

# Irans Sports federations websites rank according to Webometrics

Mosab Khosravi<sup>1\*</sup>, Fatemeh Abdavi<sup>2</sup>, Abdulshakkor Menbari<sup>3</sup>

1- M. A., Athletic Expert

2- Assistant Professor, Faculty Member, Tabriz University

3- Undergraduate Student, Physical Education, Payam Noor University, Sanandaj Branch

*Corresponding author:* Mosab Khosravi

**ABSTRACT:** The present study was to evaluate the ranking of Iran's Sports Federation Websites according to webometrics. The Statistical Society of this research consists of all Sports Federation website. In this study, Webometrics index scores and Webometrics score were used to rank websites. The findings of the research showed that between ranking websites according to the Visibility, Size and Rich files there is a significant difference, but there is no significant difference between ranking websites according to the Google Scholar index and there is a significant difference between ranking websites according to the Webometrics. Soccer Federation's Web site, best Web based webometric criteria.

**Keywords:** Visibility, Size and Volume, Rich files, Google Scholar, Webometrics.

## INTRODUCTION

Web emergence is considered as one of the most important transformations in communications arena. By the emergence of Internet particularly World Wide Web, a great revolution is occurred in providing information services to users so that increasingly usage of Web and Internet has led into the expansion of international networks and huge volume of information are currently accessible through world wide web.

Users go to Internet for different reason and purposes and to the same reason; using Internet is increasing in all aspects of human life. Hence, organizations, companies and even individual have often established their webs for different goals and are providing most of their operations and services through web. In other words, it is now considered as a necessity form many individuals and businesses to have a web and to attend in web world (3 & 4).

In principle, web is designed to meet researchers' informational needs and to share information resources as well as individual knowledge and experiences. Therefore, web should identify and meet user's informational needs and pave the ground for service developments. In fact, web is set of very complicated information resources generated by different people and searched by different users (5, 6 & 7). According to Netcraft report, the number of websites throughout the world achieved to over 312,603,000 in 2011 (4).

Today, websites are considered as proper tools for professional communication in different fields. More quality of provided information and easier communication methods, better possibility for website to conduct its mission namely proper communication and playing servicing role by which it can achieve higher status in professional communication. Principally, it is expected that the most recent information are appeared in websites. However, the way of information dissemination crystalized through linkages with profession or organization related websites is too important. As a result, the websites may find a special status in professional areas and may be manifested as effective in short term if they have rich contents and disseminate information well (8, 10 & 6).

Countless increase in indexed web pages in 1990s yielded to methods and scales to measure web resources. On this basis, a new research field was emerged in mid-1990s based on information measurement methods called webometrics which studied the nature and characteristics of the web (9). Almind and Ingwersen (1997) called study on web as webometrics. The basics of webometrics are based on the laws of bibliometrics covered by informetrics, scientometrics and cybermetrics. In fact, webometrics is a quantitative on web based on informetrics methods which

investigates relevant problems on bibliometrics. Webometrics is to understand that web is a huge reservoir of documents (11).

Thelwall believes that webometrics is a category of bibliometrics since web documents either text or multimedia, are all recorded information saved in web servers. A part of webometrics is covered by scientometrics (12).

Webometrics divided websites to four groups based on four criteria as below:

1. Accessibility or search ability of web pages through search engines and the possibility of reviving resources in website by search tool as called visibility index.
2. Size or volume of current information on web; the number of pages is an effective index in webometrics. This index relates to the size of volume of information in websites.
3. Rich files; undoubtedly, information resources in the format of electronic files in website of any institute can be a reason of its scientific richness and knowledge generation volume. Thus, the third index on webometrics ranking is the number of scientific files with such suffixes as PDF, PS, DOC and PPT.
4. The number of scientific articles and ranks in Google (Google Scholar) show the number of references to each subject (13, 14, 15 & 16).

Noteworthy, it is possible that each index to be a number between 0 and 1. Scientific and training values of a website are depended on the ranking by webometrics. To have higher webometrics index, a website should consider all webometrics quadruple measures and try to increase them.

Danesh, Soheili and Nokarizi (2008) studied all websites of Iranian medical universities. Their findings indicates that the website of Shiraz Medical University, Tehran Medical University and Isfahan Medical University with 12,700, 10,400 and 5,170 received linkage have the highest rates of visibility respectively while Baghyatollah, Bushehr and Babol medical universities have the highest impact in web ambience respectively. In the meantime, Fasa Medical University has the lowest web impact by 0.81 as impact factor (3).

Sedghi et al. (2012) studied domestic medical universities and based on the comparisons of average achieved pages in three Google, Yahoo and Bing search engines, they found that Tehran Medical University has the highest rank while Dezful Medical University (117 pages) gets rank 43. In terms of fruitful files, the website of Shiraz Medical University is rank 1 (types of formats on published scientific documents and works by universities) while the lowest rank is Jiroft Medical University with 12 fruitful files.

Haji Aeinolabedini, Maktabifard and Osareh (2006) studied the links between the websites of national and international libraries. Their findings suggest that US Congress library website is the strongest website among all national libraries throughout the world. It has the highest rate of linkages (596,000) the highest foreign received links (249,000), the highest rate of self – linkage (89,600) and the highest rate of profiled pages in AltaVista search engine (452,000). In terms of co-links with other national libraries worldwide, it is located in one of the most focused co-link points (17).

In his study titled “visibility of Iranian journals’ websites: webometrics”, Zahedi (2008) indicates that the archives of Iranian medical websites have the most internal linkages and the motivation of 30% of links is to research. The designers of such websites should increase their visibility since it shows their situation in a scientific community (18).

In all countries, an organization called Sport Federation is established and operated based on well-devised articles of association consistent with the articles of association of relevant sport International Federation in order to manage each sport field (19). Federation is a public organization which is established to plan, coordinate, monitor, evaluate and execute the laws and regulations of a given field based on amatory principles as well as Olympics’ Charter and it is considered as the top technical authority of the relevant sport. The websites of federations can act as the most agent in transferring information and news of sports. Since all people are able to access easily to their desired athletic information in space without any limitation, these websites can use their total capacity to help interested people to relevant sport fields to be more aware and to provide them with the most complete and comprehensive needed information. Present study is conducted to compare the websites of athletic federations and ranking them based on webometrics indices. Since they are functional, research results can be used by federations’ managers and public relations and to improve their services through their websites.

### **Methodology**

The main aim of present research is to study sport federations. Concerning the nature of the research and its purpose, it is an applied study conducted as a field study in which Freedman test is used to rank websites. Research population consists of all websites of domestic sport federations (n = 48).

To achieve proper data, we need a strong search engine. This search engine should be accessible, global and very strong. We achieved our needed data to measure webometrics criteria from Google and Yahoo search engines.

Fata collection method for visibility is so that there is search box of siteexplorer.search.yahoo.com in where we insert the name of our website and observe the results in inlink. To acquire the volume of existing information in

google.com, we insert below term in search box and insert our name instead of domainname. Instead of PDF format, we use DOC or PPT formats and then aggregate achieve numbers. To compute the number of indexed articles in Google researcher, we insert below term in the search box of scholar.google.com and insert our name instead of domainname to achieve the relevant number. Finally, to compute the corresponding webometrics number for each website, we use below equation:

Website's Webometrics value = 2 (size) + 4 (visibility) + rich files + the number of indexed articles in Google Scholar

Findings and discussion  
 Table 1 renders Freedman test results to examine websites' ranked average differences. This table indicates that there is no significant difference between visibility and the number of revived articles among rank averages. Therefore, one can say that the websites of sport federations have no difference and are mostly in one level. Likewise, existing data shows that there is a significant difference between ranking the websites in terms of visibility, size and rich informational files which suggests that websites are different in terms of visibility, size and rich informational files and, as a result, some websites are better than other ones in terms of these criteria. The final part of the table shows ranking the websites in terms of webometrics. It indicates that websites enjoy different quality.

Table 1. Freedman test to study the significant difference of ranks' averages

	Sig	DF	Chi
Visibility	0.045	47	64.00
Size and volume	0.001	47	97.08
Rich Informational files	0.001	47	47
Google Scholar	0.473	47	37.1
Webometrics	0.001	47	20.913

Table 2 shows the average rank of federations. As seen, in visibility section, Basketball Federation with rank average of 36.75 has the best rank while the lowest rank (8.1) is Squash Federation. Concerning the size and volume, Volleyball Federation (36.25) has the highest rank while the lowest rank (12.75) is Kung Fu Federation. Concerning rich informational files, Cycling Federation with rank average of 36.91 has the best rank while the lowest rank (14.75) is Kung Fu Federation. Concerning revived articles, Medical Athletic and Running Federation has the best rank (36) while other federations have the lowest ranks (24). Ultimately, website ranking by webometrics indicates that Football Federation with rank average of 35.5 has the best rank while the lowest rank (3) is Squash Federation.

Table 1. Freedman test

Webometrics	Google Scholar	Rich files	Size and volume	Visibility	Federation	
Mean rank						
3.00	24.00	15.75	12.75	20.25	Squash	1
20.00	24.00	31.25	24.75	32.25	Ski	2
22.00	24.00	24.75	29.25	33.75	Sport associations	3
19.50	24.00	26.75	22.25	30.75	Skating	4
26.00	24.00	29.25	34.75	36/75	Basketball	5
13.00	24.00	34.25	18.75	22.25	Badminton	6
15.00	24.00	22.75	14.25	25.25	BBF&PL	7
20.50	24.00	17.50	13.25	30.25	Boxing	8
17.00	24.00	22.25	26.75	26.25	Bowling, Billiard& Boules	9
28.00	36.00	35.75	31.25	35.25	Sportmedicine	10
27.50	24.00	33.25	32.75	34.75	Teakwondo	11
17.00	24.00	31.75	20.50	24.25	Shooting	12
28.00	24.00	35.25	25.75	29.25	Archery	13
22.50	24.00	33.75	27.25	28.75	Tennis	14
21.00	24.00	32.75	24.25	27.25	table Tennis	15
14.50	24.00	16.75	15.25	21.25	Judo	16
29.50	24.00	32.25	35.25	33.25	Disabled	17
23.50	24.00	21.75	13.75	28.25	Polo	18
33.50	24.00	36.91	32.25	34.25	Cycling	19
28.00	36.00	34.75	23.25	24.75	Amatur Athletics	20
24.50	24.00	19.00	18.25	27.75	Gymnastic	21
13.00	24.00	15.75	19.75	13.75	Equestrian	22
31.00	24.00	13.75	31.75	31.75	Chess	23
25.00	24.00	30.25	25.25	26.75	Fencing	24
31.00	24.00	19.00	17.25	31.25	Swimming	25
35.50	24.00	23.75	33.25	35.75	Football	26
28.50	24.00	24.25	34.25	25.75	Boating	27

23.50	24.00	18.25	21.25	22.75	Kabaddi	28
34.50	24.00	20.00	35.75	32.75	Wrestling	29
32.00	24.00	30.75	30.25	29.75	Karate	30
24.00	24.00	29.75	29.75	19.25	Mountaineering	31
25.00	24.00	20.00	30.75	13.25	Golf	32
22.00	24.00	15.75	21.75	18.25	MAF	33
21.50	24.00	23.25	16.25	19.75	Lifesaving	34
20.50	24.00	13.75	19.25	16.75	DEAF, SPECIFIC PATIENTS AND TRANSPLANT	35
23.00	24.00	17.50	22.75	14.75	Pahlevani and zoorkhaneh	36
24.50	24.00	27.25	23.75	17.25	Blind	37
35.00	24.00	26.00	36.25	23.75	volleyball	38
23.00	24.00	21.00	17.75	18.75	iusf	39
20.50	24.00	13.75	14.75	14.25	Martial arts	40
32.50	24.00	28.50	33.75	16.25	Roosta	41
28.50	24.00	13.75	26.25	21.75	Weightlifting	42
23.00	24.00	25.25	16.75	17.75	Triathlon	43
30.00	24.00	27.75	28.25	20.75	Wusho	44
26.50	24.00	26.00	20.50	15.75	Hockey	45
33.50	24.00	21.00	28.75	23.25	Handball	46
24.50	24.00	13.75	15.75	12.75	Kung fu	47
31.00	24.00	28.50	27.75	15.25	Public	48

### CONCLUSION

Research findings indicate that there is a significant difference on ranking the websites of sport federations in terms of visibility. On this basis, Basketball Federation, Swimming Federation and Athletic Medical Federation achieve ranks 1, 2 and 3 respectively and the lowest ranks belong to Equestrian, Golf and Kung Fu Federations.

Freedman test results indicate that there is a significant different ranking the websites of sport federations in terms of size and volume. On this basis, Volleyball Federation, Wrestling Federation and The Disabled People Federation achieve ranks 1, 2 and 3 respectively and the lowest ranks belong to Public Sports, Boxing and Squash Federations.

Freedman test results indicate that there is a significant different ranking the websites of sport federations in terms of rich informational files. On this basis, Cycling Federation, Medical Sports Federation and Shooting Federation achieve ranks 1, 2 and 3 respectively and the lowest ranks belong to Wushu, Public Sports and Kung Fu Federations.

Freedman test results indicate that there is no significant different ranking the websites of sport federations in terms of revived articles and one can conclude that all websites are in the same level. Regretfully, the number of revived articles indicated that only Medical Sports and Running Federations have revived articles and these two federations have only and only one revived article and other federations have no revived article in their websites. It shows low attention of federations to scientific discussions.

Ultimately, sport federations were examined by webometrics criteria in which Football Federation, Volleyball Federation and Wrestling Federation achieve ranks 1, 2 and 3 respectively and the lowest ranks belong to Badminton, Equestrian and Squash Federations.

Obviously, all four criteria should be considered to increase ranks in webometrics. Generating updated and efficient content in websites is the best solution. Although all webometrics ranking criteria depend apparently to current contents in websites, since used tools in webometrics ranking are search engines to examine the extent, type and volume of information in websites, the status of website in search engines is highly important. Improving the situation of a website in search engine means that the website will be seen better, fuller and rapider by searching robots, more loading of websites in searches and, finally, more visits to website. Webometrics ranking is a main criterion on the situation and number of indexed pages by search engines; thus, it is a very high important factor. Each search engine has its own criteria and formula to evaluate websites which usually retain precise factors and ranking algorithms confidentially and do not expose it to others. However, there are many factors recognized by search engines and professional website managers try to use them in their own website in the best manner. Many of these Search Engine Optimization (SEO) factors relate to content and definition of information in different parts of the website while the other ones relate to website technical structural. Such technical structure can designed so that one can put relevant indices in them. Present research is an alarm for domestic sport federations to improve the quality of their websites and, finally, to promote their status in webometrics ranking. Therefore, relevant authorities are expected to use the results of present study in improving their websites.

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