# IMPACT FACTOR (IF) OF HOSPITALITY, LEISURE, SPORTS & TOURISM JOURNALS: CURRENT TRENDS, OVERALL RANKING AND TEMPORAL STABILITY OVER A FOUR YEAR PERIOD

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#### Abstract

A journal's "impact factor" (IF) is the bibliometric index that reflects the frequency with which an "average article" from a scientific journal has been cited in subsequent publications. The purpose of the present study is to examine the current impact factor of Hospitality, Leisure, Sports & Tourism journals, their overall ranking and temporal stability over a four year period. For this reason, we have included the impact factor of the scientific journals classified in the "Hospitality, Leisure, Sports & Tourism" subject category of the Journal Citation Reports (JCR) database from 2007 to 2010. Available data indicates that during this period, 34 journals were added to the aforementioned category and the average impact factor rose from 0.86 in 2007 to 0.99 in 2010. Therefore, "Hospitality, Leisure, Sports & Tourism" journals' impact factor remained relatively stable during the four years examined.

#### **Keywords**

Citation analysis, journal citation reports, research performance

### Introduction

Scientific journals are the primary mode for disseminating scholarly information within and between disciplines. An quantitative method for evaluating the quality and prestige of a jour-

nal is the analysis of its citation rates. A journal's impact factor (IF) is the most popular measure of assessing the citation patterns of that journal (Garfield 1955).

The IF, as a fundamental citation-based measure of significance and performance of scientific journals, was introduced by Eugene Garfield in 1955. Garfield used the IF as an internal index of the Science Citation Index to help in the selection of journals to be included in this database (Garfield, 1999, 2006). The JCR is published in two editions, one for the Sciences and one for the Social Sciences.

Despite the fact that most scientists, funding organizations, promotion committees, and journal editors are very much aware of the field-specific biases associated with the use of journal IFs as a measure of scientific quality or even impact (Garfield, 2006; Postma, 2007), journals' IF continues to be used widely as an indicator of journal visibility or prestige by researchers, publishers, libraries, and even research funding bodies, and it is the first objective, quantifiable, and stable assessment of the worth of scientific journals (Lluch, 2005). It has gained acceptance in the scientific community and is now one of the parameters most frequently and almost exclusively used in developed countries to assess the importance of scientific journals (Buela-Casal, 2002).

Thus, it is not surprising that the IF has been the topic of many studies across different disciplines. Some of these studies examined various aspects of journals' impact of factor (Chew, Villanueva, & Van Der Weyden, 2007).

Towards that end, application of statistical techniques may help to enlighten the worth of and problems surrounding the concept of an impact factor. One of the subject categories included in the Science Edition of the JCR is the "Hospitaly, Leisure, Sport & Turism". Despite the plethora of citation rates studies in different scientific fields, limited information exists about the performance of the journals covering the discipline of "Hospitaly, Leisure, Sport & Turism".

Other hand, non-US scholars do use citations from the other side of the Atlantic. Moreover, it would appear that there is "cultural bias" of the IF. Link (cited in Boldt et al., 2000) reported that American reviewers preferred US manuscripts. This means that a manuscript from an international (outside US) source is less likely to be published than one originating in the US.

Americans often do not quote pertinent European literature leads to an unjustly high IF for American journals and an unjustly low IF for the European journals" (Eriksson, 2004).

The aim of this article is to review upon the IFs of journals classified under the topic of "Hospitaly, Leisure, Sport & Turism" in the SCI database of the JCR, available via ISI Web of Knowledge. The analysis was restricted to the last 4 years, subject category journals, in the SSCI database of the JCR, for the years 2007 to 2010. During that period, 33 journals appeared in the "Hospitaly, Leisure, Sport & Turism" category (Table I). Forty-four (53,65%) originated from North America and thirty-eight from Europe (46,34%). Moreover, during a four-year period (2007-2010) the vast majority of the publications were written in English seventy-four (90,24%), while eight (9,75%) were indexed as being multi-language. Clearly, the above depiction of data provides additional support to the notion that English is the predominant language in the JCR database (Kurmis, 2003; Togia & Tsigilis, 2006).

Relative position of the "Hospitaly, Leisure, Sport & Turism" journals impact factor. The JCR comprises two editions, the Science edition and the Social Science edition. The Social Science edition for 2010 contains 56 categories. One of these categories is the "Hospitaly, Leisure, Sport & Turism." Journals impact factor Table 1 provides descriptive statistics of the IF of journals indexed in the Social Science edition of the JCR database for the period 2007-2010. Carr and Britton (2003) argued that a journal with an IF less than 1 is characterized as a "lowimpact" journal. The overall mean IF of the "Hospitaly, Leisure, Sport & Turism" category for four consecutive years a value of >0.9.

				MEDIAN IF 2010 0,99	MEDIAN IF 2009 1,05	MEDIAN IF 2008 0,90	MEDIAN IF 2007 0,86
Journal	Country	Language	Publisher	IF 2010 N= 33	IF 2009 N= 20	IF 2008 N= 16	IF 2007 N= 14
Journal of Sport & Exercise Psychology	United States	English	Human Kinetics Publ. Inc.	2.823	2.951	2.118	1.719
Tourism Management	England	English	Elsevier Sci. Ltd.	2.620	1.882	1.274	0.890
Psychology of Sport and Exercice	Holland	English	Elsevier Science BV	2.218	2.152	1.568	1.192
Annals of Tourism Research	United States	Multi- Language	Pergamon- Elsevier Science Ltd.	1.949	1.165	1.104	0.864
Journal of Travel Research	United States	English	Sage Publications Inc.	1.549			
Journal of Sustainable Tourism	England	English	Channel View Publications	1.539			

TABLE 1. SOCIAL SCIENCES CITATION INDEX (SSCI). HOSPITALITY, LEISURE, SPORTS & TOURISM

International Journal of Hospitality	England	English	Elsevier Sci. Ltd.	1.382			
Management Journal of Applied Sport Psychology	England	English	Taylor & Francis Ltd.	1.264	1.295	1.093	1.250
Research Quarterly for Exercise and Sport	United States	English	Mer Alliane Health Phys. Educ. Rec. & Dance	1.191	1.103	1.214	0.907
International Journal of Sports Science & Coaching	England	English	Multi- Science Publ. Co. Ltd.	1.076			
Sport Psychologist	United States	English	Human Kinetics Publ. Inc.	1.054	1.345	0.893	0.732
Journal of Leisure Research	United States	English	Natl Recreation Park Assoc	1.000	0.831	0.700	0.732
International Journal of Sport Psychology	Italy	Multi- Language	Edizioni Luigi Pozzi	0.961	0.959	0.627	0.474
Leisure Sciences	England	English	Taylor & Francis Inc.	0.917	1.036	0.776	0.792
Sport Education and Society	England	English	Routledge Journals, Taylor & Francis Ltd.	0.857	0.625	0.511	0.538
Journal of Travel & Tourism Marketing	United States	English	Routledge Journals, Taylor & Francis Ltd.	0.835			
European Sport Management Quarterly	England	English	Routledge Journals, Taylor & Francis Ltd.	0.818			
International Journal of Tourism Research	England	English	Wiley- Blackwell	0.802			
Journal of Sport Management	United States	English	Human Kinetics Publ. Inc.	0.797	0.906	1.087	0.556

Sociology of Sport Journal	United States	English	Human Kinetics Publ. Inc.	0.778	0.870	0.674	0.651
Journal of Sport & Social Issues	United States	English	Sage Publications Inc.	0.692	1.075	0.643	0.750
Journal of Hospitality & Tourism Research	United States	English	Sage Publications Inc.	0.653			
Tourism Geographies	England	English	Routledge Journals, Taylor & Francis Ltd.	0.633			
Tourism Economics	England	English	I P Publishing Ltd.	0.614			
Leisure Studies	England	English	Routledge Journals, Taylor & Francis Ltd.	0.604			
Cornell Hospitality Quarterly	United States	English	Sage Publications Inc.	0.549	0.303		
International Journal of Sport Finance	United States	English	Fitness Information Technology	0.545	0.229	0.257	
Current Issues in Tourism	England	English	Routledge Journals, Taylor & Francis Ltd.	0.542			
Journal of Sports Economics	United States	English	Sage Publications Inc.	0.528	0.628		
International Review for the Sociology of Sport	United States	English	Sage Publications Inc.	0.311			
Scandinavian Journal of Hospitality and Tourism	Norway	English	Routledge Journals, Taylor & Francis Ltd.	0.282	0.763		
Journal of Hospitality, Leisure, Sport & Tourism Education	England	English	Hospitality Leisure Sport & Tourism Network	0.250	0.225		

International Journal of Sports Marketing & Sponsorship	England	English	Int Marketing Reports Ltd.	0.225		
Sponsorship Cornell Hotel and Restaurant Administration Quarterly	United States	English	Sage Publications Inc.		0.679	

Inspection of the mean values for the period examined showed that "Hospitaly, Leisure, Sport & Turism" journals' IF rose from 0.86 in 2007 to 0.99 in 2010 (Table 2).

Calculation of the intra-class correlation coefficient yielded a value of 0.95, suggesting that "Hospitaly, Leisure, Sport & Turism" journals remained relative stable over the 4 years examined.

We used an independent t-test to analyse possible IF value differences between journals from North America (n=44) and Europe (n=38) (Table 2). However, although European "Hospitality, Leisure, Sports & Tourism" publications had a higher IF (0.97) than North American ones (0.93), the difference was not statistically significant (p > 0.05).

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TABLE 2. DESCRIPTIVE STATISTICS OF THE IMPACT FACTOR											

	IF Median 2010	% 2010	IF Median 2009	% 2009	IF Median 2008	% 2008	IF Median 2007	% 2007	Median T0TAL	% period
United States	1,01 (n=15)	45,45%						57,14%	0,92 (n=44)	53,65%
Europe	0,97 (n=18)	54,54%	1,11 (n=8)	40%	0,97 (n=6)	40,0%	0,85 (n=6)	42,85%	0,97 (n=38)	46,34%

Trend analysis showed increase of the mean IF over the last 4 years. If the IF can be related to the journal's scientific importance, then our finding suggests that the category journals have attracted the attention of the scientific community and reached a larger audience.

However, the above interpretation is not the only one. An alternative interpretation could be that this increase was anticipated, since more journals have been included in the JCR database especially in the "Hospitaly, Leisure, Sport & Turism" category and thus more citations are being made (Jemec, 2001). It should be noted that 14 journals were indexed in the "Hospitaly, Leisure, Sport & Turism" in 2007. This number reached 33 in 2010, which represents a 135,71% increase.

In a relatively small discipline such as Hospitaly, Leisure, Sport & Turism, the IFs of the journals are generally lower than those of broader subject categories, such as life sciences and clinical medicine (Garfield, 1996, 1997). The reason is that clinical investigations may be dependent on basic science investigations for developing hypotheses or invoking mechanisms of clinical effects, while the converse is less common. It is these systematic differences among scientific disciplines, which are unrelated to the quality or the size of the field, that make it impossible to compare the IFs of journals from different fields (Kokko & Sutherland, 1999; Metcalfe, 1995; Statzner, Resh, & Kobzina, 1995). Therefore, when comparing the importance of the Hospitaly, Leisure, Sport & Turism journals with journals from other scientific fields, their relative position among the subject categories that are indexed in the JCR database should be taken into consideration.

In the present study, the hypothesis that North American journals might have higher IFs than European ones was also examined. The mean IF of the North America-based publications was like the European ones. This percentage was different to that reported by others (Kurmis, 2003) who most journals there North American. Our results show that was neither statistically significant. Thus as far as the "Hospitaly, Leisure, Sport & Turism" category is concerned, there is no reason to believe that there is a cultural bias favouring journals originating in North American.

Several decades after its introduction, the impact factor continues to remain controversial. Given that this indicator may seriously affect many people's career and the future of academic departments or institutions, it is of paramount importance that the nature and premise of its derivation as well as its inherent shortcomings and practical limitations be well understood. Many authors from various disciplines as well as journal editors (e.g. Eston, 2005; Hansson, 1995; Kurmis, 2003; Seglen, 1997; The PLoS Medicine Editors, 2006) agree that it is inappropriate and misleading to use a journal's impact factor to decide on the quality of scientific output. Academic assessment committees and funding bodies should realize that "assigning the same score (the journal impact factor) to all articles masks this tremendous difference which is the exact opposite of what an evaluation is meant to achieve" (Seglen, 1997). If the objective is to evaluate the quality of scientific work, more appropriate ways should be found. Among the various methods and indexes that have been proposed, the h-index (Hirsch, 2005) seems to be a promising tool, because it was developed specifically to assess the impact of the research output. This relatively new index has already been used to evaluate individual authors and research teams (Costas & Bordons, 2008; Cronin & Meho, 2006), departments and institutions (Da Luz et al., 2008), as well as countries (Imperial & Rodriquez-Navarro, 2007). Although no index can be considered free from limitations, initial evidence shows that

the h-index might be a reliable way to assess scientific work (Bornmann & Daniel, 2005; van Haselen, 2007).

In summary, journals included in the Hospitaly, Leisure, Sport & Turism subject category seem to have consistent IF values with some evidence of growth. Finally, our results do not suggest that European journals in the field of Hospitaly, Leisure, Sport & Turism have higher IFs than the North American ones.

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