

Evaluating the Status of Information Retrieval in “Namayeh” and “Nama” Databases and Assessing the Effectiveness of Using Controlled Terms in Indexing These Two Databases

Amir Ghaebi

Assistant Professor, Department of LIS, Alzahra University
ghaebi@gmail.com

Fariborz Khosravi

Retired Faculty Member, National Library and Archives of IR of Iran
kh.class@gmail.com

Azita Malmir (Corresponding author)

M.A. of LIS, Shahid Beheshti University
az.malmir@gmail.com

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Abstract

Purpose: This study was carried out to determine the level of precision, recall, and searching time for “Nama” and “Namayeh” databases, as well as to find out which of the indexing tools (thesaurus and Dewey decimal classification) helps us more in improvement of information retrieval.

Methodology: This study is an analytical survey in which the necessary data was collected by direct observation of the resources in “Nama” and “Namayeh” paper databases. The population under study included the articles which were indexed in both “Nama” and “Namayeh” databases in the two fields of LIS and history (610 papers), among which 240 papers were chosen by random partial sampling.

Findings: The obtained results indicate that the level of precision (in the two mentioned fields) in “Nama” and “Namayeh” databases is 56% and 40%, respectively. Also, the level of recall (in the two mentioned fields) in “Nama” and “Namayeh” databases is 58% and 35%, respectively. In addition, the searching time in “Nama” and “Namayeh” databases is 1 minute and 13 seconds and 2 minutes and 13 seconds, respectively. Applying *t*-test to independent samples in this study showed that there is significant difference between the two databases regarding precision, recall, and searching time; correlation among these criteria is direct and significant between the two databases. The obtained results indicate that, in comparison with “Namayeh” database, “Nama” database has a more desirable status concerning the level of precision and recall, as well as searching time, and these good retrieval results may be attributed to use of thesaurus in indexing “Nama” database.

Originality/Value: Based upon the study results, those who search information can better make decision in choice of a database proportionate to their needs; besides, database designers can find out which controlled language is better for database development in organizing the resources.

Keywords: Precision; Recall; Searching time; Thesaurus; Evaluation of information retrieval; “Nama” article database; “Namayeh” article database