# Linguistic and Cultural Differences in Information Categorization and their Impact on Website Use

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## Abstract

*The Internet is increasingly used as a medium for providing medical information. Nevertheless, whether the World Wide Web is favoured over other information sources depends to a large extent on how easily the sought information can be found. Therefore, this paper investigates the impact of culture, language and medical knowledge on users' preferences of information categorization and on the evaluation and use of search cues and search options. Results from a laboratory experiment with 141 Malaysian, British, Russian, and German test subjects revealed significant differences but also commonalities between these groups. As a consequence of their limited medical knowledge, all groups exhibited a preference for visual cues over verbal cues. Outcomes suggest furthermore that culture mainly influences the users' preferences in information categorization as well as their attitudes and using behaviour, whereas language predominantly affects the users' beliefs about ease of use and usefulness.*

## 1. Introduction

The Internet offers unprecedented opportunity for making health information available to a worldwide audience. In many cases, Internet information presents a number of advantages when compared to the offline world, such as when meeting a physician involves high costs or when a condition elicits strong feelings of shame. Nevertheless, whether the World Wide Web is favoured over other information sources depends to a large extent on how easily the sought information can be found [25].

A number of catalogues categorize medical health information for international use (e.g. various versions of the WHO ICD[1]). Following international standards, these categorization schemes share the fact that they were designed for users with extended medical knowledge originating from a western cultural environment. When employed in other areas, e.g. on websites that also aim at patients with limited medical knowledge, these categorization schemes might be less appropriate due to their requirement of topical expertise.

In addition, websites that target an international audience have to cope with users of various linguistic and cultural backgrounds. Linguistic and cultural differences might elicit further differences in information categorisation preferences. Additionally, more and more health-website target patients as audience that in contrast to physicians, usually do not dispose of detailed medical knowledge.

Diverging degrees of domain knowledge and varying linguistic and cultural backgrounds may therefore represent barriers to easy information access. The question of identifying the characteristics of these differences and the impact of linguistic and cultural background and medical knowledge on ease of website use, a website's usefulness and using the website, is raised.

Insight into these issues is helpful from two points of view: the first one is commercial, the second is ethical. Information about categorization preferences and resulting catalogue use provide valuable support for important investment decisions with regards to the presentation of E-Health information. Insight into information access and the enhancement of information presentation help to improve access to health related content among users without extended medical knowledge and, with different linguistic and cultural backgrounds. They consequently contribute to the reduction of the digital divide arising from language and culture-related factors, and thus promote increased user participation on the Internet.

[1] International Classification of Diseases