

A Closer Look at the Hobgoblin: Users' Satisfaction with Computerized Literature Searches

Marcia Kingsley

This present study was an informal but very practical attempt to analyze some of the factors involved in users' satisfaction with DIALOG and MEDLINE searches and thereby highlight ways to improve this service in an academic library unit. In the small but growing body of user studies on satisfaction with computerized literature searches, one tendency has been reported consistently. Users in most, if not all, surveys taken via printed questionnaires have declared their over-all satisfaction. Among the published results is Howard Fosdick's report of a "strong positive patron evaluation."¹ Ryan Hoover also reported that most users of the service thought it "worthwhile."² Gerald Jahoda found that users were "generally pleased."³

Implications of Previous Studies

The universally cheering results cited above may mean that computer searches are indeed gratifying to a majority of the users, but librarians should also consider that the results may indicate that patrons choosing to respond to the questionnaire are self-selected samples of users. Those who are satisfied may be likely to complete the questionnaires, while dissatisfied patrons may be less willing to take a few minutes to respond. And the literature has provided a forum for discussing additional cautions arising from focusing on users' expressed satisfaction as a measure of retrieval effectiveness. William S. Cooper stressed the necessity of accepting the admittedly subjective assessment by the user that a search was satisfactory.⁴ He called this a "user-oriented performance rating" when quantified.⁵ But Dagobert Soergel responded that the precision of recall of a search was a more valid measure of its success. The number of retrieved citations must be judged against the absolute number of relevant citations that could have been retrieved.⁶ In his article "Is User Satisfaction a Hobgoblin?", Soergel wrote, "For too long an uncritical attempt 'to make the user happy' has been prevalent in the library and information services profession. What is needed instead is an attempt to make the user successful."⁷ In other words, the patron may be satisfied with what is retrieved, but perhaps we must question whether he should be.

To this philosophical standoff later was added a thoughtful and perceptive article by Tessier, Crouch, and Atherton, which focused on user satisfaction as the most important measure for librarians to use, but emphasized that we should consider the nature of this satisfaction. User satisfaction,

they wrote, is a state of mind; the user should "go away content." But to serve this goal the librarian needs more information about just what is important to the user and is most apt to satisfy him.⁸ Concurring in these ideas was an article by Renata Tagliacozzo who found that indication of over-all satisfaction with searches may actually contradict more specific responses provided by the patron such as assessment of usefulness and helpfulness of the retrieved material. Tagliacozzo concluded that more attention should be given to specific user needs and their satisfaction.⁹

The Survey

The members of the Reference Department at the University of North Carolina at Greensboro decided to evaluate their computer searching service by gathering data about the degrees of general patron satisfaction with searches and of specific need fulfilment through these searches. Patrons of computerized literature searches performed on MEDLINE (through the National Library of Medicine) and DIALOG data bases were surveyed by questionnaire. All searches were performed at a CRT with an attached high-speed printer.

Approximately 100 questionnaires were distributed, attached to search results over an eight month period. Though about 250 searches were actually run during this time, more of an attempt was made to obtain an equal number of completed questionnaires for each of the five participating searchers than to seek evaluations of all searches done. When a librarian had met his "quota" of completed evaluation forms, no further questionnaires were distributed with that searcher's printouts. Forty-five completed forms were returned.

The Questionnaire

Efforts were made to ensure an adequate return rate and minimize the complexity of interpreting practical implications of results by using a short, simple questionnaire. The form was kept as basic as possible, with the expectation that, the shorter the questionnaire, the higher the likelihood of both satisfied and dissatisfied patrons completing it.¹⁰ There was no need to ask for demographic data on the questionnaire, since this information is recorded during the pre-search interview and was not pertinent to this study. Also, there was no need to ask the almost-obligatory "How did you find out about this service?" since patrons have frequently given verbal indications that recommendations from teachers and colleagues are the most effective sources of publicity for this department's searching service.

In addition, questions were worded for patron's understanding rather than for precision of library terminology, e.g., "What index or indexes . . . were searched for you?" rather than "What data bases? . . ." Finally, on the question most directly related to success of the search (number 5), we limited the question to success in *finding most of the relevant items in the indexes*, the objective which seems to be most within the power of the librarian, the data bases, and the computer. (This would presumably prevent patrons from deter-

mining success on the basis of occurrences such as finding that a proposed dissertation topic was effectively preempted by a previous researcher, or, conversely, that sparseness of citations indicated the researcher might be on the threshold of academic preeminence in his field!)

Results

As expected, responses initially seemed overwhelmingly favorable. Essentially 93% of the searches were perceived as successful—33% “Definitely Successful” and 60% “Moderately Successful.” (Only three respondents, or fewer than 7% indicated that their searches were “definitely Not Successful,” and one of those may have marked that category in error since all other questions on the form were answered in the affirmative.)

On closer examination of the 31 moderately-and-not-successful search evaluations, it was in time savings for the patron that there was the greatest frequency of evident disappointment. Fifteen, or 48% of that combined group had saved a “Great Deal” of time, but the same number had saved just “Some” time. On other questions, however, satisfaction was much more obvious: 92% of the entire group of 45 said that their searches had led to citations that would otherwise not have been discovered. Finally, on the questions about the indexes/data bases that had been searched, a surprising 78% gave the correct name, or close approximation, of at least one of the bases searched.

Conclusions

The important feedback for the staff was the frequency of saving “Some” rather than a considerable amount of time for patrons. While this time savings depends, of course, on the nature and amount of available literature, on the amount of time possibly spent already by the patron in doing manual searching, and on other factors outside the librarian’s control, it is an aspect of the service that may need attention. The reference librarians have subsequently discussed and tried to identify points at which the user may feel more time could be saved for him. Since turnaround time for most searches is no greater than 24 hours, time spent waiting for results is not a major factor. However, being in an academic setting, it is this reference department’s policy to familiarize a search requestor with any corresponding printed indexes during the presearch interview. Despite the educational intentions behind the policy, this orientation to printed sources may sometimes be perceived by the patron as his time being spent unnecessarily.

A further consideration is the possibility that some patrons had unrealistically high expectations about the amount of time computer searches could save for them. The user satisfaction “hobgoblin” described by Soergel may have a role here: just as users may sometimes be satisfied with search results when they should not be, perhaps some users not fully aware of the limitations of computerized searches are not satisfied with the amount of time saved even when the most effective searches possible have been provided for them.

Another factor to consider was the large number of respondents who knew what data bases or indexes had been searched. Towards the over-all goal of helping researchers review the literature, it is gratifying to see that many patrons had some sense of the portion of the universe of available information that had been covered. This seems to indicate that the presearch discussion of indexes and data bases is effective even though it involves the search service user in a longer interview than would otherwise be required.

The searchers at the University of North Carolina at Greensboro have found that the expressed desire of patrons to save additional time through computer searches has heightened the staff's awareness of this need. In practice this means that the librarians plan to limit the length of the pre-search interview to the extent possible without jeopardizing the librarian's understanding of the search strategy or the patron's understanding of the availability of printed indexes and their relationship to his computerized search results. In addition the staff members will attempt to explain the realistic objectives that a computer search can be expected to fulfill.

Since there may indeed be a trade-off between the patron's desire to save time in the short run and the librarian's desire to educate the patron about the extent and limitations of the printed indexes, further study on the points at which users see their time being saved and the points at which it could be better saved would be valuable for the future adaptation of this service.

Marcia Kingsley is reference librarian, Jackson Library, The University of North Carolina at Greensboro.

References

1. Howard Fosdick, "An SDC-Based On-Line Search Service: A Patron Evaluation Survey and Implications." *Special Libraries* 68 (September 1977): 310.
2. Ryan E. Hoover, "Patron Appraisal of Computer-Aided On-Line Bibliographic Retrieval Services." *Journal of Library Automation* 9 (December 1976): 348.
3. Gerald Jahoda, Alan Bayer, and William Needham, "A Comparison of On-Line Bibliographic Searches in One Academic and One Industrial Organization." *RQ* 18 (Fall 1978): 46.
4. William S. Cooper, "On Selecting a Measure of Retrieval Effectiveness." *Journal of the American Society for Information Science* 24 (March-April 1973): 87-100.
5. _____, "On Selecting a Measure of Retrieval Effectiveness: Part II, Implementation of the Philosophy." *Journal of the American Society for Information Science* 24 (November-December 1973): 413-424.
6. Dagobert Soergel, "Is User Satisfaction a Hobgoblin?" *Journal of the American Society for Information Science* 27. (June-August 1976): 256-259.
7. *Ibid.*, p. 257.
8. Judith A. Tessier, Wayne W. Crouch, and Pauline Atherton, "New Measures of User Satisfaction with Computer-Based Literature Searches." *Special Libraries* 68 (November 1977): 383-386.
9. Renata Tagliocozzo, "Estimating Satisfaction of Information Users." *Bulletin of the Medical Library Association* 65 (April 1977): 243-249.

10. Though the first questionnaires distributed were kept to eleven questions, this number was pared further after initial results trickled in. The final form contained six questions, one with two parts, which, of course, had also appeared on the longer forms. Only responses to these six questions were analyzed.

Addendum: Sample Questionnaire

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COMPUTER SEARCH EVALUATION

1. How much time do you think this search has saved you?
_____ none _____ some _____ a great deal
 2. About how many references or articles did you receive on your printout?

 3. Do you think this computerized literature search has led you to library materials you would not otherwise have discovered?
_____ yes _____ no
 4. What index or indexes (such as Psychological Abstracts, Medline, ERIC, Dissertation Abstracts) were searched for you?
1. _____ 2. _____
Don't know _____
 5. Do you think the search was successful in finding most of the relevant items in the indexes?
_____ definitely successful _____ moderately successful
_____ definitely not successful
- If not successful, have the reasons for the results been adequately explained?
- _____ yes _____ no
6. Do you think the results were worth the cost?
_____ yes _____ no

Your name (optional) _____

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