



*Journal of Advances in
Science and Technology*

*Vol. IV, No. VIII, February-
2013, ISSN 2230-9659*

REVIEWING THE USE OF THEORY IN LIBRARY AND INFORMATION SCIENCE

Reviewing the Use of Theory in Library and Information Science

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Abstract – A content analysis of 1,160 Library and Information Science (LIS) articles printed in six LIS journals between 1993 and 1998 was directed to test the utilization of speculation in LIS explore. On the whole, 34.2 percent of articles joined hypothesis in either the title, dynamic, or message for what added up to 1,083 speculation occurrences or a normal of .93 episodes for every article. Articles managing subjects from the humanities (e.g., qualified information approach, history) had the most astounding rate of speculation utilize with 1.81 occurrences for every article, emulated by social science papers (e.g., informative content conduct, administration) with .98 occurrences for every article and science articles (e.g., bibliometrics, informative content recovery) with .75 hypothesis episodes for every article. The aforementioned discoveries suggest that distinctions exist in the utilization of hypothesis in LIS that are connected with the wide disciplinary substance of the exploration. The aforementioned distinctions might go out from variant conceptions of and methodologies to the utilization of speculation in the exploration customs of the humanities, social sciences, and sciences. It is recommended that the multi-disciplinary underpinning of LIS specialists gives a rich yet still under-used chance for the utilization and infrastructure of hypothesis inside LIS.

INTRODUCTION

Researchers have been concerned with hypothesis and expounded on it in diverse routes for numerous years. Essential definitions discovered inside the written works include: "A set of informative ideas" (Silverman, 1993, p. 1); "a proclamation or assembly of explanations about how some part of the planet works as often as possible clarifying associations right around phenomena" (Vogt, 1993, p. 232); "a systematic demonstration for the watched realities and laws that identify with a particular part of essence" (Babbie, 1992, p. 55); "generalizations which look to illustrate associations around phenomena" (Grover & Glazier, 1986, p. 228); and, in reference to LIS speculation, a "clarification of qualified information frameworks proficiency, of client conduct, of the capacity of distinctive pursuit operators for example descriptors, reference, titles, et cetera" (Hjorland, 1998, p. 607).

Distraction with the utilization and advancement of speculation is common inside scholarly trains, incorporating LIS. As per the theory of science, the utilization of hypothesis in academic research is a recognizing characteristic of a control's scholarly development (Hauser, 1988). LIS written works is loaded with calls for making the field progressively speculative, incorporating those by Grover & Glazier (1986), Templeton (1994), and Hjorland (1998). While the advancement of hypothesis remarkable to LIS is crucial to the development of the order, it should

additionally be recollected, as is so suitably stated by LIS researcher Elfreda Chatman (1996), that "[w]orking with theoretical systems and observational exploration has never been a simple errand (p. 205).

Small research has truly examined the utilization of hypothesis in LIS. The few existing studies inferred that most LIS examination is a theoretical, reporting rates of speculation utilize extending from 10 to 21 percent (Feehan et al., 1987; Jarvelin & Vakkari, 1990; Julien, 1996; Julien & Duggan, 2000; Nour, 1985; Peritz, 1980). This paper goes out from a greater investigation of the utilization of speculation in LIS, financed by an exploration grant from the Association for Library and Information Science Education (ALEE). The outcomes have been reported long ago in McKechnie & Pettigrew (1998), Pettigrew & McKechnie (2001), and McKechnie, Pettigrew, & Joyce (2001). The discoveries of this greater study demonstrate that speculation was discoursed on in 34.2 percent of 1,160 articles printed in six unmistakable LIS diaries from 1993 to 1998 which, when contrasted with the outcomes of prior studies, prescribes an expansion in the utilization of speculation inside LIS. On the other hand, hypothesis was not utilized reliably over the articles. Case in point, certain analysts basically said a theory while others unequivocally utilized a hypothesis to casing the study, advance research questions, and examine results. A specific "hypothesis" may be pointed to as a model, applied build, or a thousand speculation by

distinctive researchers in diverse papers and, on event, by a solitary researcher inside the same dad-for every. Speculation reference polishes moreover differed substantially: While most researchers identified and examined hypotheses inside the content of their papers and furnished bibliographic references for the speculations utilized, just a couple of specified theories in article edited compositions and a number of the references gave pointed to auxiliary instead of essential assets for the speculation. Along these lines, a major discovering of this study was that LIS researchers don't offer a lone viewpoint about what speculation contains and how it ought to be utilized inside examination. Chatman (1996) is undoubtedly right when she asserts that utilizing and developing hypothesis is hard work.

The present article investigates a plausible description for this phenomenon of conflicting utilization. Are the distinctive methodologies to hypothesis, as obvious in the LIS expositive expression, identified with the multidisciplinary groundings of LIS specialists and the multidisciplinary nature of the substance of the field? All the more particularly, do the distinctive exploration approaches and customs associated with work in the expansive trains of the humanities, social sciences, and sciences have an effect on the utilization of speculation in LIS inquire about? Furthermore is this clear in the printed reports of LIS research?

METHODOLOGY

To answer the aforementioned exploration addresses, a substance investigation was directed of 1,160 articles that showed up from 1993 to 1998 in six diaries:

1. Information Processing and Management (IP&M; six issues for every year)
2. Journal of the American Society for Information Science and Technology (JASISTten issues for every year for 1993-1995; twelve issues for every year for 1996 and 1997; 14 issues for 1998)
1. Journal of Documentation (JDOC; quarterly)
2. Journal of Educationfor Libra? besides Information Science (JELIS; quarterly)
3. Library and Information Science Research (LISR, quarterly)
4. The Library Quarterly (La quarterly)

The aforementioned diaries were picked for the reason that they are conspicuous and hold companion assessed articles coating above all ranges of exploration in LIS. All articles not counting for sections, book audits, and news things, for example meeting

affirm-ments and eulogies, were coded for the writers' utilization of speculation.

Every article was coded for the first writer's association as recorded in the article (e.g., private part, legislature, scholarly division), subject territory (e.g., informative content recovery, human informative content conduct, history), and sort of article (e.g., report of observational research, literary works audit, strategy paper). Subjects were further gathered under the expansive disciplinary classifications of humanities (e.g., qualified data arrangement), social sciences (e.g., administration), and sciences (e.g., bibliometrics). The code book is added. Speculations refered to in the articles were considered and coded to if they began inside LIS, the sciences, social sciences, or humanities, and where they were utilized within the article (i.e., title, theoretical, or essential content). Regardless of how frequently a hypothesis was specified in a specific article, it was just tallied once. To test for intercoder dependability, thirty articles (five haphazardly browsed each of the six diaries) were freely coded by three people. The last rate of understanding for all coding choices was 94.7 percent prescribing that the coding plan was dependable and substantial.

DISCUSSION

TheoryDeployment : Generally speaking, 34.2 percent (n= 397) of articles fused hypothesis in the title, conceptual, or message, bringing about what added up to 1,083 occurrences of speculation utilize or a normal of .93 hypothesis occurrences for every article. At the time one acknowledges just the articles incorporating speculation, the normal number of hypothesis episodes for every article expands to 2.73.

Unique disciplinary distinctions in principle utilize are obvious within the information. Humanities articles had the largest amounts of hypothesis utilize with 1.81incidents for every article and 4.09 episodes for every article with speculation. Hypothesis utilize as a part of social science articles approximated the midpoints for the whole example, utilizing .98 episodes of speculation for every article for all social science articles and 2.87 occurrences for every social science article utilizing speculation. The frequency of speculation utilize was lower than normal for science articles at .75 occurrences for every article for all science articles and 2.32 occurrences for those holding hypothesis.

Speculations utilized were drawn first from the social sciences (45.4 percent), emulated by LIS (29.9 percent), the sciences (19.3 percent), and the humanities (5.4 percent).

Articles managing the social sciences depended overwhelmingly amply on speculations drawn from the social sciences (69.9 percent) and LIS (22.5 percent) yet less so on those from the sciences (6.4

percent) and humanities (1.2 for every-penny). Science papers turned first to speculations from LIS (41.4 percent) and afterward generally correspondingly to speculations from the sciences (29.6 percent) and social sciences (24.8 percent). Papers managing the humanities depended progressively on hypotheses drawn from the social sciences (56.1percent) and similarly on science (14.9 percent) and LIS hypotheses (14.5 percent) as they did on speculations from the humanities (14.5 percent). While just articles with substance from one of the three wide disciplinessocial sciences-depended by and large amply on speculations from the same wide discipline, when one looks at the information from the viewpoint of the control of the speculation utilized, a positive association exists between the control of the speculation and the disciplinary substance of the article. For instance, humanistic speculations are most regularly considered in papers managing the humanities and science hypotheses in articles managing the sciences. Writers suggested eighty-six new hypotheses, conveyed proportionately consistent with the aggregate number of articles in every control between articles regarding the humanities (n= 8; 9.3 percent), the social sciences (n= 26; 30.0 percent), and the sciences (n= 52; 60.1 for every-penny). For the most part, the discoveries prescribe that there are some restrain ward contrasts connected with the utilization of hypothesis in LIS explore.

CONCLUSION

The findings suggest that differences exist in the use of theory in LIS that are associated with the broad disciplinary content of the research. Scholars publishing humanistic research within the six LIS journals analyzed for this study used theory in their articles almost twice as frequently as those working in the social sciences, and almost two and one half times more often than those publishing in the sciences. It is hypothesized that these findings arise from differing conceptions of and approaches to the use of theory associated with the traditions of humanities, social science, and science research. It may be, for example, that the lower rate of theory use in articles dealing with science-related topics reflects a disciplinary reliance on theories that are assumed to be commonly understood by the scholarly community active in the research area and, therefore, not in need of identification and explanation. More research is needed to explore this idea further. For example, interviews with authors working in the three broad areas could uncover "hidden" aspects of theory use in research that may not always be evident in the articles arising from that research.

Reports of earlier stages of this project (McKechnie & Pettigrew, 1998; McKechnie, Pettigrew, & Joyce, 2001; Pettigrew & McKechnie, 2001) found that, with the exception of articles written by LIS scholars publishing

out- side of LIS, LIS theories are not being cited in non-LIS journals. A surprising finding of this analysis is that many non-LIS scholars are publishing within the LIS journals examined, especially scholars associated with academic science departments, such as computer science, engineering, and mathematics. Although it was disappointing to see that LIS theories had not made substantial inroads in other disciplines, it is interesting to think of the opportunities afforded by exposure to non-LIS theories brought into LIS publishing by scholars working outside of the discipline.

LIS, with its broad cognitive domain and faculty recruited from diverse backgrounds, is often regarded as an inter-disciplinary orthogonal field (Bates, 1999). Some, such as Patrick Wilson in "Interdisciplinary Research and Information Overload" (1996), identify the challenges implicit in the need to master more than one area in order to conduct valid interdisciplinary work. Many others, including Machlup & Mansfield (1983), Harmon (1987), and Grover & Greer (1991) have advocated more interdisciplinary work as a potentially rich venue for answering the field's complex research questions. Tom Wilson (1997), in a review of non-LIS literature dealing with information behaviour, states that "the ideas presented throughout this review demonstrate to the information science researcher that exploration of other disciplines can be productive of research ideas. . . [including] analytical concepts, models and theories" (pp. 569-570). The large number of distinct theories from widely diverse disciplines discovered in this project, and the large number of new theories proposed in the articles, suggest that interdisciplinary work may indeed be enriching LIS in terms of the use and development of theory. However, if interdisciplinarity continues to be important within LIS, special attention must be paid to the problems it poses for theory deployment and development within the field. One simple solution suggested by the findings of this study would be to encourage scholars publishing within LIS to adopt better citation practices when writing about theory. Theories should be clearly identified and authors should list one or more primary sources for a theory. Theory names should be included in article abstracts so that individuals interested in learning about a theory and how it has been used can easily retrieve relevant research articles by searching LIS databases like Library and Information Science Abstracts. Authors could also provide brief explanations of theories and how they have been used within the text of the article itself. These practices would be helpful for LIS scholars with little or no knowledge of a particular theory. The widely diverse disciplinary affiliations of first authors publishing within LIS, evident in this study, indicates that the multidisciplinary expertise needed to increase and improve the use of theory from other disciplines and to aid in the development of new

theory unique to LIS is already available in the community of scholars, a rich and under-utilized treasure.

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