## SPORTSCIENCE

sportsci.org

**News & Comment / Research Resources** 

## Impact Factors of Journals in Sport and Exercise Science, 2004

## Will G Hopkins

Sportscience 9, 14-16, 2005 (sportsci.org/jour/05/wghif.htm) Sport and Recreation, AUT University, Auckland 1020, New Zealand. <u>Email</u>. Reviewer: Steve Olivier, Social and Health Sciences, University of Abertay Dundee, Dundee, UK.

> A journal's impact can be measured as a factor representing the recent annual rate of citation of its average article. Exercise and sport-science journals with impact factors rising by more than 0.3 since last year include Acta Physiologica Scandinavica (now 2.1), Journal of Rehabilitation Medicine (1.6), Leisure Sciences (1.3), Pediatric Exercise Science (1.4), Physical Therapy (2.0), Scandinavian Journal of Medicine and Science in Sports (1.7), and Sports Medicine (2.8). A noteworthy newcomer is Exercise and Sport Sciences Reviews (2.3). Journals maintaining their impact include American Journal of Sports Medicine (2.4), Archives of Physical Medicine and Rehabilitation (1.7), British Journal of Sports Medicine (1.3), European Journal of Applied Physiology (1.3), High Altitude Medicine and Biology (1.5), Human Movement Science (1.1), International Journal of Sport Nutrition and Exercise Metabolism (0.9), International Journal of Sport Psychology (0.4), International Journal of Sports Medicine (1.4), Journal of Applied Biomechanics (0.4), Journal of Applied Physiology (2.8), Journal of Applied Sport Psychology (0.9), Journal of Athletic Training (1.3), Journal of Biomechanics (1.9), Journal of Sport and Exercise Psychology (1.4), Journal of Strength and Conditioning Research (0.9), Medicine and Science in Sports and Exercise (2.6), and Research Quarterly for Exercise and Sport (0.9). Two core journals fell by more than 0.4: Clinical Journal of Sport Medicine (1.4) and Journal of Sports Sciences (0.9). KEYWORDS: academic, citation, publication, research.

Reprint pdf · Reprint doc

Each year Thomson Scientific (formerly the Institute for Scientific Information) publishes an update of its Journal Citation Reports, which summarize the ways authors of journal articles cite other articles. The statistic of most interest is the journal impact factor, which is the number of times per year the average article in a given journal in recent years (2002, 2003) was cited in all journal articles in the previous year (2004). Impact factors provide only a rough measure of quality of articles in the various journals. For more information and a critique, read the article that accompanied last year's list at this site. The journal Nature, which enjoys one of the highest factors (currently 32), also featured an editorial in June that was critical of "the unhealthy reliance on impact factors by administrators and researchers' employers worldwide to assess the scientific quality of nations and institutions, and often even to judge individuals".

This year Thomson Scientific insisted that I provide a shorter list of journals and approxi-

mate values for some journals, to comply with its policy of acceptable use. I have therefore focused on the core journals of sport and exercise science. I have also had to stop tabulating factors for previous years in this article and to remove tabulations from previous articles. You can access complete citation data at Thomson Scientific's <u>Web of Knowledge</u>, if your institution has a subscription.

In my report for impact factors in 2003, I noted that the typical change in the impact factor between years was  $\sim\pm0.3$ . Assuming a change greater than 0.3 is therefore atypical or noteworthy, the following core journals showed noteworthy increases since last year: Acta Physiologica Scandinavica (1.7 $\rightarrow$ 2.1), Journal of Rehabilitation Medicine (1.1 $\rightarrow$ 1.6), Leisure Sciences (0.7 $\rightarrow$ 1.3), Pediatric Exercise Science (0.8 $\rightarrow$ 1.4), Physical Therapy (1.6 $\rightarrow$ 2.0), and Sports Medicine (2.4 $\rightarrow$ 2.8). The biggest winner is the Scandinavian Journal of Medicine and Science in Sports, up from 0.9 to 1.7. Exercise and Sport Sciences Reviews made a respectable

entry on 2.3, after the requisite three years since its first appearance as a journal. Two core journals showed a noteworthy decline of more than 0.3: *Clinical Journal of Sport Medicine*  $(1.8\rightarrow1.4)$  and *Journal of Sports Sciences*  $(1.3\rightarrow0.9)$ .

I doubt whether the changes in specific journals reflect changes in quality of the articles therein. More likely, the changes are due either to sampling variation, or to changes in the area of specialization of the journal, or to changes in research activity in the journal's discipline. It worries me that a fall in a journal's impact could result in a vicous cycle of decline, because

<1.0	ACSM's Health and Fitness Journal			
<1.0	Adapted Physical Activity Quarterly			
	American Journal of Medicine and Sports			
1.1	American Journal of Physical Medicine and Rehabilitation			
~4	American Journals of Physiology			
2.4	American Journal of Sports Medicine			
	Applied Ergonomics			
<1.0	Applied Psychological Measurement			
<1.0	Applied Psychology-International Review			
1.7	Archives of Physical Medicine and Rehabilitation			
<1.0	Athletic Therapy Today			
1.0	Australian Journal of Physiotherapy			
<1.0	Aviation Space and Environmental Medicine			
1.3	Behavior Research Methods, Instruments, and Computers			
<0.1	Biology of Sport			
1.3	British Journal of Sports Medicine			
1.1	Canadian Journal of Applied Physiology			
1.3	Clinical Biomechanics			
1.4	Clinical Journal of Sport Medicine			
2.0	Clinical Nutrition			
<1.0	Clinics in Sports Medicine			
<1.0	Deutsche Zeitschrift fur Sportmedizin			
	Electromyography and Motor Control			
<1.0	Ergonomics			
1.3	European Journal of Applied Physiology			
2.1	European Journal of Clinical Nutrition			
	European Journal of Sport Science			
	European Sports History Review			
2.3	Exercise and Sport Sciences Reviews			
-	Exercise Immunology Review (discontinued)			
1.7	Gait and Posture			

some researchers may save their best work for journals that are on the way up. My continuing to publish these factors from year to year might help set such a vicious cycle in motion. Publishing this article is also inconsistent with my critical view of impact factors, but my motives are partly selfish: the article is easy to write, it is popular, and it may serve as a magnet to attract readers to the other articles.

In the table below, "<1.0" implies a value between 0.1 and 1.0. Journals without an impact factor are not in ISI's science or social sciences databases, either because the journal is too new or the factor is too low.

1.5	High Altitude Medicine and Biology				
1.1	Human Movement Science				
3.7	International Journal of Epidemiology				
	International Journal of History of Sport				
	International Journal of Performance Analysis in Sport				
0.9	International Journal of Sport Nutrition and Exer- cise Metabolism				
0.4	International Journal of Sport Psychology				
1.4	International Journal of Sports Medicine				
	International Review for the Sociology of Sport				
	International Sports Journal				
<1.0	Isokinetics and Exercise Science				
<0.1	Japanese Journal of Physical Fitness and Sport				
<1.0	Journal of Aging and Physical Activity				
	Journal of Applied Behavioral Science				
0.4	Journal of Applied Biomechanics				
2.8	Journal of Applied Physiology				
2.6	Journal of Applied Psychology				
0.9	Journal of Applied Sport Psychology				
1.3	Journal of Athletic Training				
1.9	Journal of Biomechanics				
	Journal of Bodywork and Movement Therapies				
<1.0	Journal of Clinical Psychology				
	Journal of Comparative Physical Education and Sport				
2.1	Journal of Electromyography and Kinesiology				
2.8	Journal of Epidemiology and Community Health				
	Journal of Exercise Physiology Online				
<1.0	Journal of Human Movement Studies				
	Journal of Human Performance in Extreme Envi- ronments				
<1.0	Journal of Leisure Research				

10	laumal of Mater Dahautaur		Madiaina and Chart Calanas
1.8	Journal of Motor Behaviour		Medicine and Sport Science
3.2	Journal of Nutrition	1.4	Pediatric Exercise Science
	Journal of Occupational and Environmental Medi-		Pediatric Physical Therapy
	cine	<1.0	Perceptual and Motor Skills
<1.0	Journal of Orthopaedic and Sports Physical Ther-		Physical Educator
1.0	apy	2.0	Physical Therapy
<1.0	Journal of the Philosophy of Sport	<1.0	Physical Therapy in Sport
	Journal of Physical Education, Recreation, and Dance	<1.0	Physician and Sportsmedicine
4.3	Journal of Physiology	<1.0	Physikalische Medizin Rehabilitationsmedizin Kurortmedizin
<1.0	Journal of Science and Medicine in Sport	1.0	Psychology of Sport and Exercise
<1.0	Journal of Social and Clinical Psychology	<1.0	Quest
1.4	Journal of Sport and Exercise Psychology	<1.0	
	Journal of Sport and Social Issues		Research in Sports Medicine (was Sports Med Train Rehab)
	Journal of Sport Behavior	0.9	Research Quarterly for Exercise and Sport
<1.0	Journal of Sport History	1.7	Scandinavian Journal of Medicine and Science in
<1.0	Journal of Sport Management		Sports
<1.0	Journal of Sport Rehabilitation	<1.0	Science and Sports
	Journal of Sports Chiropractic and Rehabilitation	<1.0	Sociology of Sport Journal
<1.0	Journal of Sports Medicine and Physical Fitness		Sport History Review
	Journal of Sports Science and Medicine	<1.0	Sport, Education, and Society
0.9	Journal of Sports Sciences		Sports Biomechanics
	Journal of Sports Traumatology		Sports Exercise and Injury
0.9	Journal of Strength and Conditioning Research	2.8	Sports Medicine
	Journal of Swimming Research	<1.0	Sports Medicine and Arthroscopy Review
<1.0	Journal of Teaching in Physical Education	<0.1	Sports Medicine Standards and Malpractice Re-
1.3	Leisure Sciences		porter
	Leisure Studies	<1.0	Sportverletzung-Sportschaden
	Measurement in Physical Education and Exercise		Strength and Conditioning
	Science	<1.0	Strength and Conditioning Journal
<0.1	Medicina dello Sport	<1.0	The Sport Psychologist
2.6	Medicine and Science in Sports and Exercise		Women in Sport & Physical Activity Journal

Thomson Scientific, Inc. is the publisher and copyright owner of the Journal Citation Reports®. Impact Factors listed in this article are used with the express permission of Thomson Scientific.

Published Dec 2005 ©2005