

Statement of
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To
Subcommittee on Terrorism, Unconventional Threats and Capabilities
House Committee on Armed Services
And
Subcommittee on Research and Science Education
House Committee on Science and Technology
on
The Role of the Social and Behavioral Sciences in National Security

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2118 Rayburn House Office Building

I am honored and pleased to have been invited to testify to you on *The Role of the Social and Behavioral Sciences in National Security*. I applaud your exploration of opportunities for partnership between the Department of Defense and the National Science Foundation for supporting such research. I believe such a partnership would vastly expand the social science expertise that is brought to bear on matters of American national security.

I have been asked to address four issues.

First, I have been asked to provide an overview of the University of Maryland's Center for Research on Military Organization. The Sociology Department at the University of Maryland is unique in America in that it began teaching courses in military sociology and the sociology of war during World War II, and has done so continuously since then. Military sociology is a relatively small field, and our program is the largest in the nation. In 1995 the research efforts of a number of faculty and graduate students were consolidated in the Center for Research on Military Organization, which was designated a Center of Excellence by the Army Research Institute for the Behavioral and Social Sciences, with the dual missions of conducting cutting-edge research in military sociology, and educating a successor generation of scholars in this field.

Our research program has four primary foci: diversity in the military; military families; military operations; and the intersection of the military and society. Each of these areas has implications for military effectiveness. In the area of diversity we have dealt with issues of gender, race, and sexual orientation. Recent military family research has looked at the financial well-being of military families and the impact of geographic mobility on families. Our research on military operations has dealt with multinational peacekeeping and, more recently, with insurgencies. And our research on the civil-military interface has included studies of youth attitudes and behavior regarding the military, how changes in

American professions and in American organizational processes such as outsourcing have affected the military, and the impact of base closings on host civilian communities.

Our program is currently executed by four faculty members, ten graduate students, and one post-doctoral research fellow. Since 1985 we have granted eighteen Ph.D. degrees to students specializing in military sociology, ten of them since 2000. Table 1 will give you a sense of who these graduates are, the topics of their doctoral dissertations, and what they did after they received their degrees.

Table 1. UNIVERSITY OF MARYLAND MILITARY SOCIOLOGY DOCTORAL DISSERTATIONS COMPLETED, 1985-2007.

Franklin C. Pinch (Ph.D. 1985). Mid-Career Transition and the Military Institution in Canada. Dissertation chair: David R. Segal. Subsequently Director of Military Psychology and Sociology, Canadian Armed Forces, and Adjunct Professor, Carleton University. (Now retired).

Nehama Ella Babin (Ph.D. 1986). The Impact of Military Expenditures on Economic Growth and Development in the Less Developed Countries. Dissertation chair: David R. Segal. Subsequently Senior Research Scientist, U.S. Army Research Institute for the Behavioral and Social Sciences.

Linda Moghadam (Ph.D. 1989). The Reciprocal Nature of Work and the Family: Perception of the Work/Family Interface and its Impact on Army Reenlistment Behavior. Dissertation Chair: Barbara F. Meeker. Subsequently Lecturer on Sociology and Director of the Undergraduate Program, The University of Maryland at College Park.

Robert J. Waldman (Ph.D. 1991). International Peacekeeping: Conditions of Conflict Control. Dissertation chair: David R. Segal. Subsequently federal executive, Federal Emergency Management Agency.

Kathleen M. Paasch (Ph.D. 1992). The Effects of Military Service on Marital Dissolution. Dissertation chair: Jay Teachman.

Doris Briley Durand (Ph.D. 1995). The Role of the Army Wife as Perceived by Male Officers and their Wives: Is it a Commitment to the Two-for-One Career Pattern? Dissertation Chair: Mady W. Segal. Subsequently Research Scientist, Uniformed Services University of the Health Sciences. (now retired).

Xiaolin Li (Ph.D. 1995). Women in the Chinese Military. Dissertation chair: David R. Segal. Subsequently Vice-President, Songbin System International.

Morten G. Ender (Ph.D. 1996). Soldiering on the Information Superhighway: Interpersonal Communication During Military Operations in the Post-Cold War

- World. Dissertation chair: David R. Segal. Subsequently Professor of Sociology and Director of the Sociology Program, United States Military Academy.
- David Rohall (Ph.D. 2000). The Effects of Financial Situation and Organizational Commitment on the Downsizing Process: A Case Study of the Russian Army. Dissertation Co-Chairs: V. Lee Hamilton and David R. Segal. Subsequently Associate Professor of Sociology, Western Illinois University.
- Bradford Booth (Ph.D. 2000). The Impact of Military Presence in Local Labor Markets on Unemployment Rates, Individual Earnings, and Returns to Education. Dissertation chair: David R. Segal. Subsequently Principal, ICF International.
- Richard T. Cooney (Ph.D. 2000). Moving with the Military: Race, Class, and Gender Differences in the Employment Consequences of Tied Migration. Dissertation chair: Mady W. Segal. Subsequently Director of Diversity Programs, Office of the Secretary of the Air Force.
- Steven S. Trainor (Ph.D. 2004). Differential Effects of Institutional Socialization on Value Orientations in Naval Academy Midshipman. Dissertation chair: David R. Segal. Subsequently Permanent Military Professor of Leadership and Head of the Leadership Department, United States Naval Academy.
- Ryan Kely (Ph.D. 2005). Social Psychological Effects of Integrating Civilians and Military Personnel. Dissertation chair: David R. Segal. Subsequently Assistant Professor of Sociology, United States Military Academy.
- Yuko Kurashina (Ph.D. 2005). Peacekeeping Participation and Identity Changes in the Japan Self-Defense Force: Military Service as “Dirty Work”. Dissertation chair: David R. Segal. Subsequently Research Associate, University of Maryland.
- Meridith H. Thanner (Ph.D. 2006). Community after the Cold War: The Effects of the Closure of Fort Ritchie on Cascade, Maryland. Dissertation Chair: Mady W. Segal. Subsequently Faculty Research Associate, Johns Hopkins University Office of Critical Event Preparedness and Response (CEPAR).
- Rachel N. Lipari (Ph.D. 2006). The Financial Well-Being of Military Families. Dissertation chair: Mady W. Segal. Subsequently Research Analyst, Defense Manpower Data Center.
- Brian J. Reed (Ph.D. 2006). Social Network Analysis and Counter-Insurgency Operations: The Capture of Saddam Hussein. Dissertation chair: David R. Segal. Subsequently infantry battalion commander, U.S. Army.
- Irving Smith (Ph.D. 2007). The Effects of Military Service: Social Status Attainment of World War II Veterans through the Life Cycle. Dissertation chair: David R.

Segal. Subsequently Academy Professor of Sociology, United States Military Academy.

Five of these Ph.D.s have been military officers who were sent to Maryland for graduate education before reporting to our military academies as faculty members. Our alumni, both military and civilian, teach at military academies and civilian institutions, work in the research and development industry and in federal agencies, and command military troops in the field. Among our current students we have two Navy officers who, upon completion of their degrees, will become Permanent Military Professors at the Naval Academy. Next year a field grade Army officer who has been selected for the faculty at the Army War College will begin doctoral studies at Maryland.

In addition, we have in residence fourteen Navy and Marine officers who are enrolled in a Masters program to prepare them for serving as company officers at the U.S. Naval Academy starting next year. This program reflects a partnership between our Center, the Psychology Department, and the School of Education at Maryland, and the Naval Academy. West Point has a similar program through Columbia University, and the Air Force Academy has one through the University of Colorado. These programs are not research-oriented programs, but they do serve to educate the officers who will be mentoring the current generation of cadets and midshipmen about the contributions of the behavioral and social sciences to national security.

Over the last decade, our research, excluding our contract with the Naval Academy (which is for education, not research), has been supported by over four million dollars in extramural funding. More than eighty percent of this has come from the Army Research Institute. This has covered competitively won contracts to study “Social and Cultural Dynamics of American Military Organization,” “Social Structures Affecting Army Performance,” and “Social Structure, Social Systems and Social Networks”. About fourteen percent has come through competitive grants from the National Science Foundation in support of research on the impact of military downsizing and base closings in Russia on the life course and mental health of Russian Army officers and their wives. About six percent has come from industry, for participation in research on retention and attrition in Navy entry-level training. The remainder has come from private foundations.

Second, I have been asked how research such as ours can help achieve national security goals. Research in the social and behavioral sciences has supported America’s armed forces in maximizing soldier and unit performance since World War I, when psychologists developed the first selection and classification tests used to determine who should serve and what jobs they should be assigned. These tests are the progenitors of all of the selection and classification tests used in America today by industry and higher education, as well as by the military. Research utilization continued in World War II, when a generation of America’s best sociologists and social psychologists were mobilized to support soldier morale and performance through survey research and training experiments. They contributed to developments in social science research methods and conceptualization, as well as contributing to the management of military

personnel. Social science research was also used extensively in the 1970s to help the services make the transition from a conscription-based force to an all-recruited force.

Today, as the domestic labor force and the international environment change, there are opportunities for the social and behavioral sciences to make continued contributions. Understanding the nature of culture and cultural differences, for example, can help soldiers function in a force that is itself increasingly culturally diverse, reflecting the changing ethnic and racial composition of American society. It will help them participate in coalition operations where they share the battlespace with allies who come from different social backgrounds. And it will help them function in unconventional military operations, where the opponent is not a bureaucratically organized modern army whose soldiers wear uniforms that distinguish them both from friendly forces and from indigenous civilians, but rather irregular forces who blend in with the local population.

Third, I was asked to identify current and emerging areas of research that can contribute to the effectiveness of our national security apparatus. Many of the important areas, such as cohesion and leadership, have long been important, but continued research is necessary as research methods and conceptualization evolve. Others are identified in the 2008 National Research Council report on *Human Behavior in Military Contexts*. This volume focuses on the contributions of psychology, and particularly on cognitive psychology. Other social sciences, such as sociology, anthropology, and economics, as well as other fields of psychology, have contributions to make as well. Secretary of Defense Gates alluded to some of these in his recent discussions of the Minerva Consortia with the presidents of some of our leading research universities. At the individual level, research on the life course decisions of young and older Americans can contribute both to an improved understanding of decisions on the choice of trajectories—military service vs. civilian employment vs. college—as well as how the nation can best serve its veterans who have incurred personal costs through their contributions to our defense. At the institutional level, research on the ways in which organizations and professions are being restructured in America can contribute to our understanding of the contemporary military profession, its organization, and its interface with society. In particular, research on organizations and social networks can contribute to our understanding of non-bureaucratic or irregular forms of military organization and the ways in which they interface with the societies in which they emerge.

Research is also needed on the implications of the recent transformation in the role of the reserve components, from a strategic reserve to an operational reserve. These changes are consequential for our reserve personnel, their families, their civilian employers, and the communities in which they live. In researching the military, new research tools, such as computer and web based survey research may make data collection easier. Qualitative research approaches such as ethnographic and archival research can enrich the statistical picture that surveys help us paint. Application of recent theoretical approaches such as culture theory and social network theory can help us understand the structure of the military, its relationship to society, and the adversaries we are likely to have to face.

In the behavioral and social sciences, the line between basic and applied research is not as clear as it frequently is in the physical sciences and engineering. The findings from basic research are often directly applicable to human resource management practice and policy. Also, research conducted in non-military contexts can frequently have military implications and lessons. For example, psychologist Philip Zimbardo's experiments at Stanford in the early 1970s using students to simulate the behavior of corrections officers eerily anticipated the behavior of military personnel at Abu Ghraib in Iraq a generation later.

Finally, I have been asked to comment on how we communicate our findings to DoD and the military services. Part of this is done through the normal vehicles of science: meetings of professional associations that span the civilian and military boundary, such as the Inter-University Seminar on Armed Forces & Society, and the Society for Military Psychology. It is also done through the peer reviewed journals of these organizations, *Armed Forces & Society*, and *Military Psychology*, which have both uniformed and civilian readers and contributors. There are also important interactions between us and our civilian behavioral science counterparts within the military departments, such as those at the Army Research Institute for the Behavioral and Social Sciences and Navy Personnel Research, Studies and Technology. We also contribute to user-oriented scientific reports published by the armed forces. My colleague, Mady W. Segal, for example, co-authored an important 2007 report on *What We Know About Army Families*, prepared for the U.S. Army Family and Morale, Welfare, and Recreation Command, which is a user-oriented synthesis of the policy-relevant social science research in this area. I authored a 2007 Army Technical Report on *Social Structures Affecting Army Performance*. My colleague, Jeff Lucas, is the senior author of a Navy Technical Report on *The Role of Social Support in First-Term Sailors' Attrition from Recruit Training* that will soon be published.

Perhaps most importantly, we have also found the military to be enthusiastic consumers of our research, and we are frequently asked to serve as consultants to senior military and civilian leaders, and to participate in military conferences and study groups. For example, my colleague Meyer Kestnbaum was the deputy leader of a Secretary of Defense, Office of Net Assessment, Summer Study of "The Military Officer of 2030" at the Naval War College that was briefed to the Secretary of the Air Force, the Director of Net Assessment, and at least twice additionally at the Pentagon. Mady W. Segal has served as a Human Resource Consultant to the Secretary of the Army, as a member of the Board of Visitors of the U.S. Military Academy, as a member of the Congressional Commission on Military Training and Gender-Related issues, and as a Special Assistant to the Chief of Staff of the Army. She just recently made an invited presentation at the U.S. Naval Academy Leadership Conference, on *Leadership Beyond Barriers*. I personally have served as a Special Assistant to the Army Chief of Staff, as a member of the Defense Science Board Task Force on Human Resources Strategy, and as a member of the Board of Visitors of the U.S. Army War College. In recent months I have been invited to participate in an educators' workshop at Marine Base Quantico by the commanding general of the Marine Recruiting Command, to give a keynote address on our research on recruiting and youth attitudes at the Army Recruiting Consortium, and to address the

annual conference of the Court of Appeals for the Armed Forces, attended by hundreds of JAG officers, on changing conceptions of the military profession.

I will be happy to answer any questions you may have on these four issues, or on related topics on which I have expertise.