

1. Record Nr.	UNINA9910789227903321
Titolo	Human performance modification : review of worldwide research with a view to the future // Committee on Assessing Foreign Technology Development in Human Performance Modification, Division on Engineering and Physical Sciences, Board on Behavioral, Cognitive, and Sensory Sciences, Division on Behavioral and Social Sciences and Education, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, District of Columbia : , : National Academies Press, , [2012] ©2012
ISBN	0-309-26272-0 0-309-26270-4
Descrizione fisica	1 online resource (67 p.)
Disciplina	612.8/233
Soggetti	Human-computer interaction Cognition User-centered system design Augmented reality Nootropic agents
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgment of Reviewers""; ""Contents""; ""Summary""; ""1 Introduction""; ""2 Human Cognitive Modification as a Computational Problem""; ""3 Human Performance Modification as a Biological Problem""; ""4 Human Performance Modification as a Function of Brain Computer Interfaces""; ""Bibliography""; ""Appendixes""; ""Appendix A: Biographic Sketches of Committee Members""; ""Appendix B: Meetings and Speakers""; ""Appendix C: Acronyms and Abbreviations""; ""Appendix D: Contextual Issues""
Sommario/riassunto	"The development of technologies to modify natural human physical and cognitive performance is one of increasing interest and concern, especially among military services that may be called on to defeat

foreign powers with enhanced warfighter capabilities. Human performance modification (HPM) is a general term that can encompass actions ranging from the use of "natural" materials, such as caffeine or khat as a stimulant, to the application of nanotechnology as a drug delivery mechanism or in an invasive brain implant. Although the literature on HPM typically addresses methods that enhance performance, another possible focus is methods that degrade performance or negatively affect a military force's ability to fight. Advances in medicine, biology, electronics, and computation have enabled an increasingly sophisticated ability to modify the human body, and such innovations will undoubtedly be adopted by military forces, with potential consequences for both sides of the battle lines. Although some innovations may be developed for purely military applications, they are increasingly unlikely to remain exclusively in that sphere because of the globalization and internationalization of the commercial research base. Based on its review of the literature, the presentations it received and on its own expertise, the Committee on Assessing Foreign Technology Development in Human Performance Modification chose to focus on three general areas of HPM: human cognitive modification as a computational problem, human performance modification as a biological problem, and human performance modification as a function of the brain-computer interface. Human Performance Modification: Review of Worldwide Research with a View to the Future summarizes these findings."--
