

Berryman, Jack W., and Park, Roberta J., eds. *Sport and Exercise Science: Essays in the History of Sports Medicine*. Urbana: University of Illinois Press. 1992. Pp. xvii. 372. Notes, photographs. index.

Human physical performances such as those of Olympians Jackie Joyner-Kersey and Carl Lewis impress and mystify modern-day spectators no less than did the 55-foot-long jump of the legendary fifth-century B.C. athlete. Phayllus of Croton. This long-held fascination with the capacity of the human

body to perform superhuman athletic feats provides one excellent sub-test for this exposition into the relationship between, and scientific study of, exercise, sport, and medicine.

The 10 articles in this anthology collected and introduced by Jack Berryman and Roberta Park fulfill several important functions in the historiography of sport and exercise. Many of the articles contain extremely useful and interesting surveys of the relevant literature on a range of medical and exercise topics. This work also brings together two important constructs of this field: the historical significance of efforts to link medical inquiry with sport, exercise, and physical education, and the cultural attitudes which influence how and what scientific research is undertaken. Additionally, many of these articles lend themselves to sport history seminars and even undergraduate reading lists.

The articles as a group explore the shifts and permutations of medical advice regarding exercise and sport. How much exercise, what kind, and its consequences for the healthy function of the body are questions raised since the time of Hippocrates and Galen, and which are relevant to late twentieth-century concerns about proper ways of exercising. And, like the modern-day propensity to adopt the latest trends in “trans-forming” the body by experimenting with exercise method, equipment, and diet, the contributions of Roberta Park, James Whorton, and Donald Mrozek suggest that the eschewing of scientific and physiological know-how in favor of popular notions about bodily function had its origins as early as the nineteenth century.

Many of the articles focus on nineteenth-century ideas about exercise. The decision of many athletes to ignore the latest physiological discoveries in favor of traditional wisdom made it possible for a variety of specious beliefs about the consequences of strenuous exercise to filter through and persist in nineteenth-century society. Efforts to improve the physical body and its capacity for high-level performance led athletes to adopt “unproven” methods, and compelled the public to ask the question: Is the athlete healthy? This question was raised in that century’s debate over vegetarianism as a performance enhancer discussed by Whorton, and in the steroid-abusing climate of modern sports explored by Terry Todd.

Cultural attitudes toward the health, function, and performance capabilities of the human body continue to influence both scientific research directions (e.g., studies of the reproductive capacity of elite female marathoners), and the endurance of traditionally held beliefs about human capacity. Park explains in her two articles that the approach to physical performance by athletes in the nineteenth century wavered between utilizing “specialized knowledge gathered through observations,” and information gathered through scientific, “carefully designed and controlled experiments.” (p. 88) with athletes and their trainers inevitably choosing the former method. This construct has great applicability for studies which explore the shifts in medical authority regarding patterns of sport and exercise participation.

Physiologists continue to explore the relationship of exercise to health, an issue with antecedents in the ancient period according to Jack Berryman. But, as Hoberman, Whorton, and Mrozek show, generalizations about medical influence are difficult to make because of the impact of specific societal concerns (such as Whorton's case of medical and popular beliefs about the impact of exercise on the "athlete's heart"), and other timely issues. These scholars demonstrate that physicians have not uniformly, nor without qualification, recommended exercise for the improvement and preservation of health.

Several authors clearly attempted to identify the "hidden" agendas underlying attitudes toward exercise held by some physicians. This is a useful direction to take in the study of sport history if the more profound questions about the function and impact of exercise and sport in society are to be answered. Medical practitioners have at times taken on dual roles as purveyors of specific sociopolitical aims as well as shapers of such thought. Vertinsky, for example, points out quite astutely that doctors "utilized pseudoscientific theories about the effects of the reproductive cycle upon women's physical capabilities to control the life choices of middle-class women and set limits upon their activities" (p. 183). Thus, these physicians recommended physical activity as much to control and limit women's behavior as to legitimate their physical and mental development. While Bernarr Macfadden actively promoted exercise as healthful for women, Jan Todd's article shows that moral, social, and aesthetic concerns have had an impact on cultural perceptions of acceptable forms of exercise for women. And Hoberman's piece unravels the conservative sociopolitical views of German physicians and physiologists that influenced their recommendations of specific activities.

Admittedly, the concept of "sports medicine" receives a generous berth in this work: it would be interesting to read a collection which focuses on a specific time period such as ancient medicine and physical culture. And, while Jan Todd's piece and that by Patricia Vertinsky addressed the particular issues related to women's health and exercise practices in the late nineteenth and early twentieth centuries, further research is needed which takes into account the *distinctions* in medically prescribed exercise for men and women. Also, how did cultural definitions of appropriate physical activity vary according to social class and status?

The editors offer "a historical perspective on the growing field of sports medicine and the scientific study of exercise, sport, and physical education," (p. xiii) while looking at "important traditions, trends, and ideas" (p. xiv). The breadth of topics covered in this work provides a worthy and fascinating bird's-eye view of enduring questions about the impact of strenuous exercise and sport on the health and efficiency of the human body throughout history.