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Paper title: "Team Composition: Linking Individual and Team Characteristics to Team Decision-Making and Performance"

Paper [...]

Topics: Social Domain Issues - C2 Experimentation - Cognitive Domain Issues

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Abstract

Command and Control in the 21st century is characterized by transformation from traditional industrial age C2 to networked information age C2 concepts. While a requisite information infrastructure is widely recognized as enabler of networked C2, the contribution of humans to C2 performance is still underestimated. The authors argue that knowledge of how and to what degree characteristics of individuals and teams affect networked C2 and collective action, both in teams and between coalition forces, is indispensable for an efficient implementation of information age C2 concepts.

This paper presents results of an empirical study aimed at uncovering the effects of selected individual and team characteristics – measured by means of standard psychological tests – on team collaboration and effectiveness by means of simulation experiments. The study involved some 150 teams, of four cadets and junior military officers of the German *Bundeswehr* each, tasked to locate and attack targets distributed over a simplified terrain grid in a simulated operation. The results show how and to what degree personality structures, both on the individual and team level, affect collective decision making in and effectiveness of teams. They support the conclusion that C2 and mission effectiveness strongly depends on appropriate staffing and training of networked teams.