds of factors - i.e. kind of work, social (e.g. relationship with superiors) and contextual (e.g. salary, job security) - on the satisfaction with the activity. We furthermore looked into the extent of commitment as well as its predictability regarding the intention to resign from a job. The findings were then used in a workshop with selected professional military personnel to discuss possible consequences. The results of this workshop are also presented in this paper.





ID 102

Compensation: U.S. Navy Research Initiatives and Applications

Tanja F. Blackstone, Ph.D.
Navy Personnel Research Studies and Technology
PERS-1300
5720 Integrity Drive
Millington, TN 38055-1000
Phone: (901) 874-4642
Email: Tanja.Blackstone@navy.mil

Historically, the U.S. Navy has used selective reenlistment bonuses (SRB) to induce retention in critical skill groups. While SRB's have been shown to be effective, the effectiveness is limited and can be relatively costly. Retention bonuses are paid to all eligible individuals in critical skill groups, even if the individual's intention would be to reenlist absent the bonus. Similarly, individuals in a given skill group all receive equivalent bonus amounts. This standardized approach to bonus awards ignores the 'true' compensation level required to induce the desired retention behavior. Further, the SRB program has had limited success in filling jobs in undesirable locations.

Alternatives to the SRB program include a flexible market based incentive system. Beginning in 2003, the U.S. Navy, in a limited test case basis, implemented Assignment Incentive Pay (AIP). AIP uses a simplified modification of a first price auction and has been shown to have success in filling positions in historically undesirable locations. Advances to AIP currently under development include the Distribution and Incentive System, (DIS). DIS incorporates an advanced optimization technique that considers the sailor's bid and Navy costs in the job assignment process.

In this paper we discuss (1) the use and effectiveness of the U.S. Navy's SRB program, advances in modeling and estimating the impact of SRB on reenlistment behavior, (2) experimental results of the feasibility of a multi-attribute auction in assigning military personnel to jobs, and (3) based on preliminary basic research results couched in choice theory, the net benefits of a flexible compensation plan is discussed.





ID 103

Effect of Sea/Shore/Overseas Rotation on Enlisted Examination Results

Kiwanis G. Short
Darlene A. Barrow

Navy Enlisted Advancement Center
Naval Education & Training Professional Development & Technology Center
Pensacola, Florida

This paper examines the effect of sea/shore/overseas rotation on US Navy Enlisted Examination results. Performance of Sailors at different duty stations will be compared.

Historically, for many job ratings, Sailors performing their duties at sea tend to perform better on the advancement examination than Sailors attached to a shore or an overseas duty station. This hypothesis will be analyzed in this study.

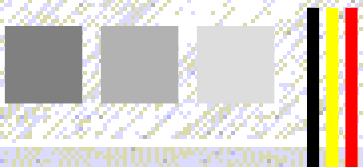
This study seeks to verify and contribute to the future approaches the US Navy takes toward future examinations and/or advancements.

ID 104

Social Network Analysis: A Diagnostic Feedback Tool to Enhance Organizational Connectivity

Mr. Daniel Lee
LtCol Beng-Chong Lim, PhD
Applied Behavioral Sciences Dept, Ministry of Defence, Singapore

A social network is a set of actors (or points or nodes or agents) that may have relationships with one another. Social Network Analysis (SNA) is the use of mathematical and graphical techniques to represent the descriptions of social networks compactly and systematically. This presentation describes the application of SNA in a military organisation that comprised 28 departments. SNA was used in the context of an Organization Development effort to enhance inter-department connectivity. Representatives from each department were asked to provide ratings to three types of network. The resulting network analysis provided important insights into the current level of connectivity among the 28 departments in the organization.





ID 105

The transformation into an All-volunteer Force: Lessons Learned in Spain

Maj. Narciso Michavila PhD
Statistic Unit of the Army, Spain
michavila@et.mde.es

The transformation of the Spanish Armed Forces into an All-volunteer Force started in 1996 and finished five years later. During these years several decisions have been taken to improve the recruitment and retention of the enlisted by the MoD, such as:

- Massive Advertisement campaigns
- Modification of the requisites to join the Army
- Increase of salaries
- Recruitment of non-nationals youths
- Implementation of a continuous selection system

The impact of these decisions on the recruitment will be assessed in this paper, together with the influence of other substantial factors that affect the number of applicants. The most remarkable of these factors are:

- Demographic reduction of the contingent of young people available
- Improvement of the labor market
- The end of conscription, which was the best means to attract volunteers
- Increase of competition from other options: local polices, national police, *Guardia Civil*, etc.
- Emptiness of the pocket of recurrent applicants
- Impact of international crisis: depleted uranium in Kosovo, Perejil island incident, participation and withdrawal in Iraq, etc.

The comparisons with the military and social reality in other NATO countries will be present in the paper, as well as the detection of future factors that have influence in the recruitment and retention of military personnel: evolution of demography, employment, technology, salaries, educational level and presence of minorities.





ID 107

Predicting Safety and Service Orientation: Screening Applicants for Dependability

Eugene Burke
SHL, UK

This paper reports the UK validation of a measure originally designed in the US to screen applicants to the transportation industry for safety orientation. The questionnaire takes about 15 minutes to complete. The validation reported for an N of 102 also included a personality questionnaire (the Work Style Questionnaire or WSQ) from which markers of the Big 5 personality structure were derived. Building on the work of Ones on integrity tests and Digman on the Higher Order Factors of Alpha and Beta, the study reports both construct and criterion validity. Criterion used was a questionnaire covering behaviours such as the extent to which the ratee was reliable in attending for duty, could be relied upon to complete tasks, and their ability to cope with pressure and setbacks. Reliabilities of scales in the rating questionnaire, completed by supervisors, ranged from 0.6 to 0.8. US results showed a reduction in accident rates of 16% and an improvement in attendance for duty of 7%. The UK study also shows that the measure offers validities in the range of 0.2 to 0.4, uncorrected for range restriction, in predicting levels of counterproductive behaviour. The paper provides links to broader theory on personality.

ID 109

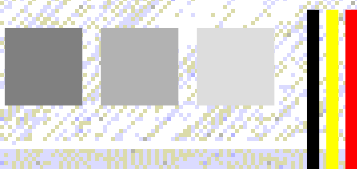
The U.S. Navy's Rating Identification Engine: Optimizing Human Resource Allocation

Dr. Stephen E. Watson
US Navy Selection & Classification Office

The United States Navy has developed a new technology for screening and matching Sailors to jobs in order to maximize valid job qualification and productivity. The application houses a variety of job screening and optimizing modules, and is referred to as the Rating Identification Engine (RIDE) when used with new recruits during initial classification, and as Fleet-RIDE, when used with in-service Sailors who are considering reclassification.

RIDE and Fleet-RIDE feature a 3-stage process:

1. Initial medical, moral and mental qualification screening. Requirement profiles for all Navy Program/Ratings are compared to the applicant's qualification profile to develop a pool of qualifying jobs.
2. Job matching optimization. Using heuristic algorithms based on the Watson-Folchi (1999) performance-based functions, qualified jobs are ranked to list optimally challenging jobs progressively toward the top, and over- or under-challenging jobs progressively toward the bottom. Future versions will incorporate job interest profiles (Watson, 2003) to this rank ordering process.





3. Applicants are presented with additional job information and supplemental requirements specific to jobs under consideration, and applications for enlistment/conversion are processed and submitted.

RIDE has undergone pilot testing in 2002-2003 and is under production development. Fleet-RIDE has passed pilot testing and production testing in FY04, and will go operational in FY05. Current paper discusses validation data and analyses to date.

ID 110

Endogenous and Exogenous Attention in Vigilance Tasks

Nathalie Pattyn, Capt., M.D.^{1,2} and Prof. Eric Soetens³

¹ Department of Physiology, Vrije Universiteit Brussel, Brussels, ² Royal Military Academy, Brussels, ³ Cognitive and Physiological Psychology, Vrije Universiteit Brussel, Brussels.

npattyn@vub.ac.be

Despite the crucial importance of vigilance for cognitive performance, the attentional mechanisms involved are scarcely understood. Vigilance decrements over time are simply described as an increase in reaction time or errors. Because of the importance of vigilance for their task, we investigated the evolution of endogenous and exogenous attention over time on task in a group of Air Traffic Controllers (ATC's) and controls. We expected people trained in vigilance tasks to be less susceptible to changes in vigilance over time, especially for endogenous cueing. Subjects had to detect a target in one of two groups of geometric figures presented left or right from fixation. Response-stimulus interval (RSI) ranged from 5 to 40s. Targets were preceded by a cue, indicating its likely location. Cues were central arrows in the endogenous, and peripheral changes of brightness in the exogenous condition. As expected the results showed a decrease of the endogenous cueing effect over time for controls only, whereas no such difference between groups was observed with exogenous cues. Further, the endogenous effect increased and the exogenous effect decreased with RSI for controls only, whereas no RSI effect was found for ATC's. The results show that endogenous attentional processes are most vulnerable to the passing of time. People trained in vigilance tasks seem to be less susceptible to this effect. In general, these data demonstrate that more research is needed to study the underlying processes of vigilance decrement in order to be able to develop adequate tests for measuring sustained attention.





ID 111

Examination of Military College Scholarship Selection Model Validity

Akihito Kamata, Gershon Tenenbaum,
Cathleen Alfano, Carla Urena Hutchinson, and Laura Hassler
Florida State University, U.S.A.

Data from 13,788 high-school applicants to a military college scholarship program in the United States during the years 2000-2002 were examined for its predictive validity of scholastic and personal characteristics on criteria measured during three consecutive academic years while they were attending college. Three criteria were military aptitude, grade point average on college courses, and grade point average on military science courses. It was revealed that Scholastic Aptitude Test (SAT) math, high school teachers' marks, rank in high school, interview evaluation, SAT-verbal, and intellectual motivation accounted for the majority of the variances of the three criterion measures. However, the predictive power of all the selection variables together was not high, ranging between 6.1-14.7% accounted variance of the criterion variables. Alternative models are suggested and tested to improve both the ecological and predictive validities of the model.

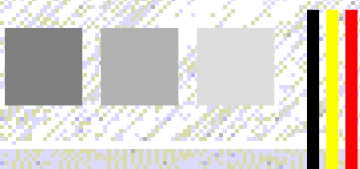
ID 112

**Team Mental Models and Team Performance:
A Field Study of the Effects of Team Mental Model Similarity and
Accuracy**

Lt Col Beng-Chong Lim, Ph.D.
Applied Behavioral Sciences Dept, Ministry of Defence Singapore

Katherine Klein Ph.D.
Wharton School, University of Pennsylvania

We conducted a field study of 71 action teams to examine the relationship between team mental model similarity and accuracy and the performance of real-world teams. We used Pathfinder to operationalize team members' taskwork mental models (describing team procedures, tasks, and equipment) and teamwork mental models (describing team interaction processes) and examined team performance as evaluated by expert team assessment center raters. Both taskwork mental model and teamwork mental model similarity predicted team performance. Team mental model accuracy measures were also predictive of team performance. We discuss the implications of our findings and directions for future research.





ID 114

Scale Shift in CAT: Should We Fix Anything At All?

Dr. Ivailo Partchev and Prof. Dr. Rolf Steyer
University of Jena, Germany

Online calibration is nowadays the preferred approach to the replenishment or the replacement of item pools in computerized adaptive testing (CAT). Technically, it is usually achieved by marginal maximum likelihood estimation, keeping the parameters of the operational and/or anchor items fixed at their precalibrated values. While this procedure is expected to place parameters on the proper psychometric scale, there are fears that it may actually lead to scale shift in a sequence of successive calibrations.

We discuss the possible causes of scale shift and the optimal ways to diagnose the occurrence of the phenomenon through simulation. Based on our own simulation studies, we try to identify conditions in which scale shift does or does not occur.

ID 115

Decision Conferencing within a Multimethodological Framework: Developing a Performance Appraisal Model for the Portuguese Army Officers

João P.C.F. Thomaz^{1,2} (fernandesthomaz@leirianet.pt)
Carlos A. Bana e Costa^{2,3} (carlosbana@netcabo.pt)

¹ Portuguese Military Academy & Military Academy Research Centre (CINAMIL),
Paço da Rainha, 1150-244 Lisbon, Portugal

² Centre of Management Studies (CEG-IST), Instituto Superior Técnico,
Av. Rovisco Pais, 1049-001, Lisbon, Portugal

³ London School of Economics, Department of Operational Research,
Houghton Street, London WC2A 2AE, U.K.

Over the last ten years, the Portuguese Army's officers have been evaluated annually by their commanders, who have used a simple notation model which includes 16 attributes and a specific 5-level descriptive scale for each one. This model has become ineffective for several reasons, mainly because it is no longer able to distinguish between very good and good performers. This paper describes the intervention process in which Decision Conferencing, Process Consultation and Multicriteria Decision Analysis were used in a multimethodological framework aiming at conceiving a new model that would be suited for integration into the Portuguese Army's personnel management system, not only for the appraisal of officers' performances, but also to evaluate each officer's individual potential in terms of functional specialization. The structuring phase of the process was developed by a multidisciplinary work group, during which a new competency based model was created. The competencies were identified in "post-it" sessions and using the decision





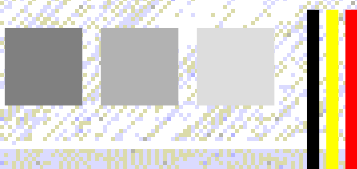
support system Decision Explorer for the construction of cognitive maps. Evaluation measures for the competencies were proposed and their additive aggregation enabled to define a global performance appraisal index, taking into account the institutional importance of each competency. This was performed in a decision conference in which weights for the competencies were assessed from a representative high-level group of the Army Personnel Command making use of the MACBETH decision support system.

ID 117

Varieties of Postmodern Individuality: Implications for Soldierly Self-Definition

Guenter Fleck
Institute for Human and Social Sciences
National Defense Academy
Vienna, Austria

Human history now has entered an epoch called postmodernism. One can observe increasing interest and acceptance of postmodernistic thinking in many areas of life, on the one hand, and a critical stance, even a total rejection, on the other. This is also significant for the military. Intense and highly controversial debates take place especially in regard to human development including the making of soldiers, their value orientation and identity. The postmodern world view is either made responsible for deficiencies in personality development leading to the fragmentation of self, or it is propagated as a means promoting an optimum of personal growth and self-actualization. From a psychological perspective both versions of postmodern individuality exist. The question to be answered refers to the conditions responsible for generating these types of individualities. To find possible answers, first a sketch of the existential conditions of every day life is presented. It will be followed by a conception of the image of man, which is considered adequate for the human being. Thereby basic theories of personality and personality development and their underlying assumptions are discussed and linked to individual self-organization. Finally, a model of personal growth is presented, which enables understanding the generation of postmodern individuality. This is linked to the issue of defense motivation and the readiness of soldiers to engage increasingly in international military operations in order to protect democratic values and human rights.





ID 118

Military Pedagogy and the Postmodern Transformation of Soldiership

Jarmo Toiskallio
Department of Education
National Defense College
Helsinki, Finland

There is much talk today about the transformation of defense and the militaries. Not so much is discussed the problem that we might lack theoretical concepts and frameworks in order to understand the transformation. Especially there seems to be a profound need for a new thinking at the pedagogical level of education and training. Here an outline of military pedagogy as a theoretical approach with action competence as its core concept is presented.

The basic idea behind the action competence approach is that war and different kind of military actions still are, fundamentally human acts. They are not acts of ‘cyborgs’ or computer-like minds, but acts of embodied human beings in a very deep sense. In order to manage with the evolving complexities and difficulties of the military actions, humanity and individuality have to be seen more profoundly than they have been taken in the traditional military education and training. The individual soldier as an ethical subject – ethics as the hard core of action competence – is the focus of my study. Perhaps it should be taken to be the main challenge for military pedagogy, how to develop soldiers as human beings responsible for their actions.

ID 119

Warrior, Helper, Adventurer? Soldierly Self-Identity in Missions

Jörg Keller
Bundeswehr Institute of Social Sciences, Germany

The article deals with the experience of German peacekeeping units deployed to Bosnia (SFOR 7 and 8), in 2003/2004, on the basis of interviews and a questionnaire survey. The major research topic was the motivation and self-perception of German soldiers across all rank categories in peacekeeping missions. The results of the quantitative and qualitative study emphasize that there are different types of self-identity among the soldiers.

The German organizational philosophy for the Bundeswehr (*Innere Führung*) acclaims a very special type of soldier: based on ethics and oriented toward the society, the so called “Staatsbürger in Uniform” (*Citizen in Uniform*). Thus, out-of-area missions sometimes attract people showing attitudes of adventurers, mercenaries, or warriors, that is, individuals who do not fit within the scheme of the *Citizen in Uniform*. Which types are found in the German peacekeeping missions in Bosnia? That was the question. Based on a simple theoretical concept with two dimensions (social orientation and ethical orientation),





an attempt was made to examine whether the soldiers are citizens in uniform, technocrats, warriors, or traditional soldiers.

The results show that German soldiers in Bosnia mostly belong to a type we called “Helper in Uniform”, that matches with the *Citizen in Uniform*, prescribed by *Innere Führung*.

ID 120

Motivation of Austrian Soldiers to Engage in International Military Operations

Helmut Slop

Austrian International Peace Support Command

Götzendorf, Austria

Ludwig Krysl

National Defense Academy

Vienna, Austria

The Centre for Operations Preparation (COP) is the Austrian administrative home base and the national and international training centre for peace support operations. The psychology section within the COP is responsible for the psychological selection, training and care-giving before, during and after peace support operations. One of the psychological post-mission measures is the preparation of all repatriates from the current Austrian contingents for redeployment approximately two weeks before their rotation in the mission area. According to this psychological preparation each soldier has also to fill in a special questionnaire concerning his experiences and opinions about his deployment.

This anonymous questionnaire is designed to provide a lot of information about all phases of the deployment, from the recruitment and selection, the pre-mission training, the life and daily duty during the deployment, up to the future prospects of the soldiers.

The main topics of the questionnaire are: motivation for peace support operations, attitudes of family, friends and comrades toward the assignment, pre-mission phase, attitude toward and dealing with danger, living- and working conditions in the mission area, leadership style of commanders, social relationships, leisure-time activities, apprehensions and future prospects.

The results of this survey yield several helpful findings for evaluating the lessons learned for psychological selection, training and care-giving and help to make the deployment more effective and successful for all persons involved.





ID 123

U.S. Army Recruiter Selection Research: Another Update

Walter C. Borman

Personnel Decisions Research Institutes and University of South Florida

Leonard A. White and Mark C. Young

U.S. Army Research Institute for the Behavioral and Social Sciences

U. Christean Kubisiak, Kristen E. Horgen, Lisa M. Penney, Valentina B. Lee,
and Patrick W. Connell

Personnel Decisions Research Institutes and University of South Florida

A primary purpose of our research program with the U.S. Army Research Institute (ARI) and the Army Recruiting Command has been to develop and validate a screening battery to help select noncommissioned officers (NCOs) likely to succeed in the recruiting environment. The research approach was first to conduct a concurrent validation (CV) with about 500 Regular Army production recruiters on the job. The main components of the battery were ARI's Background Information Questionnaire (BIQ) and Assessment of Individual Motivation (AIM). Results of the CV showed significant validities for both the BIQ and AIM, against a composite sales effectiveness criterion.

In addition, a predictive validation (PV) was conducted employing a revised test battery (now called the Noncommissioned Officer Leadership Skills Inventory (NLSI)) in conditions closer to those to be expected in operational screening. Initial results on a sample of 2241 recruiters are, first, attrition from the recruiter school is related to NLSI scores. For example, attrition for the highest quartile of NLSI scores was 6.7%, compared to 15.5% for the lowest quartile. Second, sales volume results indicate that recruiters who score higher on the NLSI have higher production.

Finally, validity analyses are proceeding for a sample of about 375 recruiters against peer and supervisor job performance ratings which focus on parts of the job beyond production (e.g., community-relations). Preliminary findings from the PV indicate that the NLSI continues to be a reasonably valid predictor of recruiter performance. We are also investigating expanded applications of the NLSI for Drill Sergeants.





ID 124

Army Personal Development Record: Simply a Personal Tool for Development?

Shar R. J. Nokes

Ministry of Defence (Army), United Kingdom

Retaining effective personnel is a problem the British Army shares with most employers. The Army lost 13% of its total strength between August 2002 and July 2004, outflows with direct financial and operational impact on the organisation. One response, prompted by the Strategic Defence Review and the Adjutant General's Human Resources Strategy, has been to introduce a Personal Development Record (PDR) in September 2000, to encourage Personal Development, improved individual skills, wider employability and, therefore, retention.

The PDR is a boxed file with general and specialist sections to record past achievements and provide a 'route map' to identify and achieve future goals. Electronic versions are available and extended specialist section options are among the further developments in the pipeline. It has been issued to all Serving Personnel and is basic issue for new recruits.

Using questionnaire surveys, the distribution, perception and usage of the PDR is being evaluated over a 5-year period using item analysis. The findings to date show a wide distribution of the PDR, but limited usage. It is also clear that many soldiers are unclear or unconvinced of its value as yet.

The PDR has become, however, more than a personal tool to help individuals. Under Army guidance, its functions now include providing the structure for annual Appraisal interviews. This educates and supports both the employing officers and the soldiers in the Appraisal process. It gives the Army a valuable tool to promote management skills and organisational change.

ID 125

Terrorism Fighting Readiness Related to "Classic" Psychological Combat Readiness in the Croatian Armed Forces

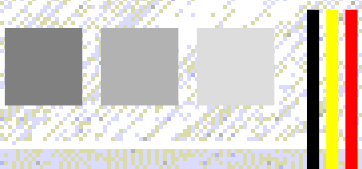
Tomislav Filjak

Dijana Denačić

Ministry of Defence of the Republic of Croatia

Terrorists attack escalation over the past several years, their catastrophic consequences as well as the announcement of "the war against terrorism" set the attention to the role of military in terrorism fighting affairs. There is no doubt that in the situations of the kind, as in any other fields of activities, the viewpoints of soldiers significantly affect their pre-crisis preparation as well as their performance in a crisis situation.

For the first time, in Croatian Armed Forces (CAF) in November 2001 together with the regular psychological combat readiness survey, terrorism attitude research was conducted.





Direct occasion for this were terrorist attacks on USA in September 11, 2001 and the establishment of “antiterrorist alliance”.

Sample of 888 subjects was submitted to the research in 2001, and the same research was repeated in November 2002 on 671 examinees, and then in December 2003 on 645 persons.

Psychological combat readiness was examined by standard questionnaire PBS (8 subscales and 45 questions) while the research related to terrorism through 10 items.

Comparison of items factor structure related to terrorism which were reached through 3 researches show that they are grouped into 3 relatively steady factors: informed soldiers, fighting readiness estimation and prediction of terrorism fighting success.

Common factor-analysis of PBS questionnaire and items related to terrorism shows that there is no overlapping, which means that PBS questionnaire gives the usual 7- factors structure and terrorism items gives 3 above mentioned factors.

Therefore we may come to the next conclusion: among (Croatian) soldiers terrorism fighting readiness is an independent construct and a special type of readiness when compared to “classical” combat readiness.

ID 126

Optimizing US Navy SEAL Selection

Dr. Lisa J. Mills

US Navy Selection & Classification Office

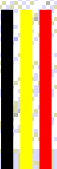
Janet D. Held

US Navy Personnel Research Studies & Technology

The Global War on Terrorism has generated increased manning requirements for US Navy Special Forces. A significant challenge in meeting these new requirements is the historically high attrition rate in SEAL (SEa/Air/Land) training. The US Navy is conducting a formal evaluation of the SEAL selection process and developing strategies for improvement.

To be selected for SEAL training, candidates must achieve minimum qualifying scores on the Armed Services Vocational Aptitude Battery (ASVAB) and meet specified performance standards on the SEAL Physical Screening Test. Efforts for near-term improvements will focus on maximizing the validity of the current predictors and increasing process efficiency to bring better candidates to Basic Underwater Demolition / SEAL (BUDS) training. A parallel and somewhat longer term effort will focus on augmenting existing predictors with psychological tests of personality / temperament, with the ultimate goal of creating a comprehensive battery of SEAL training predictors.

Data will be presented on SEAL training attrition and the relationship between the current SEAL selection variables and training performance. The plan for optimizing SEAL selection will be outlined and preliminary results reported.





ID 127

Assessing Cultural Attitudes, Values, & Beliefs

Patrick C. Kyllonen
Lazar Stankov
Educational Testing Service (ETS)
Princeton, NJ, USA
pkyllonen@ets.org
lstankov@ets.org

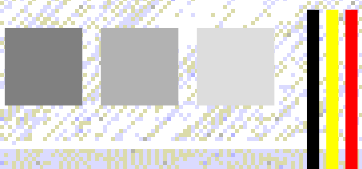
Cultural differences are becoming increasingly important as a result of globalization and increased engagement in multinational military operations, as well as international business and educational activities. How do we characterize those cultural differences? The purposes of this project were to (a) identify psychological measures of personality, attitudes, and values known to be sensitive to cultural influences, (b) determine the dimensionality of the space defined by these measures, and (c) examine differences between cultural and national groups on these dimensions. We administered a wide range of personality, social attitudes, and values questionnaires and rating forms over the World Wide Web to 2,000 non-native speaking Test of English as a Foreign Language (TOEFL) test takers from 20 different countries. Questionnaires measured personality (Big 5 factors plus additional; Saucier & Goldberg, 2002), values (8 dimensions; Schwarz & Bardi, 2001; 5 dimensions; Hofstede, 2001), and social attitudes (6 dimensions; Saucier, 2000; 2 dimensions; Stankov & Knezevic, in press). Factor analyses yielded a number of dimensions, but also suggested considerable overlap among the various measures; national group differences were found on all dimensions. We will discuss how this work will contribute to an understanding of cultural differences and open the possibility of developing a set of guiding principles and training modules for those who need to interact with members of societies other than their own.

ID 128

Trends in Testing: Simulations, Situational Judgment, Video, and ICT Literacy

Patrick C. Kyllonen
Educational Testing Service (ETS)
Princeton, NJ, USA
pkyllonen@ets.org

Advances in technology, psychometrics, and cognitive psychology provide an opportunity to consider new kinds of assessment methods that may prove useful as supplements or replacements for the conventional tests commonly used in enlisted and officer selection, classification, promotion, and certification. In this presentation I will review and provide demonstrations of four new tests that have been developed at ETS over the past year. The simulation test is a computer network simulation that enables trainees to acquire knowledge and skill in understanding and designing computer networks by having them interact with the simulation. Simulation tests are no longer novel, but the innovation in this





system is that performance is scored in an embedded fashion by a Bayesian inference network that interprets all learner actions as indications of knowledge and skill. The situational judgment test is web-delivered business problem solving exercise. It leads examinees through a realistic, complex problem, and has them make judgments about the best course of action. The score indicates the degree to which the examinee's choices match those of experts. The video test is an assessment of an examinee's listening communication skills. Live actors act out situations that present communication problems and possible responses to those problems. The examinee rates the quality of the response, or chooses which of several responses is best. The ICT literacy test measures the examinee's familiarity with common computer and web applications, such as e-mail, word processing, spreadsheets, and web searching methods. I will discuss several advantages of these new tests, the most important of which is that they can be used for training as well as selection, and they can serve as job previews.

ID 129

Generalisability of the Psychometric Properties of a Pilot Selection Battery

Agnès Kokorian
People Technologies, UK
agneskokorian@ntlworld.com
&
Colin Valsler,
Psytech Ltd, UK
colin@psytech.demon.co.uk

This paper presents the R&D objectives as well as reliability and construct validity evidence supporting the Pilot Aptitude or *PILAPT* computerised test battery designed for the selection of pilots. Data is presented from seven military sites across Europe and South America and a total sample size of 4,487 applicants to military pilot. The consistency of the reliability estimates across different national/language sites with different selection processes and different applicant populations suggests that the psychometric properties of *PILAPT* scores are generalisable across settings. The construct validity data show how a substantial amount of the predictor space for pilots has been captured by short and efficient computer-based tests.





ID 130

Validity of Computer-Based-Testing and Psychological Assessment in Controlling False Positives

Lieutenant Colonel Carlo SERUSI (psychologist)
Italian Air Force Selection Centre
c.serusi@tiscali.it

Captain Pierpaolo CALANNA (psychologist)
Italian Air Force Selection Centre
p.calanna@mac.com

The false positive rate in selecting military pilot candidates may be considered as an important criterion when evaluating measures of pilot aptitude. The aim of this study was to determine the validity of a selection protocol based upon Italian Air Force selecting procedures and the *PILAPT* computerised test battery. The main hypothesis was that such a protocol would reduce false positive rate. Participants were 90 Italian applicants to military pilot. Data were analysed in three stages: first an explorative factor analysis was conducted on *PILAPT* subscales, which revealed a two factor solution. Subsequently, t-tests and biserial correlation were employed in order to identify relationships between flight training outcome and the collected variables. Finally, a logistic regression was used to verify the significance of the variables used as predictors against pass/fail criterion in flight training results. The tested model showed a good fit and, in particular, offered low false positive rate. These results tend to confirm the validity of the proposed selection protocol.





ID 131

Generalisability of the Criterion Validity for a Pilot Selection Battery

Agnès Kokorian
People Technologies, UK
agneskokorian@ntlworld.com

Colin Valsler,
Psytech Ltd, UK
colin@psytech.demon.co.uk

Jaime Cabrera Tobar
Chilean Air Force
jaimecabre@hotmail.com

Rui Bartolo Ribeiro
Portuguese Air Force
rmribeiro@emfa.pt

The purpose of this paper is to complete the symposium by sharing criterion validity results across four national sites and four different pilot applicant populations used to provide an initial evaluation of the transportability of PILAPT validities. The four national sites were Chile, Italy, Portugal and the UK. The Schmidt-Hunter (1990) model for psychometric meta-analysis was used to determine whether validities varied by language, type of applicant, type of training and platform on which the applicants were tested. The analysis shows a lower bound estimate for PILAPT validity of 0.33 uncorrected for range restriction. These results alongside those presented in the other two papers in this symposium do suggest robust levels of criterion validity across sites and training programmes. Furthermore, allied with construct validation evidence and that PILAPT design and development was based on a larger scale meta-analysis of pilot validities, the results are in line with a confirmatory model for developing measures of pilot aptitude.





ID 132

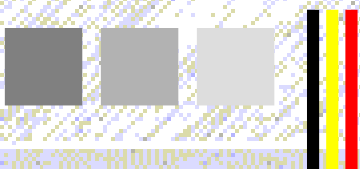
Selection Criteria for Officer Applicants: An Analysis of Admissions to the U. S. Naval Academy

Prof William R. Bowman
U. S. Naval Academy
Annapolis, Maryland 21402
(410) 293-6881/6899
bowman@usna.edu

Prof Stephen L. Mehay
Naval Postgraduate School
Monterey, California 93943
(831) 656-2643/3068
SMehay@nps.edu

Most selective colleges, including the U.S. Naval Academy, rely on quantitative indicators to predict applicants' academic performance and to select applicants to admit. These indicators normally include SAT scores and high school GPA or high school class rank. Recently, due to pressure to diversify incoming classes, many selective colleges have shifted toward a greater reliance on qualitative indicators to predict performance, an approach that has been called the 'whole person' approach. This approach stresses less measurable indicators of potential performance. The question that is raised is how the whole person approach changes selection outcomes, and in particular whether it tends to improve academic performance of those selected. This issue is particularly important in the military setting because those selecting applicants to officer commissioning programs are trying to predict selection both as a student and as an officer. Consequently, in this setting, the whole person approach is particularly well suited for identifying background characteristics that are more predictive of performance than in a standard civilian university.

This study seeks to decompose the relative contributions of quantitative and qualitative indicators on the performance, both academic and military, of applicants admitted to the U.S. Naval Academy. The data covers USNA classes of 1996-2001 and provides extensive performance information, including whether the student graduates or not, cumulative academic grades, and cumulative military performance grades. The study finds that the qualitative factors that are used in the whole person concept are strongly predictive of graduation and student performance of graduates, and that the concept plays an important role in meeting the institution's diversity goals of admitting high-quality minorities and women.





ID 134

U. S. Army Special Operation Forces (SOF) Assessment and Selection

Dr Mike G. Sanders, Army Research Institute
Col John V. Christian, Commander Selection and Training

The assessment, proper selection, and training of personnel has and will continue to be an essential if not a primary focus of SOF units. The paper addresses the historical origins of the SOF selection model; including the influence of the Office of Strategic Services [OSS] and the British Special Air Service [SAS]. The paper addresses the rationale and essential components of one of the Army's SOF selection and assessment programs. The major phases of the process are described along with the intent of each phase and tools used in each phase to assess candidates. The importance of a good job analysis will be addressed along with conceptual differences between screening out versus screening in [selecting] candidates. A sequential assessment and selection model has been successfully used for years; the paper addresses the major components of the model which includes job sample testing and training. Foundational research will be described and illustrations of the predictive validity of some of the selection tools will be shown. In addition, the emphasis on professionalism in SOF will be described along with major organizational components which support and promote professionalism, such as, Organization Culture, Personnel Stabilization, Selection and Training, Shared Initiative to Lead, and Shared Ownership.

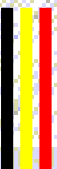
ID 135

Values Research

Capt. Psychologist, José M. Puente
General Inspection of Medical Services
Ministry of Defense, Spain

Lato sensu, values are relatively stable constructs that affect broad modes of behavior over time. Values make up the foundations, the background of human behavior –they guide behavior. Values make up social culture, the beliefs and norms of behavior characterizing the human communities. Although there is a vast literature on national culture dimensions –particularly on individualism vs. collectivism- there are differences among researchers about which values are relevant for individual-organization fit and organizational outcomes (quality of life, commitment and job satisfaction among others).

This paper reviews the important, although most of the time unnoticed, documented role that values play in individual fit to an organization, with a special emphasis on attraction and attrition processes. Values play a relevant role at the time of making a decision to enter or leave an organization such as the Armed Forces. Another important issue to address is the values shift taking place in contemporary society, a shift which is progressively influencing the military culture. This shift will bring about a dramatic change in traditional military values, which necessarily will have to assimilate some of these values in order to recruit young people and at the same time keeping core military values in order to achieve missions.





ID 136

Military Job Analysis and its Automation for the 21st Century

James M McCutcheon and Brian R Thompson
Military Occupational Structure Analysis, Redesign and Tailoring Project
Ottawa, Ontario, Canada
McCutcheon.JM@forces.gc.ca

Since the Canadian Forces (CF) unification of its Navy, Army and Air Forces in the late 1960s, a system of maintaining the Military Occupational Structure (MOS) through job, or “occupational” analyses has been used. This TI CODAP (Task Inventory – Comprehensive Occupational Data Analysis Program) form of job analysis, originated by the US Air Force in the mid 1960s, has been shared among several of the Allied militaries. In the CF, a great many job/occupational analyses have been conducted, sometimes with single, but often with multiple occupational groupings or “functional” areas of work. Since a major review and restructuring of the CF occupations is currently underway with the MOSART Project, the basic rationale of “Job/ Occupational Analysis” is also under scrutiny, as is the overarching consideration of Human Resource Management System (HRMS) automation, including PeopleSoft, and a variety of specific job analysis automation initiatives. MOSART Project staff have liaised with Australia, Germany, the UK, the five US uniformed Services, and some large private and governmental organizations to determine which are the “Best Practices” in job analysis support of military occupational structure. This paper will address the interim results of the strategic level survey, literature review, and considerations raised, to stimulate discussion with Allied Forces and others on the optimal way ahead for analyzing and managing the military occupational structure. Which of the various job analysis approaches and their automated technologies hold the most promise for the future, and which should be incorporated into the new CF MOS?





ID 137

Are Special Forces Candidates as Well Prepared as Expected?

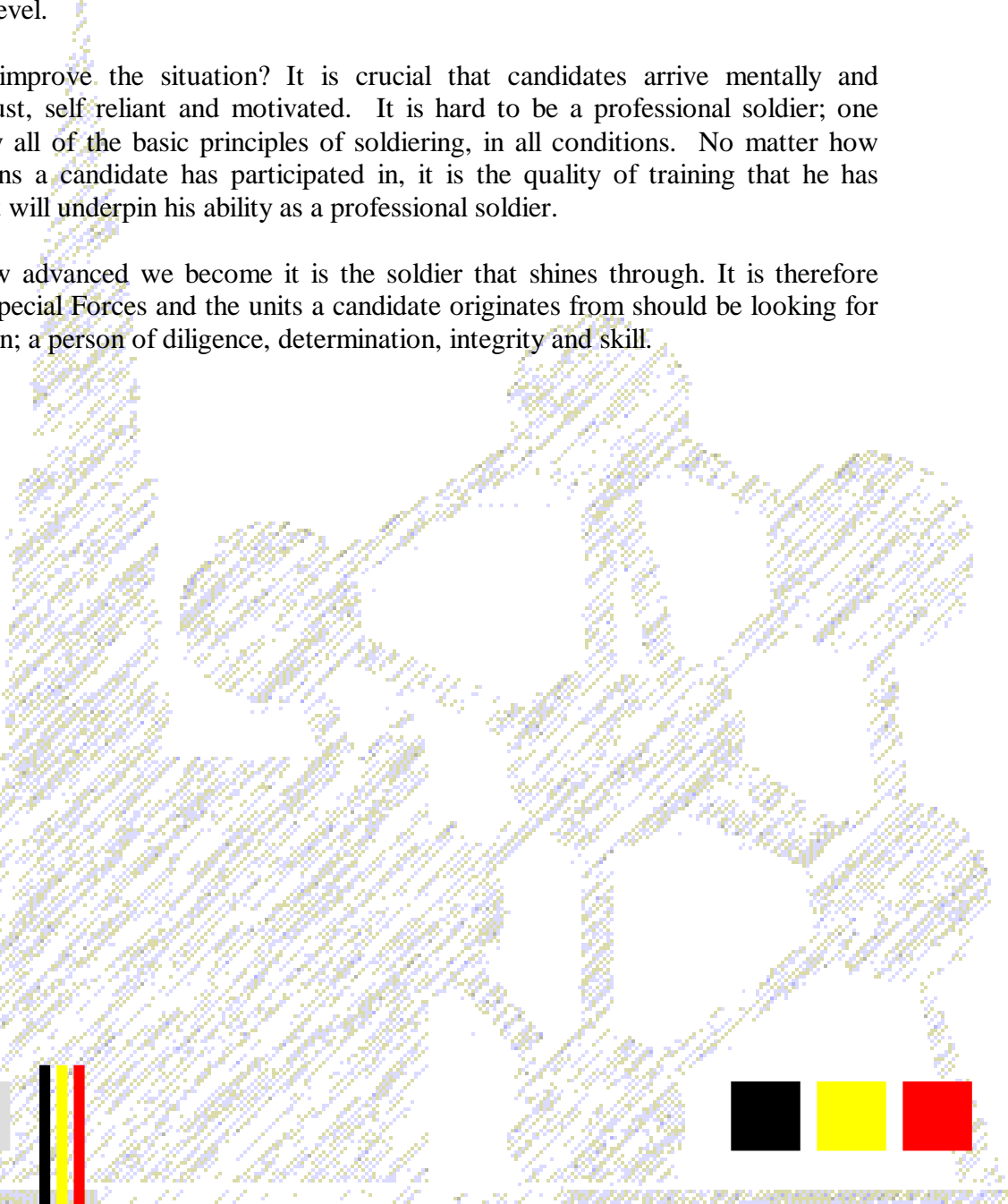
Capt Floyd Woodrow, MBE DCE
United Kingdom

The principle aim in the selection of Special Forces soldiers should be to give candidates the ability to understand the contents of the course. To then be trained in each aspect of the course and then to be tested against measurable outcomes.

If this is the basic premise why do so many fail? Firstly, I have found that those candidates who pass the course today are undoubtedly as competent as their predecessors. There are however a significant number of those who fail that give up at the first sign of adversity. There is a culture of failure and an acceptance of it. These soldiers lack mental and physical fortitude possibly because the Army itself doesn't train hard enough. This needn't be expensive joined up war fighting, simply tough challenging training at section, platoon and company level.

How do we improve the situation? It is crucial that candidates arrive mentally and physically robust, self reliant and motivated. It is hard to be a professional soldier; one who can apply all of the basic principles of soldiering, in all conditions. No matter how many operations a candidate has participated in, it is the quality of training that he has undergone that will underpin his ability as a professional soldier.

No matter how advanced we become it is the soldier that shines through. It is therefore apparent the Special Forces and the units a candidate originates from should be looking for the same person; a person of diligence, determination, integrity and skill.





ID 139

Organizational Commitment Impact on Satisfaction on Equal Opportunity Complaints

LT Herbert F. Coard

Defense Equal Opportunity Management Institute

The Military Equal Opportunity Climate Survey (MEOCS) has been utilized by the Department of Defense since 1990 as an organizational assessment tool to assess the Equal Opportunity (EO) climate and organizational effectiveness (OE) of military units. The MEOCS contains 100 items that produce twelve unique scales that have been validated over time. Scales one through five focus on the perception of EO behaviors within the respondent's unit. Scales six through eight measure perceptions of organizational effectiveness. The last four scales measure general attitudes towards EO issues and tend to reflect perceptions about the Service and society as a whole and not just within the respondent's specific unit of assignment. Currently the MEOCS Universal All Services Version database has more than 1.32 million respondents. A review of the database revealed that 39.4% of respondents personally experienced an incident of discrimination (racial, sexual, or sexual harassment) directed towards them by a military member or civilian; however, only 7.1% of individuals filed a complaint on the incident. Of the individuals who filed a complaint, 31.4% were satisfied with the disposition. The best predictors for positive resolution of complaints were Overall EO Climate, Organizational Commitment, Job Satisfaction, Positive Equal Opportunity Behavior, Discrimination against Minorities and Woman and the Differential Command Behavior towards Minorities scale from the MEOCS. Demographic variables such as branch of service, component (Active, Reserve, National Guard), unit size, and combat mission type (combat, combat support, combat service support) were weak predictors of positive resolution of complaint.

ID 140

Knowledge and Skill Tests as Measures of Motivation and Interest

Janet D. Held and William L. Farmer

Navy Personnel Research, Studies, and Technology²

Millington, Tennessee 38055-1300

The Armed Services Vocational Aptitude Battery (ASVAB) standards for the Navy Special Warfare Sea, Air, Land (SEAL) Teams were reviewed with the hypotheses that Coding Speed, a perceptual speed test that reflects an underlying propensity for individuals to persist with diligence, and the technical tests, Auto Shop, Electronics Information and Mechanical Comprehension, that measure not only knowledge and aptitude, but experience and interest, would predict highly physical and stressful training outcomes. The sample came from the Basic Underwater Demolition/SEALs (BUD/S) course that has had historically high attrition, most of which appears related to physical strength and stamina,

²The opinions expressed in this paper are those of the author, are not official, and do not necessarily reflect the views of the Navy Department.





fortitude, and perseverance in the face of extreme conditions. The sample was edited to include only those who passed and those who failed for motivational reasons. Logistic Regression was used to compare composites of these tests with the ASVAB academically oriented composite of the Verbal and Arithmetic Reasoning tests, which was the operational SEAL composite. Results confirmed the hypotheses. Implications are that 1) military services should expand their classification batteries to include other than academically oriented tests, and 2) research on personality should be conducted for special warfare jobs to augment the underlying traits measured reliably by the study tests.

ID 141

Select21 Project Criterion Measures

Deirdre J. Knapp & Patricia A. Keenan
Human Resources Research Organization (HumRRO)

The Select21 criterion set comprises multiple measures (and measurement methods) intended to reflect a comprehensive portrayal of performance and organizational fit. The research problem also requires measures of how well Soldiers are expected to perform in the future. The development effort was made even more challenging by difficulties gaining access to Soldiers during a period of heightened deployment activity.

Criterion measures were developed to capture Army-wide performance and fit, as well as comparable coverage for job-specific areas for six target jobs. The criterion set includes job knowledge tests administered via computer, allowing test developers to use software that accommodates graphics and non-traditional item formats (e.g., drag and drop, matching), in addition to the multiple-choice format, to minimize reading requirements and enhance realism. Rating instruments and associated rater identification and training procedures have been developed to collect performance ratings from supervisors and peers. Several interesting innovations with the ratings process will be described. The criterion set also includes a situational judgment test and operational indices of performance (e.g., awards, education, disciplinary actions). Finally, the criterion set includes indicators of organizational fit (e.g., job satisfaction) and attrition (for samples of new recruits who took pilot and field test versions of the predictor measures).

In addition to describing the criterion measures, this presentation will discuss how they differ from more traditional measurement approaches and issues encountered in their development.





ID 142

Select21 Project Predictor Measures

Christopher E. Sager, Chad H. Van Iddekinge, & Teresa L. Russell
Human Resources Research Organization

This presentation will describe the full set of predictor measures that will be validated in the Select21 criterion-related validation project. The predictor set includes the Armed Services Vocational Aptitude Battery (ASVAB), which is an operational selection test that primarily taps cognitive ability but also includes a test of spatial skills. New experimental Select21 measures include a situational judgment test, a rational biodata inventory, measures of interests and work values, and psychomotor tests. The goal of these measures is to extend the constructs assessed by the current ASVAB and improve the selection and assignment of U.S. Army enlisted personnel now and in the future Army.

In this presentation, we will discuss how the new Select21 measures represent innovations in testing technology enabled by computer administration. Some of these measures focus on constructs that are traditionally difficult to accurately assess in high stakes contexts (e.g., temperament, values, and interests). Some results will be presented from faking research with Army recruits designed to evaluate potential response distortion in an operational environment. Finally, we will describe how the response distortion findings were used to evaluate and modify some of the experimental measures.

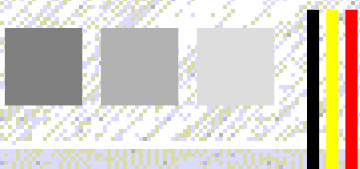
ID 143

Low Workload Amongst Soldiers in the RNLA: Measurement and Consequences

Renier van Gelooven (PhD)
Marianne Schoneveld van Dorsten, Ma
Ilona de Hooge, Ma

Behavioural Sciences Services Centre, Support Command, Ministry of Defence,
The Netherlands

This paper describes the results of a study into the workload of Dutch soldiers. It focuses on the development of a workload scale, the correlation of low workload with outcome measures such as satisfaction, commitment and attrition and the distribution of low workload across units and branches. Results show that a substantial part of the soldiers report low workload. Also it is clear that there is a strong correlation between low workload and reduced satisfaction, commitment, motivation and therefor also the intention to stay with the army. Low workload is a serious risk factor. The study also shows specific units and branches at risk can be pinpointed. In conclusion the way low workload is monitored is described.





ID 144

Predictors of Retention Decisions Across Ranks in the U.S. Army

Heidi Keller-Glaze, Ph.D. and Debora Mitchell, Ph.D.

Caliber Associates

Jon Fallesen, Ph.D.

Army Research Institute

The Army Training and Leader Development Panel (ATLDP) was perhaps the largest assessment of leader development the Army has ever done. Data collection, conducted from 2000-2002, was performed in four phases: Officer, Noncommissioned Officer, Warrant Officer, and Civilian. Data were collected from Soldiers and civilians worldwide in the form of surveys, focus groups, and interviews. The research assessed organizational culture, training and leader development, perceptions of advancement opportunity, and the effect of these factors on retention.

To identify the variables that impact Soldiers' decision to leave the Army before retirement, logistic regression was conducted with intent to stay or leave as the dependent variable and demographic data and factors related to benefits, pay, self-development, mentoring, performance evaluation, and training as independent variables. The ranks of sergeant and staff sergeant, lieutenant, and captain were used in the analysis. Results showed that demographics such as race and number of children under 18 played a role in the retention decisions of junior non-commissioned officers, while source of commissioning, mentoring, and counseling were among the significant factors in junior officers' retention decisions. These results suggest that professional development becomes more important to the decision about whether to stay in or leave the Army with higher ranks.

ID 145

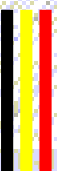
Development and Validation of Leadership Assessment Instruments for United States Army Commanders, Staff Officers, and Non-Commissioned Officers (NCOs).

Steven N. Aude, Ph.D., Caliber Associates

Debora Mitchell, Ph.D., Caliber Associates

Gary B. Cordes, LTC, Center for Army Leadership

This research paper describes actions to date to develop valid and reliable assessment instruments for Commander, Staff, and Non-Commissioned Officer (NCO) leadership for the United States Army. Initial validation steps included a literature review, a structured rating of survey items by leadership subject matter experts, and focus group reviews by active duty Army leaders. The overall purpose of the assessment is to provide leaders with developmental feedback on their leadership from a multi-rater (360) perspective (self, peers, subordinates, superiors). This feedback is expected to enhance leader efforts at self-development while improving overall unit performance.





A central issue in the validation process was to confirm if leadership varied according to Command, Staff, and NCO leadership position. Initial findings support the idea that leadership does differ for these three positions. Even though the same leader domains were consistently associated with Command, Staff, and NCO leadership, the wording of specific survey items differed across the surveys. The importance given to each leadership domain also differed by leadership position. A second issue was operational constraints on overall survey administration time. Reduced sets of leader domains were selected for administration to accommodate this constraint.

The resulting leadership assessment surveys were piloted in September 2004 with sixty-two (62) leaders of an Armored Battalion. Follow-on validation strategy for the surveys includes factor analyses, reliability checks, and fairness analyses. The embedding of criterion variables within each survey permits regression analysis of individual survey items as well as the cluster of survey items that comprise each leader domain.

ID 146

Burnout in a Peacekeeping Mission

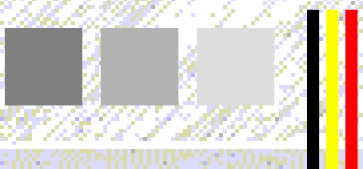
Maria José Chambel

Lisbon University

Fernando Oliveira da Cruz

Portuguese Army Psychology Applied Center

The study of the burnout has been generalized to different professions. In this investigation we analyzed the development of the burnout in 106 military that they fulfilled a peacekeeping mission in Timor Lorosae, carrying out a longitudinal study with evaluations taken in three moments, before deployment, in the course of deployment and after deployment. As we expected the level of burnout of these military suffered modifications, increasing to emotional exhaustion and to depersonalization and diminishing the personal efficacy from pre-deployment to after deployment. However, we verified that from the pre-deployment to the course of deployment only emotional exhaustion increased in significant way to these military. We should have expected for the after-deployment, for that the levels of depersonalization suffered a significant increase and the personal efficacy a significant diminution. Also as expected, we verified that to depersonalization felt in the after-deployment was not alone influenced by the depersonalization felt in the pre-deployment, but also by the perception from the collective efficacy in the course deployment. By the contrary one, we verified that this perception from the collective efficacy did not influence, neither the development of the emotional exhaustion, neither the personal efficacy. Finally, our results, such as to previous research, they bore that the burnout existing in the pre-deployment was a good one predictor of the burnout in after-deployment.





ID 147

Sixty Years of U.S. Army Selection and Classification Test Development

Paul A. Gade, Ph.D.

U.S. Army Research Institute for the Behavioral and Social Sciences
Arlington, VA, USA

gade@ari.army.mil

and

Nicole M. Dudley

U.S. Army Research Institute for the Behavioral and Social Sciences and
George Mason University

Fairfax, VA, USA

dudley@ari.army.mil

The purpose of this paper is to present a brief history of the selection and classification testing research and development that has taken place at the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) since World War II. Beginning in 1940, we trace the major events that took place and the men and women who were instrumental in moving testing research forward in the U.S. military. In particular, we examine ARI's role in developing the Army General Classification Test (AGCT), the Armed Forces Qualification Test (AFQT), and Project A. We also discuss the role ARI played in the development of the Armed Services Vocational Aptitude Battery (ASVAB) and its successor the Computerized Adaptive Test (CAT) ASVAB. We describe how the key people, politics, and historical times influenced the directions that were taken. We conclude with a brief discussion of some new directions in selection and assignment testing that ARI research is taking. Among these are differential assignment theory applications and tacit knowledge assessment.



BY-LAWS OF THE INTERNATIONAL MILITARY TESTING ASSOCIATION

Article I - Name

The name of the organization shall be the International Military Testing Association (IMTA).

Article II – Purpose

- A. Discuss and exchange of ideas concerning the assessment of military personnel
- B. Discuss the mission, organization, operations and research activities of associated organizations engaged in military personnel assessment.
- C. Foster improved personnel assessment through exploration and presentation of new techniques and procedures for behavioral measurement, occupational analysis, manpower analysis, simulation modeling, training, selection methodologies, survey and feedback systems.
- D. Promote cooperation in the exchange of assessment procedures, techniques and instruments among IMTA members and with other professional groups or organizations
- E. Promote the assessment of military personnel as a scientific adjunct to military personnel management.

Article III – Participation

The following categories shall constitute the membership within the IMTA:

- A. Primary Membership shall be open to personnel assigned to organizations of the armed services and defense agencies that have been recognized by the IMTA Steering Committee as Member Organizations and whose primary mission is the assessment of military personnel. Representatives from the Member Organizations shall constitute the Steering Committee.
- B. Associate Membership shall be open to personnel assigned to military, governmental or other public entities engaged in activities that parallel those of primary membership. Associate members (including prior members, such as retired military or civilian personnel who remain professionally active) shall be entitled to all privileges of the primary members with the exception of membership on the Steering Committee, which may be waived by a majority vote of the Steering Committee
- C. Non-Member Participants represents all other interested organizations or personnel who wish to participate in the annual conference, present papers or participate in symposium/panel sessions. Non-Members will not attend the Steering Committee meeting nor have a vote in the association affairs.

Article IV – Dues

No annual dues shall be levied against the members or participants.

Article V – Steering Committee

- A. The governing body of the Association shall be the Steering Committee, which will consist of representatives from the Primary Members and those other members as voted by a majority of the Steering Committee. Commanders of the Primary Member organizations will each appoint their Steering Committee Member.
- B. The Steering Committee shall have general supervision over the affairs of the Association and shall have responsibility for all activities of the Association. The Steering Committee shall conduct the business of the Association between the annual conferences of the Association by such means of communications as selected by the Chairman.
- C. Meeting of the Steering Committee shall be held in conjunction with the annual conference of the Association and at such times as requested by the Chairman. Representation from a majority of the Primary Members shall constitute a quorum.
- D. Each member of the Steering Committee shall have one vote toward resolving Steering Committee deliberations.
- E. (Added November 2003) All past recipients of the Harry Greer Award will be ex officio, non-voting members of the Steering Committee, unless they still represent their organization, in which case, they would still be a voting member. (The intent here is to maintain the institutional knowledge, the depth and breadth of experience, and the connection to our history that could be lost since Executive Steering Committee members are subject to change.)

Article VI – Officers

- A. The officers of the Association shall consist of the Chairman of the Steering Committee and a Secretary.
- B. The Commander of the Primary Member coordinating the annual conference of the Association shall select the Chairman of the Steering Committee. The term of the Chairman shall begin at the close of the annual conference of the Association and shall expire at the close of the next annual conference. The duties of the Chairman include organizing and coordinating the annual conference of the Association, administering the activities of the IMTA, and the duties customary to hosting the annual meeting.
- C. The Chairman shall appoint the Secretary of the Association. The term of the Secretary shall be the same as that of the Chairman. The duties of the Secretary shall be to keep the records of the Association and the minutes of the Steering Committee, to conduct official correspondence for the Association and to insure notice for the annual conference. The Secretary shall solicit nominations for the Harry H. Greer Award.

Article VII – Meetings

- A. The association shall hold a conference annually.
- B. The Primary Members shall coordinate the annual conference of the Association,

either individually or as a consortium. The order of rotation shall be determined by the Steering Committee. The coordinating Primary Members and the tentative location of the annual conference for the following three years shall be announced at each annual conference.

- C. The annual conference of the Association shall be held at a time and place determined by the coordinating Primary Member. Announcement of the time and place for the next annual conference will occur at the annual conference.
- D. The coordinating Primary Member shall exercise planning and supervision over the program and activities of the annual conference. Final selection of program content shall be the responsibility of the coordinating Primary Member. Proceedings of the annual conference shall be published by the coordinating Primary Member.
- E. Any other organization (other than a Primary Member) may coordinate the annual conference and should submit a formal request to the Chairman of the Steering Committee no less than 18 months prior to the date they wish to host.

Article VIII – Committees

- A. Committees may be established by vote of the Steering Committee. The Chairman of each committee shall be appointed by the Chairman of the Steering Committee from among the members of the Steering Committee.
- B. Committee members shall be appointed by the Chairman of the Steering Committee in consultation with the Chairman of the committee being formed. Committee chairman and members shall serve in their appointed capacities at the discretion of the Chairman of the Steering Committee. The Chairman of the Steering Committee shall be an ex officio member of all committees.
- C. All committees shall clear their general plans of action and new policies through the Steering Committee. No committee or committee chairman shall enter into activities or relationships with persons or organizations outside of the Association that extend beyond the approved general plan or work specified without the specific authorization of the Steering Committee.

Article IX – Amendments

- A. Amendments of these By-Laws may be made at the annual conference of the Association.
- B. Proposed amendments shall be submitted to the Steering Committee not less than 60 days prior to the annual meeting. Those amendments approved by a majority of the Steering Committee may then be ratified by a majority of the assembled membership. Those proposed amendments not approved by the Steering Committee may be brought to the assembled membership for review and shall require a two-thirds vote of the assembled membership to override the Steering Committee action.

Article X – Voting

All members attending the annual conference shall be voting members

Article XI – Harry H. Greer Award

- A. The Harry H. Greer Award signifies long standing exceptional work contributing to the vision, purpose and aim of the IMTA.
- B. Selection Procedures:
1. Prior to June 1st of each year, the Secretary will solicit nominations for the Greer Award from members of the Steering Committee. Prior Greer Award winners may submit unsolicited nominations. Award nominations shall be submitted in writing to the Secretary by 1 July.
 2. The recipient will be selected by a committee drawn from the Primary Members and committee members will have attended at least the previous three Association annual conferences.
 3. The Chairman of the Award Committee is responsible for canvassing other committee members to review award nominations and reach a consensus on the selection of a recipient of the award prior to the annual conference.
 4. The Award Committee selection shall be reviewed by the Steering Committee.
 5. No more than one person is to receive the award each year but the Steering Committee may decide not to select a recipient in any given year.
- C. The Award is to be presented during the annual conference. The Award is to be a certificate, the text prepared by the officers of the Association and appropriate memorabilia per discretion of the Chairman.

Article XII – Enactment

These By-Laws shall be in force immediately upon acceptance by a majority of the assembled membership of the Association.