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INFORMATION EVALUATION AS A DECISION SUPPORT FOR INFORMATION AND COMMUNICATION MANAGEMENT

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Abstract: *The evaluation criteria of the scientific information on websites may generate a management system of the information quality used by young researchers during Ph.D. thesis elaboration.*
The students of the doctoral school within the university participated in a quality marketing research concerning the assessment of the scientific information available on websites. The research was based upon an evaluation model and the specific criteria of various information sources. Analyzing the research results we propose a new module as a compulsory tutorial regarding the evaluation criteria of the information quality. The research has led to the conclusions and recommendations that are presented below. Taking in account the literature and the result of quality marketing research we implemented a quality assessment system tutorial.

Key words: *information literacy, quality of information, evaluation model, educational marketing, PhD student.*

1. Introduction

The management of information is an extraordinary modality not only for education, but also for developing an academic environment. [1, 8]

Using the information is always connected with access, but also with the use the information in the information society. [7]

PhD students need to have access to the information in the same way like all researchers and is very important for them to handle with the information for their studies. [6]

As Chung mention: "information professionals rely on the Internet to obtain information to support decision making, the large amount of data and unorganized web content often challenge effective information management." [2]

2. Case study at Transilvania University of Brasov

We surveyed doctoral school PhD candidates from Transilvania University of Brasov. Our data were collected in the first semester of 2012, during 2 weeks. We used one electronic survey, using the free tools site: https://www.surveymonkey.com. The survey was called: Scientific information evaluation. We sent invitations for this study on their entire discussion list. The sample was validated from the point of view of women-men proportion and from the point

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of view of the respondents' proportion in distribution of year of doctoral school stage and distribution on PhD field research. We had 100 responses and the research is validated by gender and number of PhD students in different fields.

3. Methods

Our survey contained two distinctive parts: information literacy and a scientometric elements part. The scientometric elements survey made use of a Likert scale.

The model and criteria of information quality assessment were based upon the matrix in fig.3

4. Data analyses

The fields in which the university owns the skills of doctoral school development are: Engineering, Economical Sciences, Sports and Education, Medicine and Literature.

The most respondents, 74%, belong to engineering field, which is a traditional domain within *Transilvania* University, see in figure 1.

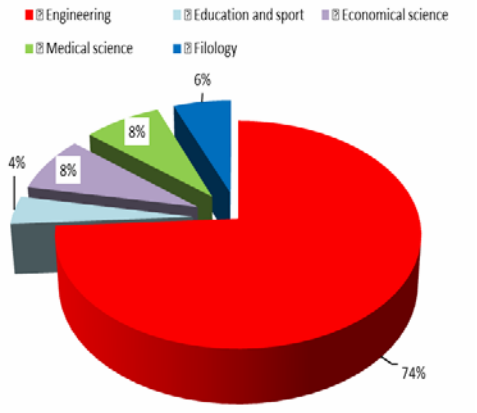

Fig.1. *Topics of thesis*

The main sources of documentation are the scientific databases to which university has subscribed for 61% of the PhD students. The direct access journals are sources of documentation for 3% of the PhD students, and the university library represents the place where students get access to their resources for 10%. Although they are the Google generation, only 2% access Google Scholar and only 4% institutional digital repositories, see in figure 2.

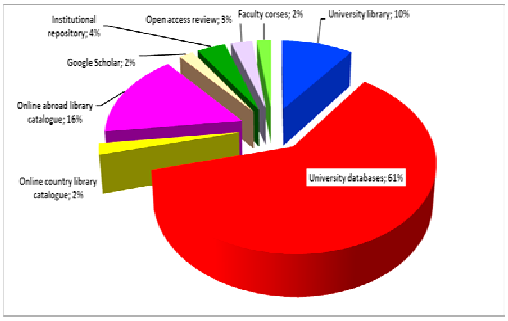

Fig 2. *Information sources*

68% of PhD students prefer online resources, 24% traditional and only 8% media resources.

Referring to knowledge level of scientific information evaluation only 17% have a high level of information evaluation, 50% have a low level and 33% have a medium level.

In order to assess information several different criteria were proposed. The criteria for scientific information evaluation were accepted with weight from 1-3, the: Author's name 2.62, number of citations 1.94, journal's reputation24% and article references 2.4., see in figure 3.

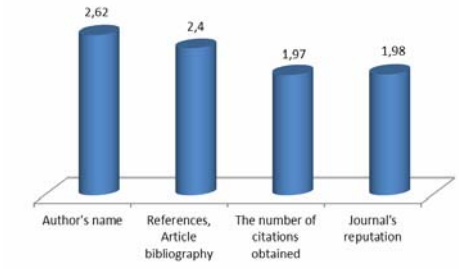

Fig. 3. *Criteria used to evaluate scientific information*

The criteria proposed to evaluate websites obtained the following results: 34% of the respondents use the criterion of site organization during their assessment, equally, meaning that 27% check the site host and author's data while 12% are interested in how up to date the site is, like in figure 4.

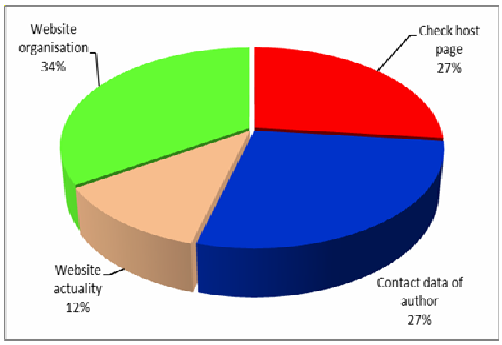

Fig. 4. *Criteria for credibility in web site evaluation*

Regarding the assessment criteria of the scientific information quality disseminated by the web pages, all respondents consider the copyright restrictions – 1.447, the purpose- 2.06, information costs- 2.019, content- 3.697, form and availability-1.958, where 1 is most relevant and 4 less relevant, like in figure 5.

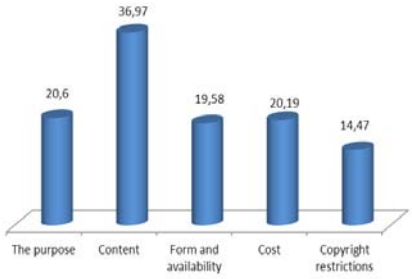

Fig. 5. *Assessing web pages criteria*

The most used criterion in assessing the content of a scientific paper is accuracy, 23% followed by originality 21%. The other criteria, in order of importance are the references – 15%, the evolution of the presented phenomenon – 14%, links to other resources and quality of expression – 11% also the scientific committee – 5%, see in figure 6.

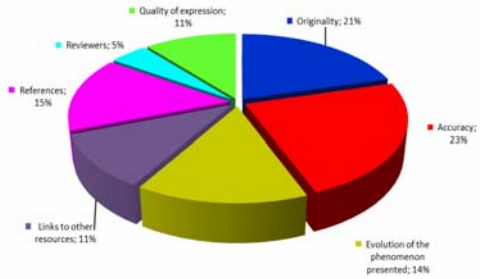

Fig. 6. *Assessing content of scientific article*

In case of a blog or website evaluation, criteria are considered at: namely: is the scope clear-2.143, what is it dealt with-2.662, novelty - 2.765, format and presentation thoroughness- 1.285 where 3 is most relevant and 1 is less relevant, like in figure 7.

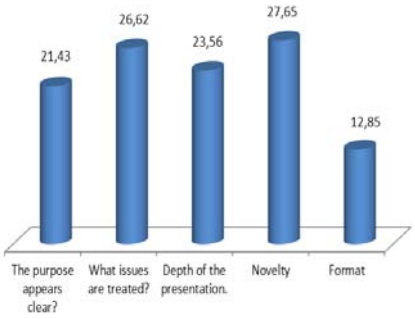

Fig. 7. *Assessing criteria for blogs and websites*

5. Discussion

The period of research and writing PhD thesis is an edifying stage in the future researcher's development. During this period the PhD students must have research skills. Quality information evaluation ability which is necessary to any student becomes impetuously necessary during the doctoral school.

A surprise element in the survey is the fact that a small percentage of PhD students use Google Scholar as a source of information. Google Scholar is a free scientometric base which comprises only documents that are academically indexed by Google. Another surprise is the low level of knowledge regarding the scientometric databases, especially because the most PhD students use as main sources of information the databases to which university has subscribed, among which there are also the two scientometric databases, ISI Web of Science and Scopus. [3, 4, 5].

Most of the Ph.D. students use the online sources for their informational needs.

Ph.D. students have a diminished knowledge regarding the assessment systems of the information quality in a 50% proportion which requires the implementation of a module for INTERNET use in the documentation process. Name of the author and number of citations represents an assessment criterion of the scientific papers evaluation only in a 27% proportion while the journal impact represents a 24% criterion, fact that offers us an additional reason to promote scientometry, the science of information impact evaluation.

6. Conclusions

The information assessment criteria in the web space should be promoted and compulsory skills must be generated for Ph.D. students and university researchers and others.

The fact that the majority of the PhD students, who know these notions, know them due to their individual study imposes the organization of some presentation of the above mentioned notions.

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