

At a Glance

What it is

- Human Social Cultural Behavioral (HSCB) Sciences is a technology investment area that strives to support decision making and improve tactical warfighter training and mission rehearsal by developing cross-cultural and sociocultural skills, computational social science models and simulations.

How it works

- Efforts aim to provide military decision makers with the knowledge and tools to understand the dynamics of regional populations through the development of data collection and analysis methods, computational social science models and sociocultural training methods and tools.

What it will achieve

- This focus area will enhance the ability of U.S. Navy and Marine Corps forces to identify, anticipate and defeat adaptive irregular threats operating within the physical, cyber and sociocultural domains. With a focus on operational- and tactical-level needs, HSCB data collection, analysis methods, and socially and culturally informed models of human behavior will enable the warfighter to forecast the effects of blue forces' actions. The warfighter will be able to identify types of influences that are likely to be effective and how they can be applied to shape the battlespace.

Point of Contact

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The Office of Naval Research (ONR) funds and manages basic and applied research and advanced development efforts in the HSCB sciences with the goal of developing a full understanding and mastery of the social, cultural and cognitive factors that will optimize the warfighter's ability to influence human behavior across the full spectrum of military operations.



To meet these objectives, research funding in the HSCB sciences supports an integrated portfolio, ranging from fundamental research to advanced development, to investigate the influence of cultural, social and cognitive factors on human behavior; develop data collection methods; build computational models; and validate operationally applicable tools.

HSCB-funded projects are distributed across:

- (1) Interdisciplinary basic research that builds foundational understanding of sociocultural behavior in military contexts and enables applied research and development
- (2) Related basic research grouped under the "anticipate and affect" tenet lane within ONR's Sciences Addressing Asymmetric Explosive Threats program
- (3) Growing an applied science base for general use, cross-domain capabilities and tools to support and facilitate the development of HSCB applications; this includes research in the areas of quantitative methods for social and cultural data collection and analysis, theory development and analytic methodologies
- (4) Developing computational modeling capabilities, visualization software toolsets and training and mission rehearsal systems that provide capabilities for forecasting human terrain responses at various levels
- (5) Integrating computational models into software tools that assist decision makers in considering human terrain factors
- (6) Maturing, hardening and validating software that models HSCB influences for integration into the architectures of existing programs of record or maturing software via open architectures to allow broad systems integration.

Research Challenges and Opportunities:

- Understand—Capabilities grounded in social and behavioral science to support thorough perception and comprehension of the sociocultural features and dynamics in an operational environment
- Detect—Capabilities to discover, distinguish and locate operationally relevant sociocultural signatures through the collection, processing and analysis of sociocultural behavior data
- Forecast—Capabilities to track and forecast change in entities and phenomena of interest along multiple dimensions through persistent sensing and modeling of the environment
- Mitigate—Capabilities to develop, prioritize, execute and measure courses of action grounded in the social and behavioral sciences