



“WRAIR Forward”

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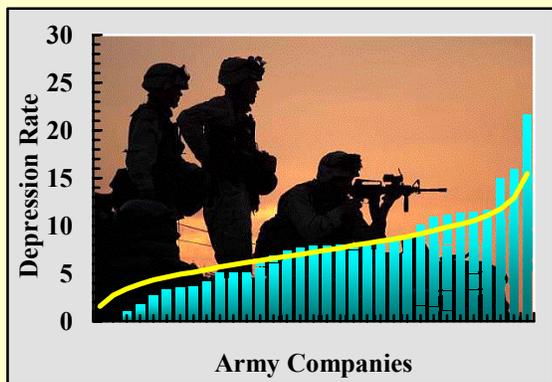
COMMANDER’S CORNER

Experience tells us individual perceptions of events are influenced by interactions with others. It should come as no surprise, therefore, that Soldiers’ attitudes and behaviors are influenced by their unit members. Interestingly, this tendency to form similar perceptions and act in similar ways has health implications. Our research shows, for instance, that units such as Army Companies differ in terms of a wide variety of well-being factors – some units develop healthy work climates that sustain and support their Soldiers, other units do not. Over the last decade, Army medical research has been a leader in both the theoretical and statistical application of group-level analytic methods to problems related to organizational health. As this issue of the WRAIR Forward shows, this work has proven to be of interest not only to the Army, but also to other organizations that promote healthy employees.

-MAJ Paul D. Bliese

GROUP-LEVEL EFFECTS

This graph illustrates group effects using a visualization technique developed by WRAIR. The graph shows that average levels of depression vary from 0% to 23% in a sample of 33 Companies. The yellow line reveals that levels of depression vary more than would be expected by chance. The three companies on the right, for instance, show particularly high levels of depression even compared to chance levels. As researchers and practitioners, we want to understand what drives these differences among groups and apply the findings to enhance unit health.



There have been several recent presentations and collaborations as part of USAMRU-E’s research efforts in the field of group-level effects (see column to the right).

MORE GROUP-LEVEL EFFECTS

Clinical Implications of Group Data

MAJ Bliese presented “*Modeling the Role of Organizational Variables in US Army Research on Psychological Health*” to the US Army, Europe Behavioral Sciences Conference in Bad Kissingen, Germany (18 MAY 04).

Group-Level Stats: New Software

MAJ Bliese attended the first UseR conference in Vienna and met with Dr. Douglas Bates from the Statistics Department at the University of Wisconsin (19 - 21 MAY 04). Dr. Bates, along with Toyon corporation, are Phase II Small Business Technology Transfer Program (STTR) grant recipients for a project to develop new statistical algorithms for random coefficient model estimation. So far, the STTR has produced a completely new set of algorithms for model estimation based on sparse matrices, two manuscripts submitted to top statistical journals, and a national award for one of Dr. Bates’ graduate students. MAJ Bliese oversees the grant.

International Conference

MAJ Bliese and CPT Thomas presented a paper on the group-level effects of within-group conflict at the International Applied Military Psychology Symposium (IAMPS) in Oslo (23–28 MAY 04).

Bliese, P.D., Thomas, J.L., Adler, A.B., & Wright, K.M. (2004, May). The impact of within-group conflict on perceptions of the organization: Evidence for emergent group effects.



University of Valencia Connection

University of Valencia graduate student Gloria Gonzales-Morales began an internship with MAJ Bliese to study group-level statistics and applications on 23 JUN 04. Ms. Gonzalez-Morales has a scholarship for university lecturers (FBU) from the Spanish Ministry of Education and Science.



Two for One: Universities in Hessen

MAJ Bliese was invited to present at the joint colloquium series between the Department of Psychology at the University of Giessen and the Institute of Psychology at the Goethe University in Frankfurt (23 JUN 04). MAJ Bliese presented “*Modeling the Role of Organizational Variables in US Army Research on Psychological Health.*”



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STO-W

Steering Committee

USAMRU-E's top priority projects are to support the Department of Army's Science and Technology

Objective (STO-W) “Interventions to Enhance Warfighter Psychological Resilience.” The goal of this research program is to deliver a series of products, from the Army Suicide Event Report (ASER) form (delivered in 2003) to a validated psychological screening instrument (in-progress). The first steering committee meeting to review the progress of the STO was held at the WRAIR in Washington DC (8 June 04). The steering committee, chaired by STO-W manager COL Charles Hoge (WRAIR), includes four experts from the scientific and military communities: LTC Charles Engel, Chief, Deployment Health Center, WRAMC; COL (ret.) John Brundage, Senior Scientist; CHPPM, LTC Spencer Campbell, Senior Behavioral Science Officer, 44th MEDCOM, XVIII ABN CORPS; and Dr. Matthew Friedman, Executive Director, National Center for PTSD. USAMRU-E participants included MAJ Bliese, Dr. Wright and Dr. Adler. The steering committee meeting followed a briefing provided to COL Brian Lukey, RAD III, by COL Hoge (STO-W coordinator) and MAJ Bliese (13 MAY 04) in Fort Detrick, MD.

Screening Program Progress

What is a valid and efficient method for identifying soldiers in need of mental health evaluation? Over the past several years, USAMRU-E has been working on validating a brief psychological screening survey to be administered to troops at pre- and post-deployment. Recent progress includes:

- Dr. Robert Ployhart, University of South Carolina, met with the unit's science team to discuss analytical strategies for validating screening data (29-30 APR 04).

- A research report on the validation of items measuring post-traumatic stress disorder was issued by USAMRU-E

(authors:

MAJ Bliese, Dr. Wright, Dr. Adler, CPT Thomas, & COL Hoge).

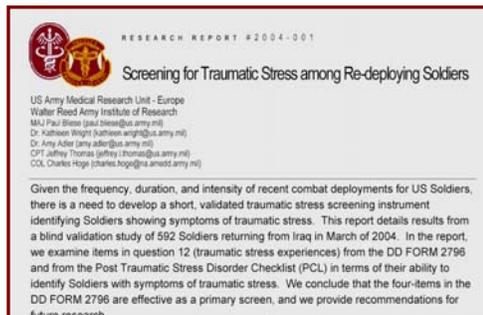
- Coordination continued for a 4-month follow-up to screening conducted in March 04 with the Soldiers from the 173rd ABN BDE in Vicenza, Italy (#889).

- A summary of the screening validation studies was presented at a NATO conference in May:

Hoge, C., Wright, K.M., Bliese, P.D., Adler, A.B., Thomas, J.L., & Castro, C.A. (May 2004). *Prevalence and screening of mental health problems among US combat soldiers pre- and post-deployment*. Presented at the Human Factors and Medicine Panel Symposium on NATO Medical Surveillance and Response: Research and Technology Opportunities and Options. Budapest, Hungary.

- Modifications were approved for protocol #889 (4 MAR, 7 & 10 MAY 04).

- A brief was provided to BG Granger, Commander, ERMIC, on results from the Validation Study with 173rd ABN BDE Soldiers and future research plans (3 JUN 04).



Munster Meeting

MAJ Bliese and CPT Thomas participated in a US-Germany Science and Technology Working Group in Munster co-hosted by the US Army Information Technology Center's German Liaison Office for Defense Materiel and the German Federal Office of Defense Technology and Procurement (19-23 APR 04). Terms of reference and an integrated technology team for "Soldier and Unit Physiological Status Monitoring" were developed.

Technical Panel Recommended

The Technical Cooperation Program (TTCP) Action Group 21, *Stress-Related Health and Behavior Effects of Military Operations*, identified research priorities in a meeting held in Canberra, Australia (17-18 May 04). TTCP is designed for five English-speaking nations to collaborate in defense scientific and technical information exchange. LTC Carl Castro (Department of Neurosciences, WRAIR) and Dr. Adler (USAMRU-E) attended as the U.S. representatives.

NATO Meeting

MAJ Bliese served as US representative to RTG 020, *Stress and Psychological Support in Modern Military Operations*, in Split, Croatia (20-23 APR 04).

Conferences

- CPT Thomas attended the Society of Industrial and Organizational Psychology conference in Chicago (1-10 APR 04):

Britt, T.W., Dawson, C.R., & Thomas, J.L. (April, 2004). Predicting Performance from Self Engagement and Perceptions of Task Skill. Paper presented at the 19th Annual Society of Industrial and Organizational Psychology Conference. Chicago, IL.

Sinclair, R.R., Sommers, J, Bliese, P.D., Thomas, J.L. & Durand, D.A., & Dezsofi, A. (April, 2004). Multilevel Effects of Occupational Stress Among Activated National Guard Soldiers. Paper presented at the 19th Annual Society of Industrial and Organizational Psychology Conference. Chicago, IL.

- MAJ Bliese and CPT Thomas attended the Bi-annual Army Research Psychologist Professional Short Course in Fort Detrick, MD (10-11 JUN 04). CPT Thomas presented the technical brief "From 'Hey You' to Validity Research: The US Army Research Unit-Europe's Psychological Screening Program."

Unit Visitors

- CPT Oscar Cabrera, research psychologist at the Division of Neurosciences, WRAIR (22-24 JUN 04).

- Mr. Gary Wheeler, Administrative Liaison for Overseas Labs, WRAIR (29 JUN 04).

Personnel Updates

- MAJ Bliese attended Activities-Based Cost Accounting model building group at the WRAIR (11-14 MAY 04).

- Ms. Ippolito was awarded a contract for a manuscript (1 JUN 04).

- Ms. Salvi attended training at the WRAIR in actigraphy, the PVT, and PMI & trained WRAIR staff in scanner software (10-14 MAY 04).

- CPT Thomas was awarded an MSM (10 JUN 04) by MG Martinez-Lopez, Commander, Medical Research and Materiel Command at the Research Psychologist Professional Short Course.

- SGT Carr, SPC Sinclair, and Ms. Kelley Rice completed Critical-Incident Stress Management training, 22-23 JUN 04, Miesau, GE.

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