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Why content analysis should be used more in Library and Information Studies research

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Abstract

Content analysis provides an alternative technique for Library and Information Studies (LIS) research, but despite its effectiveness has been too often ignored. This editorial outlines the basic concepts and procedures of content analysis, then explores and denounces possible causes of its limited application in the LIS field.

Why content analysis should be used more in Library and Information Studies research

Content analysis provides an alternative technique for Library and Information Studies (LIS) research, but for all its effectiveness, it has been rather underused. My goal here is to outline the concepts and procedures of content analysis, then explore and denounce

possible causes of its limited application in our field.

Briefly, content analysis is, as Powell (1997) explains, “a systematic analysis of the occurrence of words, phrases and concepts” (p. 50). It reveals prejudices and oversights of creators and publishers (Busha & Harter, 1980). The technique can be subdivided into “manifest” and “latent”, the former being quantitative and involving the tallying of word occurrence, and the latter being qualitative by its examination of patterns in data. The effectiveness of content analysis depends on progressing logically from creating appropriate categories, to coding data, to interpreting the results (Rochester, 1995a).

Content analysis fulfils the premise of LIS research: data are produced that enable practical or theoretical changes to improve the quality of information services. It can function either as the primary method in a study, or in conjunction with others to triangulate and enrich findings (Gorman & Clayton, 1997). Content analysis is not a new (and therefore unproven) approach—Rochester (1995a) advises that its earliest application occurred in Sweden in the 18th century, when hymns were checked for compliance with orthodoxy. The foundations of the theory were consolidated in the early half of last

century, and today procedural guidelines are easily obtained. The practice has matured, and highly regarded LIS academics have contributed to its development (such as Jarvelin and Vakkari, 1990), and extol its merits.

Qualitative tools suit the nature of our studies by their inherent flexibility. Gorman and Clayton (1997) claim the complexity of the information environment requires adaptability in data analysis, indicating the cohesion of qualitative techniques with the non-quantitative background of the typical information professional. Rochester (1995a) praises content analysis for being unobtrusive, and for allowing cumulative research. Another advantage is its flexibility and its focus on particular tasks of importance to the LIS field, such as collection evaluation—Smith's 1994 study of ten Melbourne public libraries identified common ideological statements in selection and acquisition policies. Or, content analysis can examine the information sector as a whole, such as studying the literature produced.

Additionally, content analysis extracts further or different findings from material and it is suitable where other tools are not. Slater (1990) stresses that it may be applied to diverse items, especially social texts such as newspapers (thus having synchronicity with, as Gorman & Clayton (1997) note, the social nature of information centres). For my Honours thesis, I used content analysis on media articles to determine the portrayal of the information profession. The study sampled forty clippings from two Australian newspapers (one national and one state), which were published during 2000 to 2004. A manifest approach was taken, and the results disproved the project's contention that the media were, for the most part, perpetuating clichés in LIS worker appearance and attitude.

Library and Information Studies is lagging behind the other sciences in this area (Busha & Harter, 1980). Indeed, content analysis is widely employed, from "marketing...to literature and rhetoric, ethnography and cultural studies, gender and age issues, sociology and political science, psychology and cognitive science, and... socio-and psycholinguistics, and is playing an integral role in the development of artificial intelligence" (Colorado State University, 2004). Furthermore, it suits cross-disciplinary research, a practice that is increasingly popular (Ryan & Bernard, 2000).

As Busha and Harter (1980) explain, use of content analyses in the post-World War II information sphere often concentrated on the interpretation of novels, such as Harvey's 1953 "The content characteristics of best-selling novels". More recently, job advertisements are the favoured source material, like in the work of Clyde (2002) and Pember (2003). This expansion of undertakings represents some progress in LIS thinking about the tool.

And content analysis has been applied and well-received in studies all over the world. Evidence of global LIS implementation include Leif Kajberg's (a Danish consultant to the Royal School of Library and Information Science) review of research and development publications on technology and competence in 1992, Maxine Rochester's (1995b) scrutiny of professional communication in Australian library and information science through journal articles, and William Moen's 1997 examination of the metadata of United States government records.

Content analysis has been dismissed due to its large demands of labour, time and funds (Ellis, 1993; Powell, 1997), yet this flaw exists in numerous

research methods. Busha and Harter's (1980) identification of the disadvantage that no single model is applicable, and each new analysis must be structured according to "the accomplishment of a specific task" (p. 174) is undeniable. However, as List (2003) suggests, existing frames from similar content analysis studies can be modified. Furthermore, technological aid is available for the numeric tasks, via standard spreadsheet applications (like Excel) or specifically formulated content analysis packages (such as Textpack).

Content analysis is also frequently dismissed due to the perceived weakness of subjectivity. Again, this issue affects all qualitative research. Validity does depend upon the collective opinion of coders, but this is managed by checking the level of agreement with a correction formula (theory trailblazer Krippendorff set a benchmark of 0.70). The warning that items that are not coded do not receive attention, and hence the study may miss something of significance (Ellis, 1993), is rebutted by pointing out that methodology selection involves consideration of tool appropriateness.

Reluctance of researchers to incorporate this tool arises from habit--as Rochester (1995a) remarked, "In Australia the survey seems to be regarded as a standard strategy for all library and information science problems" (p. 169). Additionally, research in our sphere is often a case study conducted by an employee focusing on their organization. Low usage of content analysis may be attributed to it being unfairly maligned. It is suggested that much of its poor reputation stems from past studies of poor quality, where researcher error (a possibility in any technique) led to tenuous conclusions.

Wider publicity of the merits of the research method of content analysis in Library and Information Studies would greatly benefit the field. The criticisms of potential difficulties of the tool are unfounded, and studies in which content analysis has been applied have subsequently added to the LIS body of knowledge. I hope that once content analysis is better understood it will be better utilised.

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