

Revising the DEOCS: Preliminary Findings and Recommendations for Future Research

Executive Summary

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Summer 2010

Technical Report (Exec Summary) # 07-10

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Issue

The DEOMI Organizational Climate Survey (DEOCS) was developed to assess facets of organizational climate that are relevant to unit-level performance. Commanders are increasingly relying on data provided by the DEOCS because of its utility as an indicator of command climate. Similarly, researchers and support staff are increasingly seeing the utility of the DEOCS for answering operationally-relevant research questions. The next version of the DEOCS is scheduled for implementation in 2011.

Current Status

Unfortunately, empirical research linking DEOCS unit-level responses to unit-level outcomes has been limited, somewhat due to limitations in the design of the survey. Given the growing use of the DEOCS to guide policy as well as recent advances in survey methodology (e.g., multidimensional item response theory), the authors propose a five-phase research program to empirically drive revision of the DEOCS.

<p>The content and opinions expressed in this report are those of the author and should not be construed to represent the official position of DEOMI, the military service, or the Department of Defense.</p>

Recommendations

The following five-phase plan is likely to position DEOMI to revise a state-of-the-art DEOCS that is designed to link unit (i.e., UIC)-level responses with unit-level outcomes and better position DEOMI to target key changes in command policy in specific units and across the DOD:

1. **Phase One:** Close examination of items and application of IRT and differential item functioning (DIF) models across multiple subsamples across multiple years in order to identify the combinations of items (i.e., scales) that best represent the constructs intended to be measured. This would yield a shortened, near-final set of scales based on existing items. [Note: Currently, DEOMI does not have the software required to run multidimensional IRT.]
2. **Phase Two:** Theoretically-based testing of practically relevant hypotheses using the revised scales. This would identify the “validity” or effectiveness of the IRT- and DIF-generated scales and thus indicate which items/scales need to be dropped because they do not predict relevant outcomes that are currently embedded in the existing version of the DEOCS.
3. **Phase Three:** Use of the revised scales to predict objective criteria, such as ship awards in the Navy and unit awards in the Army. This would further identify the “validity” or effectiveness of the IRT- and DIF-generated scales and thus indicate a final set of scales comprised of existing DEOCS items.
4. **Phase Four:** Assessment of user needs to identify new content of the survey and requirements for a revised reporting format. This process would in the very least include meetings and/or focus groups with DEOMI’s multiple constituencies (e.g., field commanders, OSD personnel in the Pentagon, EAO’s, and medical and human resources

researchers may want to partner with DEOMI, etc.) and ideally include field assessment of factors that identify high- from low-performing field units. This would yield both customer desired and science-based areas of content for the revised DEOCS; that is, the outcome would be a near-final version of the DEOCS with better coverage of legacy content and expansion into new areas (e.g., occupational health issues that predict illness, absenteeism, etc.).

5. **Phase Five:** Pilot-testing the near-final version of the revised DEOCS, which would likely include:
 - a. Assessments of multiple constituencies measured in focus groups (and other available means) to identify user/customer reactions;
 - b. Application of IRT and DIF analyses to data collected using the revised DEOCS, followed by further revision, as appropriate;
 - c. Model-testing to ensure that the theoretically-predicted relationships hold. It is critical that data collected during the pilot-testing phase “behave,” so that DEOMI officials will be positioned to sell the DEOCS as not only well constructed but also valid and important.
 - d. Development of the final version.