

Analysis on Present Academic Communications in National Traditional Sports Research Field

-----based on 2000-2011 master theses on national traditional Sports

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Abstract - To explore the characteristic of academic information in the field of national traditional sports. **Methods:** Based on the citation of master theses on national traditional sports in 2000-2011, this article describes the present communications in national traditional sports research. **Conclusion:** The academic information in this field is mainly spread through traditional media such as journals, books, etc., and the majority of the theses are included in 10 journals. It has also found that the communications have reached a wider range than its alike discipline and that languages are the main barrier in the communications. And the first 6 years after the thesis was published saw the best effect of the information.

Key words: national traditional sports, academic information, communication

As an essential part of human scientific activities, academic communications, featured by innovation, freedom and standardization, promote the academic prosperity, enlighten the successive researchers, and provide reference for the followers, thus playing a significant role in pushing forward the scientific development.

Masters, as a necessary source for future researchers, are a new vital part of the Chinese scientific research. Dissertations written for the master degree are the first harvest made by masters in their initial phrase of the scientific research. With master theses on national traditional sports in 2000-2011 as case study, this article has taken statistics and analyzed the citations, trying to find the academic communications law in national traditional sports research, thus serving as a reference for the research in this field and for improving the quality of masters.

1. Data source and research methods

CMFD (China Master's Theses Full-text Database) of CNKI (China National Knowledge Infrastructure), known as the top most complete, high quality, and continuously replenished databases, have collected a great amount of excellent master theses since 1999 from over 600 universities and institutions^[1]. With "national traditional sports" as "subject name", we have searched all master theses on national traditional sports from 2000 to 2011, and found 758 theses on traditional sports (till April 30th, 2012), all of which meet the requirements.

Through an excel for the quantity, languages, categories, high-frequency issues and years for publishing of the reference

listed in the 758 master theses, etc., we have made thorough analyses.

2. Results and analyses

2.1 The total citation and the average citation per theses

The quantity of citation in one thesis reflects the author's further and broader view on the pioneering information and the latest development in this field, showing the author's ability to investigate the literature. All these 758 theses are attached by references, with 41918 items as a total and 55.30 items per thesis. This two figures are higher than items cited by master theses on full-time physical education and training in Hebei province after 2000 (50 items per theses)^[2], items averagely cited by master theses on full-time physical education and training from 2003 to 2007 (49.08 items per theses)^[3], items cited by master theses on basketball (46.76 items per theses)^[4]. However, the figures are a little bit lower than items cited by master theses on national traditional sports in Hebei province (59 items per theses)^[5], and lower than the citation in the master theses in Capital Institute of Physical Education (58 items per theses)^[6]. According to LuShi, the average citations of master theses in Beijing Sport University are only 32.1 items per thesis^[7]. After the analysis of the published master theses, we found that less citations were used in the early-published theses, and the recent years have seen an apparent rise in citations, which, to some extent, shows an increase in the author's use of literature to do the research, and masters of national traditional sports enjoy higher abilities to use literature than those of other subjects. Although a remarkable rise in citations can be noticed, we cannot deny that there is a long way to go to meet the requirements in some developed countries, which describes that "a master has to finish reading and digesting about 100 papers before he starts to write a master thesis". As a consequence, masters of national traditional sports have to read more literatures and absorb more knowledge to improve their abilities of doing researches.

2.2 Languages of citations

The languages used by all 758 theses can be classified to three categories: Chinese, English and Japanese, most of which are written in Chinese, amounting to 40247, accounting for 96.02% of the total citations, 3.13% of which are written in

English, accounting for 78.46%, only 0.06% of which are written in Japanese. And about 0.79% of the total citations cannot be classified, so labeled as other languages (table 1). The distribution in language use shares the same traits as those theses on other PE subjects. 96.75% of citations in the master theses on basketball were written in Chinese^[4], and 94.00% of the total 50 case study theses on physical education and training were written in Chinese^[3]. However, the percentage of citations in master theses on national traditional sports is a little higher than those on basketball or physical education and training, and apparently much higher than the percentage (63.36%) of citations in master theses published in Capital Institute of Physical Education^[6]. Consequently, we can draw a conclusion that the language of citations in the master theses on national traditional sports is very unitary. This result may be attributed to both the poor English of masters in this field and the characteristics of national traditional sports. Since national traditional sports are rooted in Chinese culture and customs, passed on from generation to generation, it is Chinese researchers that have played a leading role in this research while less attention is paid by foreign scholars or researchers. With the development of cross-culture communications, knowledge and information in one country are spread out of their original territory, so foreign advanced ideas should be borrowed into China, which will definitely push forward the development of national traditional sports.

Table 1 The languages distribution of citations in master theses on national traditional sports

Language	Chinese	English	Japanese	Others	Total
Number (item)	40247	1311	27	333	41918
Percentage (%)	96.02	3.13	0.06	0.79	100.00

2.3 The categories of Chinese citations

In order to analyze the different influence of theses written in different styles on the authors, this article made a statistics about the Chinese citations. It is astonished to find that the annotations in many theses are disordered. Firstly, 72 of the total studied theses, accounting for 10%, have not made classified annotations, and some have only made certain portions of annotations classified; secondly, the citation formats are not uniform, and some mistakes in classification and repeated classifications are also found. In order to follow the uniform criteria, this article has made classified statistics according to the requirements on annotations in journals and master theses in 2012, and detected the following result (table 2): 58.50% of the total citations come from journals, a remarkable higher than those from other types of publications. This result shares the same character with that of theses on physical education and training (62.75%)^[3] and that of theses on basketball (62.79%)^[4]. Nowadays 60% of the latest scientific information comes from journals^[8], published in a short-term period, showing new ideas, making timely reflections on world science and technology^[9], thus regarded as a main method of academic communications, which also

explains why Chinese masters of traditional sports choose journals as the main source of reference.

The frequency of citations from books comes in second, taking 30.58% of the total Chinese citations. Books are fruit grown and harvested by researchers, and the information in the journals is and will be valuable in quite a long period of time, serving as a main tool for masters to do their researches and write theses. Although citations from the dissertations run the third, the percentage is only 5.14%, which may be attributed to the lagged foundation and improvement of the dissertation database, and the poor-cooperation between some universities and the database. Since some master theses are only open to students in the same university, which influences the usage of the theses of these universities.

The average citation from newspapers, theses collections, national criteria, reports and technical standards is less than 1 item. From the above analyses, we can notice that Chinese national traditional sports masters have almost referred to only one source --journals when preparing for their dissertations.

Table 2 The number and categories of citations in master theses on national traditional sports (Chinese)

Categories of citations	Number (piece)	Average (piece)	Percentage (%)
Journal	23544	31.06	58.50
Book	12306	16.23	30.58
Dissertation	2070	2.73	5.14
Electronic literature	663	0.87	1.65
Newspapers	313	0.41	0.78
Theses collections	275	0.36	0.68
National criteria	130	0.17	0.32
Reports	71	0.09	0.18
Patent	55	0.07	0.14
Undefinition literature	820	1.08	2.04
Total	40247	100.00	53.10

2.4 High frequently cited Chinese journals

In order to deeply understand the proportions of different journals which national traditional sports master obtained information, the authors have made statistic analyses about the journals citations in 758 master theses. The total 23544 items, except 380 no-annotation items, came from 2192 journals. The top 10 were listed in Table 3, 8 of which were master journals on sports, i.e. Journal of Beijing Sport University, Sports Culture Guide, Journal of Wuhan Institute of Physical Education, Journal of Shanghai University of Sport, China Sport Science, Journal of Chengdu Sport University, Journal of Physical Education, Journal of Xi'an Institute of Physical Education. The reason why master journals on sports became the main sources of citation is that these journals cover the latest research results in sports science. Journal of Wuhan Institute of Physical Education, Journal of Shanghai University of Sport, Journal of Physical Education and Journal of Xi'an Institute of Physical Education have all made a column for traditional sports, which reflects the latest development in

national traditional sports, so the high proportion of citations from these journals shows that masters in this field have enjoyed tracing and making good use of the latest achievements. Both Wushu Science and Chinese Wushu are the two major journals for Wushu(Martial Arts), and Wushu Science has been cited 1538 times, accounting for 6.55% of the whole citations, ranking 1st in this special field. Such specialized journals were not acknowledged as master journals, but they have also attracted most researchers in this field, and became main sources of citations. The total amount of the citations in these top 10 has taken 38.47% of all journal citations. Mr. Kou Jianzhong found that all master theses on

swimming cited related items from the core journals^[10]. All the above information leads to the conclusion that the frequently cited Chinese journals on traditional sports are all featured by Chinese traditional sports, playing a leading role in the specialized field. The citations from the journals ranking 11 to 20 account for 13.73%, 8 of which belong to the core journals.

And it is suggested that masters in traditional sports should refer to other related subjects, borrow some ideas from other fields, which will help them broaden their horizon and enlarge their research areas, thus combining the national traditional sports with other subjects.

Table 3 High frequently cited journals of Chinese citations in master theses on national traditional sports (the top 10)

Journal	Frequency	Percentage of total Chinese citations %
Wushu Science	1538	6.55
Journal of Beijing Sport University	1369	5.83
Sports Culture Guide	1163	4.95
Journal of Wuhan Institute of Physical Education	972	4.14
Journal of Shanghai University of Sport	826	3.52
China Sport Science	743	3.16
Journal of Chengdu Sport University	693	2.95
Journal of Physical Education	654	2.78
Chinese Wushu	604	2.57
Journal of Xi'an Institute of Physical Education	474	2.02
Total	9036	38.47

2.5 Age distribution of citations

The analyses on the citations in different years after the literature was published directly reflect the literature's publication, diffusion and utilization, assisting researchers to know whether the information is too old to be used, so to help them make good use of the literatures in a proper time, thus

enhancing their ability to do the research. As is indicated in Table 4, the rate of literatures were cited at the same year which were published is 0.41 % of Chinese citations, and the largest citation occurred in the 4th year after the publication, amounting to 11.83%; median citations happened in the 6th year after the literature was published, with an accumulative

Table 4 Age distribution of citations

Age	Frequency		Percentage /%		Accumulative frequency		Accumulative percentage /%	
	Chinese	Foreign-languages	Chinese	Foreign-languages	Chinese	Foreign-languages	Chinese	Foreign-languages
1	165	1	0.41	0.06	165	1	0.41	0.06
2	2248	14	5.59	0.84	2413	15	6.00	0.90
3	4458	48	11.08	2.87	6871	63	17.07	3.77
4	4763	62	11.83	3.71	11634	125	28.91	7.48
5	4396	45	10.92	2.69	16030	170	39.83	10.17
6	3767	59	9.36	3.53	19797	229	49.19	13.70
7	3357	62	8.34	3.71	23154	291	57.53	17.41
8	2621	80	6.51	4.79	25775	371	64.04	22.20
9	2120	95	5.27	5.69	27895	466	69.31	27.89
10	1751	73	4.35	4.37	29646	539	73.66	32.26
11	1490	98	3.70	5.86	31136	637	77.36	38.12
12	1237	71	3.07	4.25	32373	708	80.44	42.37
13	924	70	2.30	4.19	33297	778	82.73	46.56
14	786	86	1.95	5.15	34083	864	84.68	51.71
15	614	57	1.53	3.41	34697	921	86.21	55.12
16	479	69	1.19	4.13	35176	990	87.40	59.25
17	437	47	1.09	2.81	35613	1037	88.49	62.06
18	366	52	0.91	3.11	35979	1089	89.40	65.17
19	312	57	0.78	3.41	36291	1146	90.17	68.58
20	338	46	0.84	2.75	36629	1192	91.01	71.33
Before 20	2091	358	5.20	21.42	38720	1550	96.21	92.76
Not clear	1527	121	3.79	7.24	40247	1671	100.00	100.00

total 49.19 %; the recent 10 years has seen a rate of Chinese citations amounting to 73.66%, the recent 15 years 86.21%, and the recent 20 years 91.01%, but if the literature was published 20 years ago, the citation rate is quite low. The rate of the same year after the foreign-language literature was published is 0.06 %, and the largest citation occurred in the 9th-11th year after the publication, amounting to 5.69-5.86 %; median citations happened in the 14th year after literature was published, with an accumulative total 51.71%; but the recent 10 years has seen a lower citation rate, only 32.26%, the recent 15 years 55.12%, if the literature was published 20 years ago, the citation rate also reaches 21.42%. This comparison reflects to some degree that masters in traditional sports have better absorption from Chinese than from foreign-languages.

3. Conclusions and suggestions

1) Masters on national traditional sports acquire and spread the related academic information from the traditional literatures such as journals and books, both of which account for 89.08% of the total citations, while other carriers such as thesis selections, academic blogs, and academic websites, etc. take a quite proportion. This result can be attributed to the following factors: 1. researchers are used to referring to traditional literatures; 2. the collaboration between academic websites and universities is not as good as expected and needs to be improved; 3. new carriers such as academic blogs, websites, etc. are not so convincing as traditional literatures in professional, standardization and reliability, so they are not generally accepted by most researchers. However, whether have the rapid development of forms, methods and techniques of communications brought them opportunities or challenges?

2) 55.30 citations per thesis demonstrates a higher citation rate than other subjects, but the annotations of the theses need to be standardized to a higher level. And it is also shown that the academic communications in national traditional sports have reached a bigger and further range, which will in turn push forward the research development in this field.

3) As high as 96.02% citations are coming from Chinese journals, which shows that language has been a quite big barrier in academic communications in traditional sports. This shortcoming will discourage Chinese researchers in this field from speaking loudly in the international circle, which should arouse more attention from all researches in this field.

4) At present, journals have been the main carrier of communications in national traditional sports, and the top 8

core journals and 2 specialized journals have involved the main academic information in the field, and both of them have become the main hubs for the spread of traditional sports.

5) As for Chinese literatures, most of the citations were made in the first 6 years after the publication, with the peak occurring in the 4th year. This result shows that the academic communications in national traditional sports find the best spread in the first 6 years after the publication, and that the research fruit imposes the greatest influence on researches in the field.

This article has only done researches on national traditional sports, using the citations of master theses in this field as study cases. If the study cases could involve all theses in this field and compared with theses in other fields, it is strongly believed that more profound results would be led inferred which will be the future objective of this study.

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