NAME-TITLE ENTRY RETRIEVAL FROM A MARC FILE

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A test of validity of earlier findings on 3,3 search-key retrieval from an in-process file for retrieval from a MARC file. Probability of number of entries retrieved per reply is essentially the same for both files.

This study was undertaken to test the applicability of previous findings on retrieval of name-title entries from a technical processing system file (1) to retrieval from a MARC file; the technique for retrieval employs truncated 3,3 search keys.

MATERIALS AND METHODS

The study cited above employed a file of 132,808 name-title entries obtained from the Yale University Library's Machine Aided Technical Processing System. Bibliographic control was not maintained for the generation of records in this file, with the result that the file contained errors that simulated errors in the requests library users put to catalogs. The MARC file employed in the present study contains 121,588 name-title entries that are nearly error free. Whereas the MARC file possesses few records bearing foreign titles, the Yale file has a significantly higher percentage of such titles, as would be expected for a large university library. Initial articles were deleted in Yale titles, but only English articles in MARC titles because the language of foreign language titles is not identified in MARC. Design of the program used to analyze the MARC file was the same as that for the program employed in the previous study. However, the new program runs on a Xerox Data Systems Sigma 5 computer. The test employed the 3,3 search key to make possible comparison with previous results.

RESULTS

Table 1 presents the percentage of time that up to five replies can be expected, assuming equal likelihood of key choice. Inspection of the table reveals that there is no significant difference between the findings from the Yale and the MARC files.

Table 1. Probability of Number of Entries Per Reply Using 3,3, Search Key

| Number of Replies | Cumulative Probability Percentage | |
|-------------------|-----------------------------------|-----------|
| | Yale File | MARC File |
| 1 | 78.58 | 79.98 |
| 2 | 92.75 | 93.28 |
| 3 | 96.83 | 96.93 |
| 4 | 98.40 | 98.26 |
| 5 | 99.08 | 98.91 |

DISCUSSION

The same result was expected for the MARC file that had been obtained earlier from the Yale file. Possible influences that might have led to different results were the existence of errors in the Yale file, a significant proportion of foreign titles in the Yale file as compared to the nearly all-English MARC file, and the inability to mechanically delete the initial articles in the few foreign language MARC titles. It is most unlikely that the effects of these differences are masking one another.

CONCLUSION

The findings of a previous study on the effectiveness of retrieval of entries from a large bibliographic file (1) by use of a truncated 3,3 search key have been confirmed for a similarly large MARC file.

REFERENCE

 Kilgour, Frederick G.; Long, Philip L.; Leiderman, Eugene B.: "Retrieval of Bibliographic Entries from a Name-Title Catalog by Use of Truncated Search Keys," *Proceedings of the American Society for Information Science*, 7 (1970), 79-81.