International Comparative Study Analyzing Knowledge Organization Research Topics in Four Countries - Brazil, South Korea, Spain and United States

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Abstract

With the growing international population of scholars in Knowledge Organization (KO), international academic journals are a source of academic communication among researchers. Even with the inclusion of these journals in international databases, there are still limitations due to language, culture, and interpretation. The purpose of this study is to develop a comprehensive list of topics that comprise KO in these respective countries. This study is a content analysis of two KO journals from each country: Brazil, South Korea, Spain, and the United States. The journals are limited to the last five years of each journal, 2008 to 2012. Through the content analysis, this study contributes to increase communication among academics in KO.

Keywords: knowledge organization, international comparative study, academic communication, content analysis

Introduction

In Library and Information Science, specifically in Knowledge Organization, academic journals are the main vehicle for academic communication among researchers. In spite of the efforts of internationalization and the inclusion of journals from different countries in international databases (such as: Thomson Reuters, Scopus, EBSCO etc.), there are still some limitations. These limitations in academic communication may include aspects involving language, culture, and different interpretations of a domain.

Researchers that work in countries with primary languages other than English tend to publish their research in their own language and its national journals. When the research from these countries national journals are included or referenced in international databases, the different terms used in the articles' titles, abstracts, or keywords can cause confusion among researchers developing studies about the same topic.

Pettigrew and McKechnie (2001) conducted a content analysis of six journals in English with the aim to understand how Library and Information Science's authors have used theories in their research. Freitas, Gabriel Junior and Bufrem (2012) have identified academic collaboration and traditions of research among Brazilian and Spanish authors in the Knowledge Organization area. The authors applied a content analysis and bibliometric analysis to the Reference Database of Journal Articles on Information Science and perceived that Brazilian authors have used Spanish authors as theoretical background. The authors also identified Spanish authors publishing in Brazilian journals as well as co-authorship among Brazilians and Spanish authors in Brazilian journals. Thus, "…it is already possible to observe a tendency towards a theoretical proximity of Brazilian and Spanish authors in the area, marked by the citations and the thematic relationships which they represent" (Freitas, Gabriel Junior & Bufrem, 2012, p. 223).

So, considering the problem of low communication among academic communities from different countries using different languages and different backgrounds, this project aims to:

a) Gain insight into the research topics conducted in these four different countries;
b) Present the scenery of Knowledge Organization in order to demonstrate how these countries have talked about this domain; and
c) Verify the differences and similarities on the topics in order to understand and identify problems of communication among the researchers of these four countries.

This project is an international comparative study that contributes to the improvement of communications amongst academics in Knowledge Organization by synthesizing and identifying research topics in Knowledge Organization across four countries. It may also suggest potential possibilities and opportunities for areas of research collaboration among international researchers in Knowledge Organization.

Methods

This project will apply the method of content analysis, as a domain analytical approach (Hjørland & Albrechtsen, 1995; Hjørland, 2002; Hjørland & Hartel, 2003; Talja, 2005). The literature that will be chosen for analysis are selected by the following criteria: 1) 5 years Highest Impact Factor indicator for the subject category of Information Science and Library Science in Social Science Citation Index (from Thomson Reuters via Web of Knowledge), and 2) research team's expertise (purposive sampling).

For the selection of journals for Spain and Brazil, the highest impact factor of Social Science Citation Index in Information Science and Library Science subject is applied. For the selection of the North American journals, both criteria are used. The subject category, Information Science and Library Science in Social Science Citation Index includes journals such as Library and Information Science, Computer Science, Medical Information, etc. Some journals having high impact factors such as Journal of Computer-Mediated Communication, Journal of the American Medical Informatics Association etc. are not included to be analyzed for this project based on their specificity. Therefore, the research team filtered the list of journals based on expertise. Since there are no Library and Information Science journals published in South Korean in the Social Sciences Citation Index, two South Korean journals have been purposively selected by the research team.

Some countries may have specialized journals mainly focusing on KO issues like the *Knowledge Organization* journal in United States, whereas many other countries do not have a journal specifically dealing with KO issues. In order to balance the scope of data, KO specialized journals are not included in data collection but these can be used as a counterpoint analysis for further projects offering elements to compare the topics extracted from general journals and KO journals. Table 1 shows the selected journals for the study. The scope of data is limited to the last five years of each journal, 2007 to 2011. Since the project does not focus on the quantitative aspects like the frequency of research topics in KO, the different size of data from each journal is not considered.

Table 1
Selected LIS journals from each country

Countries	Selected Journals (2007-2011)
Brazil	*Perspectivas em Ciência da Informação*
	Transinformaçao
South Korea	*Korean Society for Information Management*
	Korean Society for Library and Information Science
Spain	*Revista Española de Documentación Científica*
	Profesional de la Información
United States	*Journal of the American Society for Information Science and Technology*
	Library & Information Science Research

For the data analysis, each article is coded by four researchers in order to identify whether the articles is related to KO or not. Intercoder reliability is measured and shows above 99% agreement among researchers. Keywords from the KO related articles are listed and compared among four countries.

Preliminary Results

This poster partially analyzed data from 2010 to 2011. Table 2 shows the most frequently used keywords from each country. There are many topics such as classification, indexing, or information seeking behavior, which are commonly studied in all countries. However, some keywords tend to be studied more often in a certain country. For example, a keyword, *Epistemology of Library Science* (or Information Science), only appear in Brazilian journals.

Table 2
Most frequently used keywords from each country

Brazil	Spain	South Korea	United States
Information science	Spain	Public libraries	Science
Knowledge management	Online journalism	Academic libraries	Web
Citation analysis	Web 2.0	Citation analysis	Model(s)
Digital library	Bibliometric indicators	Information literacy	Impact
Scientific production	Scholarly journals	School libraries	Information
Information science	Internet	Information seeking behavior	Retrieval
Co-authorship	Evaluation	Metadata	Seeking
Bibliometrics	Information architecture	User studies	Indicate(ors)
Capes digital library of scientific journals	Online newspapers	Folksonomies	Information-retrieval
Environmental education		Ontology	Behavior
		Social network analysis	Communication
		Tag	

This poster shows preliminary results of KO research topics that have been studied in four different countries. However, it is too early to make any conclusion at this point. The project requires further analysis to discover the different research topics in the four countries. The research team expects to show more results during the conference.

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