

Academic Journals

By the end of your first week of university or college, you have been exposed to and affected by research that has been published in academic journals. I am often surprised and usually more than a bit deflated to learn that many of my research methods students neither know what an academic journal is, nor have pored over the contents of one first hand. More's the pity, because we often treat the contents of academic journals as canonised information in our respective sub-disciplines. The contents of your professor's lectures and the very tests and papers you will be required to write are all, in some way, linked to research that has appeared in academic journals. In this entry, let's analyse some of the critical features, components and uses of academic journals.

WHAT IS THIS CONCEPT?

Students sometimes have difficulty understanding what original empirical research refers to when we talk about the papers that appear in academic journals. Your garden variety 'research article/paper' appearing in a journal, is a sole- or multi-authored summary and analysis of first-hand research which has been conducted by the author(s). A research article's contents generally follow a similar structure: it introduces you to the question or idea underpinning the author's research project (e.g. 'Is there a culture of violence in professional ice hockey?'); what we know about the subject (in this case, a literature review of other people's research on ice hockey violence or sport violence in general, taken from books and journal articles); how the data or 'evidence' were collected within the project (e.g. interviews, experiments, surveys, media analysis, and so on); a theoretical and conceptual analysis of what the researchers think the data they gathered mean, or what the data show related to our research question (e.g. 'Yes, there is a culture of violence in the sport of ice hockey, and here is how it seems to form'); and a conclusions/discussion section where the researchers usually summarise what they found and suggest future directions for other researchers.

An academic journal is like an ongoing diary where research efforts within a specific field of study that have been identified as important, innovative, compelling and informative are published and debated. In

more specific terms, an academic journal is a periodical in which research relating to a particular academic discipline or sub-discipline is regularly published. Normally, an academic journal is published anywhere from three to six times yearly and contains a number (anywhere from 2 to 12, or more) of published research articles. Journals often contain theoretical and philosophical essays as well (e.g. let's say I propose a new theory which explains why ice hockey players fist fight), reviews of books that have been published by academics (e.g. imagine I read and provided my own assessment of a new book on ice hockey violence), meta-reviews of selected published research on a specific topic (i.e. where someone has actually read everything published on a subject like ice hockey violence and then summarised this collectively for us), or statements about 'research in progress' authored by a researcher (we often refer to these as 'Research Notes'). Academic journals serve as forums for the introduction and presentation of research conducted by academics all over the world. They are, in many ways, the lifeblood of academic research and the critical medium in the circulation of academic knowledge.

WHY IS THIS RELEVANT TO ME?

Very early on in your career as a student, you should become familiar with articles published in academic journals. They are invaluable tools for the successful completion of your own coursework and research projects. A proper and reflexive use of sport and exercise science literatures in a term paper or report is always impressive. But a review of published research and theory in academic journals is also essential for understanding how to think like a psychologist, economist or historian of sport. Reading and knowing the academic literature relevant to your sub-discipline of interest in sport and exercise sciences are components of the 'apprenticeship' role a student adopts. Journal articles provide you with a more rounded and deeper overview of the material in your courses, they add flesh to the skeletal structure of ideas presented to you in textbooks, and they unpack and explain the significance (and real-world practicality!) of the complex issues you will be exposed to in your studies.

To all intents and purposes, reading academic journal articles about a subject of your interest is probably the first step you will ever take in conducting research. Reviewing what has been published in academic journals in your substantive field of interest is indeed truly vital in the research process. But an important hurdle to overcome at first (at least



something my students complain about all the time) is that many journal articles are dense, inaccessible and filled with technological or theoretical lingo. Because academic journal articles are generally written by and for full-time academics, the style of writing can be distracting and discouraging for undergraduate students. I think this might be one of the reasons why so many of my students 'read' an article by only skimming the article's 'Abstract' (a summary of the article placed on its first page) and/or the 'Conclusion' section. Do not be discouraged if there are many parts of the article that seem daunting at first; with time, patience and experience, you will become very familiar with all of the terms and lingo. Reading and understanding journal articles is a learned skill; and thankfully, as my physiology and coaching colleagues remind me, it does not take the same time and physical effort as learning a physical skill in sport that may require 15,000 repetitions to master!

SHOW ME HOW IT'S USED!

In every one of our sub-disciplines in sport and exercise science, there may be a handful or even dozens of academic journals in which your professors and instructors strive to publish their original research findings. Psychologists of sport, for example, regularly seek to publish in journals such as *Psychology of Sport and Exercise*, *Journal of Applied Sport Psychology*, and the *International Journal of Sports Psychology*. While there are quite a few journals in every sport or exercise sub-discipline, there are literally hundreds, and in some academic fields thousands, of researchers seeking to publish their findings in the journals. An average journal may be published say four times yearly, and accept four to eight articles for publication in each of its editions – a total of only 16–32 research articles for the entire year. Hundreds of research papers may have been submitted to the journal for consideration. So, when an article appears in print it has won quite a competitive struggle. Why is this important?

One of the main differences between academic journals and trade publications where research is published (like magazines, newspapers, or even academic books) is that a research paper appearing in an academic journal has been *peer reviewed*. To have a significant understanding of why academic journal articles are treated in such high regard, and why researchers use them so frequently, we need to briefly discuss the process of peer review.

A journal of high esteem for sport and exercise sciences researchers (especially for some of our 'hard science' colleagues) is the *Journal of*



Sport Sciences (JSS). The *JSS* is physically published and distributed by the book company Routledge, but is organised, administered and managed by members of the British Association of Sport and Exercise Sciences (BASES), the World Commission of Science and Sports, and the International Society for the Advancement of Kinanthropometry. These organisations may sound rather fancy and exclusive, but they are not, really. Academic societies and associations like BASES are comprised of groups of professors from a particular country, or from around the world, who work in the same field, for instance, sports nutrition or biomechanics. They pay a yearly membership (normally) to be in the society, and may frequently meet with other members to discuss their research (often, in three- or four-day academic conferences sponsored by the societies). One of their self-appointed tasks is to create and manage an academic journal that publishes important, innovative, critical or path-breaking research in their disciplinary area. Any journal, like the *JSS*, is overseen by an editor and an editorial board comprised of members from BASES who review research papers submitted to the journal by authors. Now here's where we get to the consequential bit.

I recently finished a three-year study of pain tolerance techniques among ultra marathon runners, wrote a paper summarising the project and its findings, and now want to publish it in a journal such as the *JSS*. So, my next step would be to send them my paper, and cross my fingers! Upon receipt of my submitted manuscript (our language for a written, but not published paper), the journal editor at the *JSS* would first determine whether to reject the submission outright (i.e. if the article does not meet their standard of research quality, or focuses on a subject not usually published in the journal), or begin the process of peer review. If they thought the article decent enough to be fully reviewed, my submission would become subject to anonymous peer review by other academics (who are experts in the area of, say, ultra-endurance sport or pain processes in sport).

The number of peer reviewers (or 'referees') varies according to each journal's policies – typically, no fewer than two, and usually at least three outside peers review the article. The editor sends them my paper (without my name or university affiliation anywhere on it), and they are given several weeks to conduct the review. I do not know who is reviewing my paper, nor do the reviewers know I have written it. This 'double blind' process is standard at journals and is critical for ensuring that our own biases and beliefs about a colleague or their past work do not get factored into the review process. The editor(s) uses the reviewers'

opinions (submitted in the form of standardised reports) in determining whether to publish my article, Typically, because the process is lengthy, an accepted article will not be published until months after its initial submission, while publication after a period of several years is not unknown. What all of this means in practice is that by the time a published article appears in print, it has typically gone through a very rigorous process of review, scrutiny, revision and defending. Furthermore, researchers collectively use journals to validate the legitimacy of our research abilities, efforts and findings. Because they have been so extensively peer reviewed and critiqued through the submission process, articles become considered among academics as signs of a person's own competence as a researcher.

PROBLEMS, PITFALLS AND CONTROVERSIES

A professor of mine told me once that there are students who read articles in academic journals and those who use them. The statement perplexed me at the time, but after several years of reading journal articles and assigning course tasks requiring their employment, I came to fully understand his message. Using journals is a process that involves critically evaluating their contents. I cannot impress upon my students this lesson with enough enthusiasm. There is a natural tendency for students to read and then simply describe or repeat what lies on the pages of a journal article; perhaps out of deference to academic authority, due to their hurrying through a research assignment, or for many other reasons. But research knowledge needs to be scrutinised by both the most seasoned and neophytic of academic eyes. When I assign a research assignment requiring the use of academic literature, students tend to magically agree with the theories, methods and findings in the literature. Students of mine who have studied representations of femininity in sports advertisements or codes of masculinity in the pain and injury process, all tend to find themselves in total agreement with the dominant theories explaining either phenomenon. Students and faculty members alike must remember that arguments contained in our literatures are living, breathing (of course metaphorically) things, which need constant critical evaluation. Although the charge might be a cliché or rather passé in certain respects, never completely accept an argument just because it appears in a journal article.

Also, researchers can often find considerable creative benefit in exploring academic articles beyond their disciplinary boundaries. In my

own research on eating cultures in sport, I have come to learn quite a bit from psychologists, nutritionists and physiologists about athlete eating behaviours. My own sociological questioning of the rise of eating problems in sport cultures has been markedly influenced by other theoretical ways of seeing eating disorders brought forward through non-sociological journals. In short, our tendency to be uni- rather than multi-disciplinary when starting a project can sometimes severely limit how much we learn about a subject of our interest.

A relatively new trend among academic journals is their mass migration to online spaces. When I first started undergraduate school, online access to journal articles was universally unknown. Today, most journals are published as online texts that may be accessed for a fee, and share archives of their journal editions dating back a decade or more (see the entry on Literature Reviews for a description of how to search online journals). Among the more controversial trends in contemporary publishing is what we call the online open accessing of journals. An open access journal is one which is published online and requires no subscription (normally your university pays a subscription fee to access an academic journal for the entire school). The aim of open accessing is to literally 'open up' academic research to communities of students, researchers and members of the general public, while reducing the environmental impact of paper-based forms of publishing. To the advocates of open access, paying academic societies and publishing companies huge sums for important knowledge is a bit unsavoury and exclusionary. Some researchers express concern, perhaps in a knee-jerk fashion, about the quality of open access journals and have been reluctant to accept them as legitimate. Others are simply unaware of the mass existence of online journals in fields such as sport and exercise science. Yet others express concern that if the journal eventually disappears into virtual space, our research efforts will be lost forever.

See also: *Archival Research; Literature Reviews; Meta-Analysis; Research Proposals; Research Questions.*

KEY READINGS

The best way to learn about the wide-ranging scope and content of sport-related academic journals is by delving deeply into them. Here is a partial list of the most common academic journals used by sport and exercise researchers.



American Journal of Physiology
American Journal of Sports Medicine
Applied Bionics and Biomechanics
Athletic Insight: The Online Journal of Sport Psychology
Biomechanics
British Journal of Sports Medicine
Canadian Journal for Women Coaching
Coaching: An International Journal of Theory, Research and Practice
Coaching Psychologist
European Journal of Applied Physiology
European Journal of Nutrition
European Journal of Sport Science
European Sport Management Quarterly
Human Movement Science
International Journal of Behavioral Nutrition & Physical Activity
International Journal of Food Sciences & Nutrition
International Journal of Sport & Exercise Psychology
International Journal of Sport Nutrition & Exercise Metabolism
International Journal of Sport Psychology
International Journal of Sports Marketing & Sponsorship
International Journal of the History of Sport
International Review for the Sociology of Sport
International Sports Law Review
Journal of Applied Biomechanics
Journal of Applied Physiology
Journal of Applied Sport Psychology
Journal of Athletic Training
Journal of Biomechanics
Journal of Electromyography and Kinesiology
Journal of Exercise Physiology
Journal of Hospitality, Leisure, Sports and Tourism Education
Journal of Human Nutrition & Dietetics
Journal of Leisure Research
Journal of Sport Behavior
Journal of Sport & Exercise Psychology
Journal of Sport & Tourism
Journal of Sport Tourism
Journal of Sports Sciences
Journal of the International Society of Sports Nutrition
Legal Aspects of Sport
Leisure Management
Leisure Sciences
Leisure Studies
Nutrition Research
Operative Techniques in Sports Medicine



PE & Sport Today
Pediatric Exercise Science
Physical Education & Sport Pedagogy
Physical Therapy in Sport
Professionalization of Exercise Physiology Online
Psychology of Sport and Exercise
Recreation
Research Quarterly for Exercise & Sport
Science & Sports
Sociology of Sport Journal
Sport, Education & Society
Sport, Ethics & Philosophy
Sport in History
Sport in Society
Sport Journal
Sport Management Review
Sport Marketing Quarterly
Sport Psychologist
Sport Sciences for Health
Sports Biomechanics
Strength and Conditioning Journal
Training & Coaching Today
Women in Sport & Physical Activity Journal

..... Analytic Epidemiology

My brother contracted a very rare form of epilepsy when he was 46 years old. The disease changed his life immeasurably, and every day seems like an uphill battle for him. Knowing that he played quite a bit of contact sport in his youth, his doctors were quite eager to explore whether or not his brain suffered permanent trauma as a teenager; and whether or not such trauma might be aetiologically linked to his epilepsy. The manifestation of epilepsy in adults is poorly understood by neurologists and other specialists. Some common causes of epilepsy in children are cerebral palsy (most often due to complications related to childbirth), infections of the brain, metabolic and certain systemic diseases, any structural disease of the brain, head trauma and a range of