Head Strong
How Psychology is Revolutionizing War

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The need to understand and anticipate human behavior has been an integral part of war since the very inception of armed conflict between organized groups, dating back to (and most likely before) Sun Tzu. He contended that knowing yourself as well as your enemy was vital to consistent success in battle, while not understanding either force was certain to result in peril.¹

Notwithstanding, the science of psychology as a formal tool for refining the necessary understanding of human behavior as it relates to war is relatively new within the scientific community. As such, when compared to the longer histories of other fields of applied science, psychology has only been defined and formally organized for research relatively recently.

Despite its relatively short history as a formal discipline, modern psychological research has evolved as modern warfare has evolved, expanding its influence on measures taken to shape a war’s onset, conduct, and outcome.

Dr. Michael D. Matthews captures this progression in his book Head Strong: How Psychology is Revolutionizing War, effectively arguing that current
and forthcoming changes in psychological research and development will be vital to the composition, training, equipping, and employment of the military of 2030 and beyond.3

Matthews served as a professor of engineering psychology and deputy head of the Department of Behavioral Sciences and Leadership at the United States Military Academy. His background as a former service member and psychologist provides the requisite knowledge and expertise to address current and future impacts of psychology on the military.

The book begins by addressing the impacts of psychology on recruiting and training soldiers. Matthews predicts that the use of advanced personality testing will help identify the qualities needed for success as a service member, while modernized neuroscience mapping may potentially identify individual susceptibility to disorders such as anxiety and post-traumatic stress disorder.3

Next he addresses the criticality of building soldier resilience. Matthews lauds the implementation of the Comprehensive Soldier and Family Fitness Program and predicts that the program will continue to evolve in both efficiency and application to different services.4

Matthews places strong emphasis on highlighting cultural awareness (or competence) as key to understanding human behavior. He illustrates that language training by itself is inadequate as cultural training, and predicts that success in future conflicts will be greatly influenced by the understanding of the indigenous culture in and around which the military operates.5 Overall, the future force will be more thoroughly selected, vetted, and trained to conduct its assigned missions.

Matthews also tackles the contentious topics of diversity and generational differences in the military. He identifies the racial desegregation of military units, as well as the integration of women and homosexual service members, as significant developments of the past 70 years. Matthews predicts that the military of 2030 and beyond will be comprised of more minority races, females, and members of alternate sexual orientation.6

An undertone of social change is present in each of his topics and predictions. As the military is currently comprised of three to four different generational types (e.g., X, Y, Millennials), the predictions indicate paradigm shifts that many mid-to-senior-level leaders may not fully understand or personally support. The author highlights the evolving requirements for future leaders. He believes the proficiency of the new generation’s leaders must extend beyond technical skills and knowledge of systems to include political, social, and cultural competencies.7 Additionally, future leaders will be more successful using an egalitarian personality or approach more than an authoritarian one.8 Matthews does not believe that a leader like Gen. George S. Patton would be successful in the 21st century.9

The book concludes by addressing the use of technology and its psychological implications to develop better soldiers, which will help build a more efficient and capable future force. Matthews believes psychologists will work in partnership with engineers and physical scientists to advance soldier and system performance.10 He clearly articulates a major theme: technology and physical advances are not the only means to improve the force. The armed forces of 2030 and beyond must have soldiers who are psychologically capable, resilient, and highly trained to effectively take advantage of technological advances. The author states, “to get the most out of its soldiers and systems, the military must aggressively incorporate state-of-the-art psychology into all aspects of its missions.”11 He also discusses the possibility of psychology helping to improve diplomatic and international relations to (hopefully) prevent unnecessary war.

Head Strong is a fascinating and insightful text; however, there are some minor shortcomings worth mentioning. The first is the author’s inherent bias toward the “softer” science of psychology and related fields that permeates the text. Even so, this bias does not undermine the credibility of the issues, predictions, and the majority of contentions that Matthews presents.

Another minor flaw involves the citation of Army doctrine, specifically references to field manuals (e.g., FM 6-22) which have since been replaced by Army doctrine publications (e.g., ADP 6-22). This second issue is indicative of the timing of publication, as the manuscript was most likely published before the Army introduced Doctrine 2015, its current doctrinal reference structure.

A third shortcoming is Matthews’ occasional use of absolute terminology to support future predictions. He sporadically structures his claims in such a way as to negate the possibility of the other outcomes. One example concerning resilience is his statement that, in the future, “all soldiers will want to improve their
The general point the author intended to make is clear, but the verbiage used creates an absolute postulation and does not account for an inevitable standard deviation. A different example concerns the use of aptitude test results to select soldiers for the most appropriate jobs. He states that soldiers “placed into optimal jobs will work together better as teams.” The overall argument is accurate, but similar technical aptitudes may not be an infallible predictor of enhanced teamwork and productivity.

A final deficiency is Matthews’ perspective on baseline physical fitness standards. His discussion on the topic implies disagreement with standardized assessments of physical fitness. Although he clearly highlights the positive psychological benefits of physical fitness for overcoming obstacles, Matthews also argues that new technologies require enhanced cognitive skills. His implicit argument that technical skills may be of more importance than physical attributes results in a claim that “the relevance of a one-size-fits-all physical training standard may be called into question.”

This premise is false; the Army physical fitness standards are not currently one-size-fits-all. Alternate events and standards exist for individuals with legitimate physical limitations such as injuries. For those who do not possess physical limitations, the baseline standard exists as a measure of performance and a degree of separation from the average U.S. citizen. I predict that the military of 2030 and beyond will not want average U.S. citizens, but those who can be molded to become above average in all dimensions (to include the physical).

Overall, Matthews presents a well-structured, relevant, and multidimensional argument about the future impacts of psychological research and development for the armed forces. He discusses current trends in recruiting, training, and developing soldiers, and provides predictions on every topic. Matthews broaches the contentious topic of diversity within the ranks; his current assessment of the impact to the force is credible, and his thoughts on projected changes are certainly feasible.

Despite the previously discussed issues, Head Strong is certainly a worthwhile read for all officers. I also recommend this book for mid- to senior-level noncommissioned officers across all branches of the military. These audiences comprise key populations currently leading soldiers in the midst of changes driven by psychology. They will be influential as future changes come to fruition. If understanding ourselves and our adversaries is essential to success in warfare, then the significance of psychological developments on our future military force cannot be understated.

**NOTES**

3. Ibid., 29.
4. Ibid., 90.
5. Ibid., 106.
6. Ibid., 123.
7. Ibid., 163.
8. Ibid., 169.
9. Ibid., 174.
10. Ibid., 193.
11. Ibid., 215.
12. Ibid., 86.
13. Ibid., 30.
14. Ibid., 49.