Evidence-Based Practice in Exercise Science: The Six-Step Approach

William Amonette, Kirk English, William Kraemer
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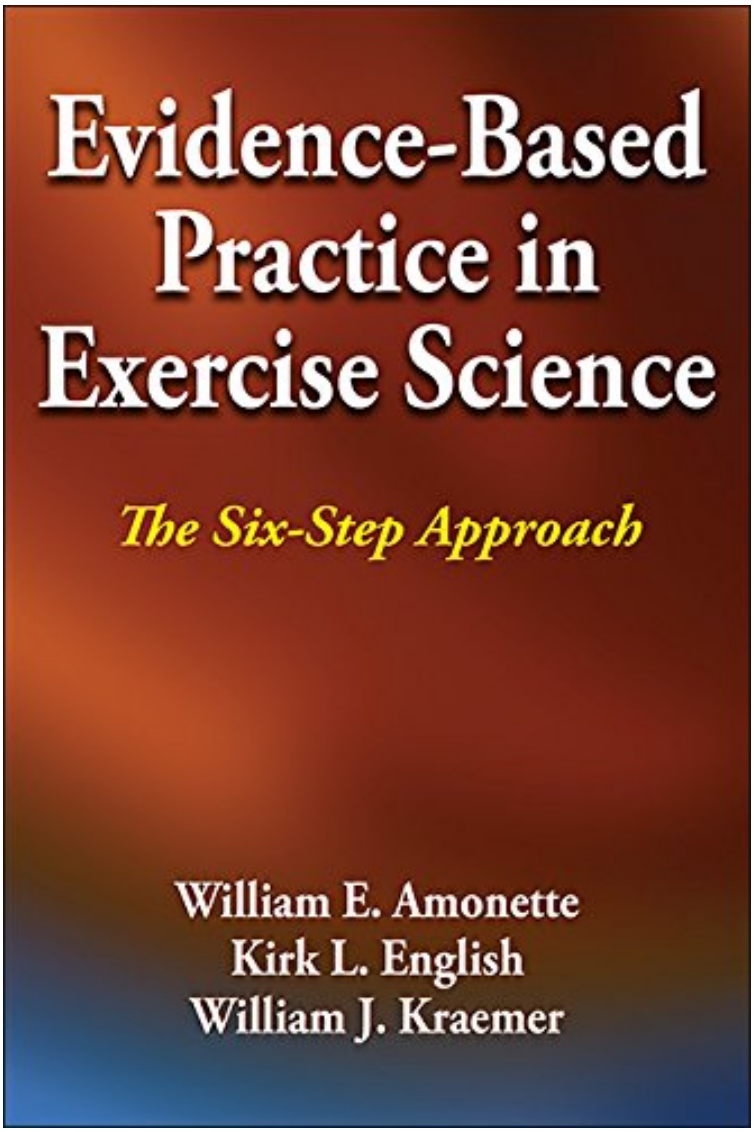

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William Amonette, Kirk English, William Kraemer : Evidence-Based Practice in Exercise Science: The Six-Step Approach before purchasing it in order to gage whether or not it would be worth my time, and all praised Evidence-Based Practice in Exercise Science: The Six-Step Approach:

0 of 0 people found the following review helpful. Five StarsBy Vanessa PorterArrived quickly and exactly as expected

Exercise science practitioners have access to mountains of research findings, expert opinions, novel techniques, and program plans via blogs, fitness magazines, conference presentations, and peer-reviewed journals. To facilitate effective practice, practitioners must sift through this information and retain only the best evidence to form a sound base of knowledge. Evidence-Based Practice in Exercise Science: The Six-Step Approach equips readers with the basic skills and competencies for discerning the value of scientific research. Using a methodical approach, students and professionals will learn to identify appropriate evidence to support novel interventions and avoid counterproductive or dangerous information to eliminate ineffective exercise options. The authors, well-known advocates in the study and application of evidence-based practice in the field of exercise science, take the five-step method of evidence-based practice that has been established in medicine, adapt it specifically for exercise science, and expand it to embrace individuality in exercise training. The content is accessible for students in a variety of courses in exercise science curricula; those seeking certification through professional organizations; and practitioners in the fields of exercise, nutrition, sports medicine, and sport science. This text is an instruction manual in understanding and applying evidence-based practice. The process is divided into six steps that begin with asking a question and then finding, evaluating, implementing, confirming, and re-evaluating the evidence. Readers of Evidence-Based Practice in Exercise Science will explore these aspects: The philosophy of science and design of scientific studies The use of search tools like PubMed and Google Scholar and how to rank or define the strength of the evidence Practical suggestions for implementing evidence-based practice in the field to better advise and serve athletes, clients, and patients Case studies that demonstrate realistic scenarios of how the evidence-based process may be used in a variety of sport and exercise settings Each chapter opens with chapter objectives that provide a road map for learning, and a chapter conclusion summarizes main points and ensures understanding. The case studies cover topics including exercise prescription; exercise for special populations; nutrition and supplementation; and exercise devices, equipment, and apparel. Each case presents a realistic scenario that an exercise practitioner may experience, presents background information, formulates a question for investigation, describes a search of the literature, discusses the findings, and provides a recommendation for practice based on the best current evidence. Evidence-Based Practice in Exercise Science is grouped into four sections that assist readers in gaining a better understanding of the evidence-based practice paradigm, learning the step-by-step method, and acquiring experience in the evidence-based approach by working through practical examples using real-world scenarios. Part I offers foundational knowledge of evidence-based practice in exercise sciences. Part II introduces the six-step method of evidence-based practice with chapters that explore each step of the process in depth. Part III presents 16 case studies grouped into chapters by general topics. Part IV concludes the text with chapters on disseminating and sharing knowledge and the future of evidence-based practice in exercise science. By understanding the concepts and process of evidence-based practice, current and future sport, exercise, and health professionals will prescribe individualized programs and treatments that improve athletic performance and lead individuals toward better health. Embracing evidence-based practice will ultimately advance the field and produce optimal outcomes for clients, patients, and athletes.

About the Author William E. Amonette, PhD, is an assistant professor and director of the exercise and health sciences program in the Department of Clinical Health and Applied Sciences at the University of Houston Clear Lake. Prior to becoming an academician, Amonette served as an assistant strength and conditioning coach for the Chinese national basketball team at the Beijing Olympic Training Center. He was also previously the assistant strength and conditioning coach and rehabilitation coordinator for the NBAs Houston Rockets, an astronaut strength, conditioning, and rehabilitation specialist, an exercise physiologist, and an integrated testing specialist for the Countermeasures Evaluation and Validation Project for Wyle Laboratories at NASAJohnson Space Center. Amonette earned his PhD at the University of Texas Medical Branch in rehabilitation sciences, with a research emphasis in clinical exercise physiology. He is a certified strength and conditioning specialist (CSCS) though the National Strength and Conditioning Association, an Associate Editor for the Journal of Strength and Conditioning Research, and ad hoc peer-reviewer for many scientific journals related to exercise and sport science. Amonettes research interests include physiological and mechanical predictors of sports performance and injury. He also has clinical research interest in neuroendocrine and metabolic responses to exercise in patients with traumatic brain injuries and the effect of novel exercise interventions on rehabilitation outcomes in people with disabilities. He has published numerous scientific and academic peer-reviewed journal articles, reports, and book chapters and has presented his work nationally and internationally. Kirk L. English, PhD, is a senior scientist with JES Tech LLC, a NASA contractor, and works in the Exercise Physiology and Countermeasures Laboratory at NASA Johnson Space Center. He is also a research scientist in the Department of Nutrition and Metabolism at the University of Texas Medical Branch (UTMB) and an adjunct professor at the University of Houston Clear Lake, where he teaches a graduate course. English, who is a member of the National Strength and Conditioning Association, American College of Sports Medicine, and American Physiological Society, received his PhD in rehabilitation sciences from UTMB. During his graduate studies, he was awarded a competitive three-year NASA/Texas Space Grant Consortium Graduate Fellowship. English has published numerous peer-reviewed articles, technical reports, conference abstracts, and book chapters on exercise, nutrition,

aging, spaceflight, and evidence-based practice in the field of exercise science. In his work with NASA, Englishs research focuses on the prevention of spaceflight-induced decreases in skeletal muscle mass, strength, and performance. His work includes the development and validation of novel exercise protocols and hardware that are used both on the ground and during spaceflight. He also conducts all pre- and post-flight strength testing of American, European, Canadian, and Japanese International Space Station crewmembers and serves as the liaison and subject matter expert on this topic to NASAs international partners. William J. Kraemer, PhD, is a full professor in the Department of Human Sciences at The Ohio State University. He has also held full professorships at the University of Connecticut, Ball State University, and The Pennsylvania State University, including each medical school. Dr. Kraemer is a fellow of the American College of Sports Medicine, the National Strength and Conditioning Association (NSCA), and the American College of Nutrition. Among many of his professional achievements, he is a recipient of the NSCAs Lifetime Achievement Award. He is editor in chief of the NSCAs Journal of Strength and Conditioning Research, an editor of the European Journal of Applied Physiology, and an associate editor of the Journal of the American College of Nutrition. He holds many other editorial board positions in the field. Kraemer has published more than 450 peer-reviewed papers in scientific literature and has published 12 books. He received the 2014 Expertscape Award, which named him the nations top expert in resistance training research over the past ten years. With almost 40,000 citations on Harzings Publish or Perish lists, his scholarly impact is impressive.