

12-1993

An Examination of the Relationship Between Published Book Reviews and the Circulation of Books at an Academic Library

Glenda Thornton

Cleveland State University, g.thornton@csuohio.edu

Follow this and additional works at: https://engagedscholarship.csuohio.edu/msl_facpub

 Part of the [Library and Information Science Commons](#)

How does access to this work benefit you? Let us know!

Original Citation

Thornton, Glenda A. An Examination of the Relationship between Published Book Reviews and the Circulation of Books at an Academic Library. Thesis (Ph. D.)--University of North Texas, Dec., 1993.

Repository Citation

Thornton, Glenda, "An Examination of the Relationship Between Published Book Reviews and the Circulation of Books at an Academic Library" (1993). *Michael Schwartz Library Publications*. 71.

https://engagedscholarship.csuohio.edu/msl_facpub/71

This Dissertation is brought to you for free and open access by the Michael Schwartz Library at EngagedScholarship@CSU. It has been accepted for inclusion in Michael Schwartz Library Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

AN EXAMINATION OF THE RELATIONSHIP BETWEEN PUBLISHED
BOOK REVIEWS AND THE CIRCULATION OF
BOOKS AT AN ACADEMIC LIBRARY

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy

By

Glenda A. Thornton, B. A., M. L. S.

Denton, Texas

December, 1993

TABLE OF CONTENTS

| | Page |
|------------------------------------------------------------------|------|
| LIST OF TABLES. | v |
| Chapter | |
| I. INTRODUCTION | 1 |
| Background of the Problem | |
| Statement of the Problem | |
| Purposes of the Study | |
| Significance of the Study | |
| Definition of Terms | |
| Hypotheses | |
| Assumptions | |
| Limitations | |
| II. REVIEW OF RELATED LITERATURE | 21 |
| Bibliometrics and Circulation studies | |
| Literature of Book Review Research | |
| III. METHODOLOGY. | 33 |
| Research Setting | |
| Research Design | |
| Selection of the Sample | |
| Data Collection | |
| Procedure for Analysis Date | |
| Testing of Hypothesis | |
| Reporting of Data | |
| IV. ANALYSIS OF DATA | 43 |
| Hypotheses One, Two and Three | |
| Hypotheses Four and Five | |
| Hypothesis Six | |
| V. SUMMARY, DISCUSSION, CONCLUSION, RECOMMENDATIONS | 61 |
| Summary | |
| Discussion | |
| Conclusion | |
| Recommendations | |

APPENDIXES

| | |
|--------------------------------------------------------------------------------------------|----|
| A. Journals Considered Scholarly Reviewing Sources for the Purposes of this Study . . . | 69 |
| B. Chi-Square Contingency Tables | 74 |
| BIBLIOGRAPHY | 76 |

LIST OF TABLES

| Table | Page |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Descriptive Analysis of Books Published and Purchased in 1987, Reviewed in 1987 or 1988, and their Cumulative Circulations Through the End of 1991 44 |
| 2. | Mean Number of Circulations Per Category 44 |
| 3. | Cumulative Circulation Frequencies of 708 Books Over 5 Years 47 |
| 4. | Circulation of Books Reviewed in Booklist (BL), British Book News (BBN), Choice (CH), Library Journal (LJ), New York Times Book Review (NYT), Publisher's Weekly (PW), and SciTech, N = 708 . 48 |
| 5. | Person Product-moment Correlation Between the Number of Circulations, the Source of Reviews, and Total Number of Reviews, N = 708 50 |
| 6. | Circulation of Literature Books ("P" Classifications) Versus all Other Subjects 51 |
| 7. | Reviews of Literature Books ("P" Classifications) Versus all Other Subjects 52 |
| 8. | Circulation and Reviews of Books in Mathematics, Biology, Business, Education and History . . . 55 |
| 9. | Descriptive Analysis of Books Reviewed in Scholarly Reviewing Sources 56 |
| 10. | Correlation Between Circulation and Source of Reviews for Biology Books, N = 14 57 |
| 11. | Correlation Between Circulation and Source of Reviews for Business Books, N = 66 58 |
| 12. | Correlation Between Circulation and Source of Reviews for Education Books, N = 20 59 |
| 13. | Correlation Between Circulation and the Source of Reviews for History Books, N = 98 60 |

Table

| | | |
|-----|--------------------------------------------------------------------------------------------------|----|
| 14. | Correlation Between Circulation and the Source of Reviews for Mathematics Books, N = 18 . . . | 60 |
| 15. | Chi-square Contingency Table for Hypothesis 4. . | 75 |
| 16. | Chi-square Contingency Table for Hypothesis 5. . | 75 |

CHAPTER I

INTRODUCTION

One of the major functions of an academic library is to acquire books for current use and to build research collections for future use. According to Robert Broadus (1973):

In reality, the building and shaping of the collection is the heart of librarianship, involving the essential philosophy of the profession. Not only is it one of the most fascinating tasks in the intellectual world, but "book selection is the most important, most interesting, and most difficult of the professional librarian's responsibilities." (p. 4)

However, much to the dismay of librarians, the research of the past 25 years indicates that a large portion of the books acquired by academic libraries never circulate. Classic studies by Fussler and Simon (1969) and Kent et al. (1979) identified usage patterns indicating that approximately one-half of all books acquired did not circulate within the first five to six years of ownership and those books which did not circulate within this time period had very little chance of ever circulating.

In the face of shrinking economic resources for higher education and the enormous cost of acquiring, cataloging,

processing, and storing library materials, it becomes very clear that academic librarians must find better models for the selection of all types of library resources. A considerable amount of bibliometric research has established that there are patterns to the use of library materials. However, to date, very little research has successfully related use patterns to improved methods of selecting materials in order to achieve improved rates of circulation. As stated in the University of Pittsburgh study, "the problem, of course, is that the techniques for predicting which books and monographs are likely to circulate 0, 1, or 2 times do not currently exist" (Kent et al., 1979, p. 201).

Fourteen years later, librarians still have not developed improved methods for the selection of materials that are likely to circulate. Clearly this situation calls for continued research into factors which might influence the potential for the circulation of library materials, particularly factors which can be identified and applied prior to the acquisition of a title.

Background of the problem

The history of book selection has a long tradition of recommending the use of book reviews in the selection of individual titles for libraries of all types because it is generally assumed that book reviews help librarians select the best possible books from among all of the possible choices. However, very little research has evaluated the

relationship between books which have been reviewed or not reviewed, the number of reviews received, or the sources of the reviews to their subsequent success in terms of library circulation. Researchers have, however, attempted to find similar links between circulation success and other selection factors.

The theory of book selection provides an appropriate place to begin an examination of the role of book reviews in the selection of materials for libraries. Very early texts in library science identified one major philosophical question in regard to selection which has never been satisfactorily resolved by librarians. This question is essentially whether or not books should be selected based upon quality or demand (use). For some librarians, this question might also be expressed as whether or not book selection is an art or a science. Most practicing librarians take a stand somewhere along the continuum between these two positions (Evans, 1987, p. 83).

Living with Books (1950), by Helen Haines, is considered a classic on the subject of book selection. In it, Haines promoted the selection of quality materials with her many principles of book selection. She advanced the role of book reviews in the selection of books because, ...in spite of contradictions and stultifications in judgement, there emerge from the mass of current criticism a certain consensus of opinion concerning the

literature of the day, and a certain indication of its trends, tendencies, and qualities, that must be known and heeded in book selection and supply. (p. 103)

Haines reported only three major sources of book reviews: Saturday Review of Literature, the New York Herald Tribune Weekly Book Review, and the New York Times Book Review (1950, p. 110). By the time Building Library Collections was issued in its first edition in 1959, book review journals, including several designed primarily for the use of librarians, were considered essential in the selection of new titles (Carter & Bonk, p. 59). With the fourth edition of this work in 1974, an entire section of annotations was incorporated into the text describing the various book review journals then available and, for the most part, still in use today including Booklist, Choice, Library Journal, New York Times Book Review, and Publishers Weekly (Carter, Bonk, & Magrill, p. 115-119).

As early as 1925, Lionel R. McColvin suggested in his text on book selection in public libraries that demand should be a primary factor in the selection of books for public libraries and developed formulas to determine the number of quality books required for each subject. However, one of the first major proponents of the scientific approach to collection development was S. R. Ranganathan. In his work, Library Book Selection (1952), he suggested that use should take priority over quality in selection of materials.

However, book reviews were recommended in making decisions about the selection of individual titles.

In 1973, Broadus suggested a role for scientific evaluation in book selection. "The librarian's whole enterprise, then, may be quite frustrating, and he often yearns for definite, unqualified, reliable evaluations" (p. 9). Regarding book reviews and recommended book lists, Broadus asked the question, "Are books which are listed in the standard aide (or reviewed favorably) more likely to be used in a library than are other books, which are not listed or reviewed?" (p. 61). He reported that only a few studies had investigated this issue and that they generally found little relationship between recommended titles and subsequent library use (p. 61).

No major studies were found that correlated the number of reviews that a book receives to its subsequent circulation history. However, several studies (Serebnick, 1978; Serebnick, 1981; Tisdell, 1958) found a strong, positive relationship between the number of reviews that a book receives (regardless of whether or not the reviews were positive, negative, or neutral) and the number of libraries which own those books. This relationship may be explained either by the general assumption that the more exposure titles receive, the more likely they are to be purchased by libraries and requested by patrons; or they are purchased because librarians believe that selecting favorably reviewed

books ensures acquiring items of high quality which are more likely to circulate and should be purchased "to meet expected patron demand" (Blake, 1989, p. 9).

In some of the more recent texts on library materials selection, notably Evans (1987), Gardner (1981), Gorman and Howes (1989), and Wortman (1989), the authors devote a considerable amount of energy and space to discussions of the theory of selection focusing on the issue of quality versus demand or use. The results of some of the more scientific use studies are summarized and their value to improving the selection of library materials is acknowledged, though not always wholeheartedly embraced. All of these texts declare the usefulness of book selection aides and book reviews in the selection of quality materials, but little scientific evidence is offered as to their effectiveness in the selection of books which will subsequently circulate. Gorman does suggest that specific tests should be applied to each tool to determine its usefulness to a particular library, but he suggests only a few very general questions which are frequently answered by an examination of the tool itself (1981, p. 249-250).

Some research has attempted to find pre-acquisition predictors of book use based on the "...conviction that there are certain characteristics associated only with high-use books and certain other characteristics which are associated with little-used books" (Weeks, 1973, p. [i]).

Whaley takes this idea one step further and suggests that, "a more fruitful approach would be to identify potential demand before acquisition" (1981, p. 333).

Other research has focused on the circulation success of books selected by faculty compared to selections made by librarians. Vidor and Futas (1988) report lack of a definite conclusion regarding the superiority of either faculty or librarian selectors (p. 135). In 1985, Millson-Martula "...indicated that while both groups of selectors may be equally effective in terms of circulation activity, classroom faculty make a greater contribution in terms of selecting books that have multiple circulation transactions" (p. 507). Evans (1970) found librarians to be more effective, Bingham (1979) reported that faculty selections circulated more frequently, and Geyer (1977) could find no appreciable difference between the two when measured by circulation frequency alone.

Hardesty (1981) found that gift books circulated fewer times than purchased books and that the books selected by librarians, when compared to books selected by teaching faculty, represented a "higher than expected portion of moderately and heavily used books and a lower than expected portion of lightly used books" (p. 274-275). Weeks (1973) studied characteristics existing prior to acquisitions which had the potential to influence future circulation. However, of those factors studied, the only reliable predictor of

future circulation turned out to be the English language (p. [i]). The only other consistent predictor of future circulation that has been identified to date is past circulation (Wortman, 1989, p. 109-110).

Only a limited number of studies have attempted to evaluate the utility of book reviews in the selection process. Stubbs and Broadus, for example, compared the number of books listed in Books for College Libraries with the Kirkus Service (a reviewing source primarily for public libraries). They found that 450 titles, or 33.7 percent of the adult nonfiction reviewed in this service appeared in Books for College Libraries and thus concluded that "the service is quite relevant to academic libraries" (1969, p. 204).

In his review of the literature on the role of book reviews in librarianship, Blake (1989) cited the above research as the sole example of a study of the usefulness of a book review source designed for one type of library (public) to the selection process of another type of library (academic). He then suggested:

The wonder is that other reviewing media, Booklist and Library Journal, for example, have not been investigated to assess their capability in assisting academic libraries in the selection process. Such an examination might emulate Tisdell's tactic of comparing the number of actual titles purchased by a library with

titles reviewed in one or both of these reviewing media rather than using Books for College Libraries or a similar tool as the standard of measure. (1989, p. 6) The question that must be asked here is, why not go a step farther and use recorded circulation as one standard of measure?

Despite the lack of research and evidence that books selected based upon their reviews are successful acquisitions, most academic librarians continue to place heavy emphasis on the use of book reviews in their selection practices. Elizabeth Futas reported in Library Acquisition Policies and Procedures (1984) that 87 percent of the academic libraries she first surveyed made common use of reviewing sources in the selection of materials while a second survey, six years later, found that 97 percent of the respondents reported using reviewing sources (Futas, 1984, p. xx).

When Futas first asked academic librarians to rank the major selection tools used in their libraries in order of preference, 136 mentioned Choice, with 103 picking it first; Library Journal was noted 96 times; Publishers Weekly, 40 times; and Booklist, 39 times (Futas, 1977, p. xxiv). The second survey six years later found these same reviewing sources still in heavy use, with Choice still first in preference, Library Journal next, followed by the New York

Times Book Review, Publishers Weekly, and Booklist (Futas, 1984, p.xxi).

Statement of the Problem

The problem of this study concerned the relationship of book reviews and book review journals to the circulation of books in an academic library.

Purpose of the Study

The purpose of this study was to determine if there are significant relationships between books which have been reviewed or not reviewed, the number of reviews per book, and the subsequent circulation histories of the books in an academic library. Further, this study examined the influence on circulation of book review sources intended primarily for the use of the library profession in the selection of materials and those professional and/or scholarly sources which are more likely to be read by faculty. This study sorted from the sample five subject disciplines (i.e., biology, business, education, history, and mathematics) as identified by their Library of Congress classifications in order to study the relationship of books in these general subject areas to their book reviews or lack thereof, the sources of the reviews and their subsequent cumulative circulation histories. Because book reviews are generally considered especially important for the field of literature, the entire sample was separated into literature

and non-literature so that the effects of book reviews on these two groups could also be studied. Finally, this study took a first step to define a successful acquisition in terms of circulation rate.

Significance of the Study

If significant patterns or relationships exist between the circulation histories of books, their reviews or lack thereof, the sources of their reviews, and their subject contents, then these patterns could be better utilized than they currently are in the selection of books in academic libraries. It is further possible that some review sources may produce better results in terms of the circulation success of individual books or classes of books than other sources. If these relationships exist, it is important that librarians learn to identify which combinations of selection sources result in selections with the greatest potential for circulation success at individual institutions. Conversely, if no relationships are found, then perhaps some of the very foundations of academic library collection development theory need to be re-examined.

As reported, librarians do spend a considerable amount of time using book reviews in the selection process. However, the research to date seems to indicate that highly recommended titles selected from reviewing sources and other aids have not experienced high circulation. If books which have been reviewed experience no significantly greater

cumulative circulation than books which have not been reviewed, then the time and money spent in using book reviews in the selection process must be questioned.

Finally, if the use of book reviews in selection does not make a significant contribution to the potential circulation of a book, then their use in the selection process needlessly delays the purchase of a title. Some book reviews do not appear until several months or more after a book is published while some books are never reviewed. In either case reliance upon book reviews as a selection aid would reduce the length of time a book could be made available to library users and increase the likelihood that the book will go out of print before a library attempts to purchase it.

Restated, the significance of this research is its potential to find factors--book reviews or the lack thereof and sources of book reviews--that have a significant correlation to the circulation success of books purchased by academic libraries. If such a correlation can be found, then librarians can improve upon current selection models. If no correlations exist, then librarians should begin more rigorous investigations into why library users select the materials that they do.

Definition of Terms

The term use of library materials opens up the possibility for extended debate on the exact meaning of the

word. What is use? Does it imply that a book has been read? Does it include the action of an individual who plucks a book off the shelf, thumbs through it, and then puts it back down? This topic has been the subject of much debate and is, in itself, a very worthy area of research. However, for the purposes of this research, use will be defined as the act of "charging-out" a title at a library's circulation point so that the item can be removed from the library (McGrath, 1980, p. 379).

The term circulation will also refer to the charging-out of a title so that it may be removed from the library and the term usage pattern will refer to identifiable configurations in the circulation of books. Circulation history will be used interchangeably with cumulative circulation, and will refer to the cumulative number of recorded external circulations of an item or items. Circulation success, for this investigation, will refer to a title that has circulated enough times to be considered cost-effective (i.e., to have circulated enough times to be more economical to own than to borrow). However, there is no industry-wide agreed upon number of circulations which constitutes circulation success and few reports by libraries of the average number of recorded circulations per title per defined time periods. One of the few reports concerning use of materials as measured by circulation rates is a recent study at the University of Tennessee. These researchers

found that the average rate of circulation over an eight year period for 921,596 monographic titles in their collection was 2.65 circulations per item (Britten & Webster, 1992, p. 240).

Selection aides, selection tools, standard aides, recommended book lists, and reviewing media all refer to a group of works which are designed to help librarians select materials (books, journals, recordings, videocassettes, films, etc.) for libraries. These works include book reviewing journals such as Choice and Booklist, books such as Books for College Libraries (now in a 3rd ed.), and products such as Books in Print, available in book or CD-ROM format. Librarians also use other sources for the selection of materials such as book reviews which appear in scholarly journals or newspapers and specialized tools such as British Book News and SciTech Book News.

In this research, the terms books and monographs refer to single titles which are cataloged as stand alone units and which are not volumes in a series. New editions of previously issued works will be considered monographs.

Hypotheses

Following are the hypotheses to be tested for this study.

H1: The greater the number of reviews a book has received, the greater its circulation in a library.

H2: Books reviewed in the five major book reviewing journals used by librarians as selection tools (i.e., Booklist, Choice, Library Journal, New York Times Book Review, and Publishers Weekly) are more likely to circulate than books which have not been reviewed.

H3: Books which have been reviewed in specialized reviewing sources such as British Book News, and SciTech Book News are more likely to circulate than books which have not been reviewed.

H4: Books classified as literature which have been reviewed are no more likely to circulate than books classified as literature which have not been reviewed.

H5: Books classified as literature are no more likely to circulate if they have been reviewed than books classified in all other subject areas which have been reviewed.

H6: Books classified in the specific subject areas of biology, business, education, history, and mathematics are more likely to circulate if they have been reviewed in a scholarly reviewing source or reviewed in one of the major librarian's reviewing sources than if not reviewed at all.

Assumptions

A major assumption of this study is that external circulation is an important measure of the use of library materials that are in circulating collections. This topic has stimulated a great deal of debate in library literature.

Kent et al. (1979, p. 27) found a high correlation between books that circulated externally and books that were used in the library. Other researchers (Hardesty, 1988, p. 67; McGrath, 1971, p. 285) have found similar results although a recent study by Selth, Koller, and Briscoe (1992) found that "30.7 percent of the monographs and 25.8 percent of the serial volumes had one kind of use but not the other" (p. 199).

Another assumption of this research is that present use is an important indicator of immediate future use and an important predictor of more distant future use. All of the empirical research to date supports this position. However, future use is poorly defined. Many librarians believe that they are building research collections for a distant future which cannot be predicted by current circulation. According to McGrath,

If librarians spend any part of precious funds for materials which may or may not be used 25 years from now, and when we have difficulty in determining which books may or may not be used today, the policy of building for the future must seriously be questioned.
(1980, p. 374)

McGrath further suggests,

Most wisely then, we should collect and preserve and store for immediate future use. The distant future will require its own needs. The alternative is to

preserve, store, and make available for nonuse--an acceptable and nonsensical policy. Present, or predictable future use, therefore, is the only acceptable rationale for building the collection. (p. 376)

It is assumed that the books examined in this study were purchased primarily for immediate future use.

This study makes a number of assumptions about book reviews. The first major assumption is that book reviews are important tools for the selection of books intended primarily for immediate future use. The second major assumption is that librarians acquire favorably reviewed books for their collections in an effort to collect the best quality books possible.

Most book reviews appear the year that a book is published or the following year. For this study, only book reviews which were indexed by Book Review Index (BRI) in the year of the publication of the book, or the year immediately following the book's publication, were included. No effort was made to locate all reviews for each book although it is likely that additional reviews did exist.

It is assumed that the editorial policies of Booklist, British Book News, Choice, Library Journal, New York Times Book Review, Publishers Weekly, and SciTech Book News, are distinct and remain relatively stable over time. An examination of these titles and their entries in such

reference works as Magazines for Libraries and Reviews and Reviewing: A Guide (Walford, 1986) indicate that this is so. Moreover, it is assumed that scholarly reviewing sources can be grouped together for the purposes of this investigation, much in the same fashion as Parker (1989) and Hargrave (1948) grouped them. It is also recognized that there is some overlap in the titles reviewed by all of these sources.

Finally, it is assumed that book reviews and book reviewing sources were used to select books at the Auraria Library in 1987. Further, it is assumed that the selectors at the Auraria Library primarily selected books which were favorably reviewed. Choice reviews in particular were heavily used during that time as a primary selection aid.

Limitations

This research examined the relationship of published book reviews to the circulation of books in one academic library. To generalize the results of this research to other libraries would require samples of books and their related circulation histories from a randomly selected group of academic libraries. This approach, while desirable, simply was not feasible for this study. It should be noted, however, that Fussler found "considerable similarity in reading interests of scholars at different institutions. For low use titles held by a pair of libraries, past use at one institution predicts almost as well for the future at

another institution as it does for the original institution" (1969, p. 66).

McGrath (1980) asserts that in regard to academic libraries, "a significant relationship in one library is a strong argument for hypothesizing a significant relationship in another library" (p. 387). He further suggests that academic libraries share many commonalities--they have extensive collections of materials, have librarians and paraprofessionals on the staff, respond to the needs of wide-ranging curriculums, and support faculties engaged in teaching and research. Therefore, if significant relationships are found in one academic library, "it behooves others to replicate the research or to test its generalizability, or to accept it" (p. 387).

This study did not take into consideration whether or not the reviewed books received positive or negative reviews. However, published studies on book reviews indicate that the majority of book reviews are positive (Busha, 1968; Serebnick, 1981; Tisdell, 1958) with Macleod (1981, p. 27) reporting 82 percent of Choice reviews and 74 percent of Library Journal reviews as positive while in only four percent of the reviews in either journal did the reviewer actually recommend an alternative title to the title being reviewed.

Finally, it should be noted that the Auraria Library's collection is heavily used. This could be a function of

having a well selected collection or the result of the fact that the institution is under-resourced for its user base.

CHAPTER II

REVIEW OF RELATED LITERATURE

The foundation for this research topic lies in the very large body of literature on circulation use studies which is grounded in bibliometric theory and in the much smaller body of research examining the role of reviews in book selection. While the research on book reviews was examined in depth, a briefer examination of the literature of bibliometrics and circulation studies was necessary.

Bibliometrics and Circulation Studies

While the application of quantitative methods to the study of patterns in the use of information dates back to the early 1900s, the term "bibliometrics" is fairly recent. Its first usage occurred only in 1969 in Pritchard's article "Statistical Bibliography or Bibliometrics?" in which he defined bibliometrics as the "application of mathematics and statistical methods to books and other media of communication" (p. 349). However, the most important early work for this research, was that of Samuel C. Bradford, who published his first paper on "scattering" in 1934 (Wallace, 1989, p. 10, 13). Bradford developed a model which describes the bibliometric principle of scatter. This model, called Bradford's Law,

is based on the frequently observed fact that the use of any collection of items is rarely distributed evenly: some items are heavily used, others receive moderate use, and some are used rarely or not at all. It has been found that the distribution patterns of the use of such items are quite regular and predictable. (Wallace, 1989, p.13)

The Bradford distribution was later seen as a special case of the strictly linear Zipf distribution which arises when,

items are chosen from a restricted population of possible items. Gradually some items emerge, on a "success breeds success" basis, as most popular and continue to be chosen at a greater rate. The total population of "used" items increases as well, since some items continue to be chosen for the first time. (Bulick, 1978, p. 216)

Now frequently called the Bradford-Zipf distribution, it fits the pattern of book use by library users because the possibly even greater use of popular items is restricted by the very fact that they are used (Bulick, 1978, p. 216).

Why this is so has not been thoroughly established. Derek de Solla Price (1976) has put forth the best theoretical explanation to date with his cumulative advantage theory which proposes that all sources of information begin with an equal chance of being used.

However, each time an individual information source is used, its likelihood of being used again increases while the potential use of an, as yet unused item, remains constant or decreases as the item ages (Burrell, 1985b, p. 100) or becomes obsolescent (Wallace, 1989, p. 19-20).

There are three important early works which began to apply these bibliometric laws to library collections on a practical basis, laying the foundation for the serious study of pattern in the use of library books. The first major work to discuss in detail the theory of statistical applications in determining patterns in the use of library books was Library Effectiveness: A System Approach (1968) by P. M. Morse. Although Morse conducted a number of experiments on the MIT Library, his primary purpose was to demonstrate the possibilities of statistical analysis when applied to library functions.

Fussler and Simon (1969) conducted the first major study of book use in a library in 1961. Its purpose was to determine if any kind of statistical procedure would predict with reasonable accuracy "the frequencies with which groups of books with defined characteristics are likely to be used in a research library" (p. 5). They found that the only reliable indicator of future use was previous use (p. 15). They also theorized that books which have received no use over time have very little chance of ever being used (p. 144).

The University of Pittsburgh study or Kent study (frequently referred to by either name in library literature), examined the external patron circulation at the Hillman Library for the period between October 1968 and the end of 1975. Major findings of interest to the present research were "...that any given book purchased had only slightly better than one chance in two of ever being borrowed" and that if "...a book did not circulate within the first six years of ownership, the prospects of its ever being borrowed were reduced to one chance in fifty" (1979, p. 10).

When first released, the Kent study raised a furor among a number of librarians and faculty. The Journal of Academic Librarianship (May 1979) published a series of critical papers which challenged the conclusions of the University of Pittsburgh study (Borkowski, C. & MacLeod, M. J., 1979; Schad, 1979; Voigt, M. J., 1979). However, as the results of subsequent research continue to support the basic findings of Kent et al., librarians have come to accept the fact that many of the books which are bought for academic libraries are never used.

Building on Morse's work, R. W. Trueswell, an industrial engineer from the field of operations research, published articles in 1965 and 1969, which demonstrated that from 20 percent to 40 percent of a library's collection meets 80 to 99 percent of its circulation needs. In

discussing the significance of this type of research, Trueswell wrote, "It should be noted, for example, that the research results describe user behavior after the fact but say nothing about the question of what should be purchased" (1979, p. 69).

More recently, McGrath has written that, "in collection development research, our task is to predict which books will circulate and how often, which subjects will circulate, percentages of time a person or group obtains the book it seeks..., and so on." He further stated,

We want to predict from the things we can observe and measure--the number of students, faculty, or other clientele, number of credit hours, characteristics of the book or subject, sociological characteristics, demographic characteristics, and so on. The better these things explain circulation, the better we can build our collections. (1980, p. 388-389)

McGrath's studies have focused upon the relationships between circulation of monographs and observable characteristics such as academic subjects and majors (1976-77, 1978, 1988).

Hardesty essentially duplicated the 1978 University of Pittsburgh study at DePauw University, Greencastle, Indiana (1981) and at Eckerd College, St. Petersburg, Florida (1988). In both cases he found that "a relatively small number of books received considerable recorded circulation

and a relatively large number of books received little or no circulation" (1988, p. 64-67). Furthermore, he found that the circulation patterns for both institutions fit Trueswell's 80/20 rule (1969) remarkably well (1988, p. 67). In both studies, Hardesty speculated on the cause of this lack of use of materials and looked at the possibility that it might relate to the selectors--faculty versus librarians. However, he felt that, "further examination of the rationale used in selecting library books should provide helpful guidance in obtaining books that will be used" (1981, p. 278).

A very recent circulation study by Britten and Webster took an in-depth look at highly circulated titles at the University of Tennessee (1992). This study found that specific subjects (defined by Library of Congress subject headings) had very high levels of circulation and that in many cases, books on these subjects were under represented in the collection.

There are many other bibliometric studies of circulation use. These studies have focused on a variety of topics ranging from the prediction of which materials can be removed to remote storage with the least inconvenience to users (Burrell, 1985b, 1986, 1987) and optimal length for circulation loan periods (Buckland, 1975; Burrell, 1980, 1988, 1990) to whether or not libraries should be centralized or decentralized (McGrath, 1986). Although

these are only marginally related to the topic of the present research, they do support the concept that patterns in the use of books or other information sources exist and can be identified and used.

Literature of Book Review Research

The literature of book reviews can be grouped into two general categories, the book review in the scholarly communication process and the research concerning book reviews. The first category contains those works which discuss the purpose and value of the book review in the scholarly communication process. This category probably has more material as well as greater historical depth than the second category. However, it is the research concerning book reviews, especially their relationship to book selection and usage, upon which this portion of the literature review will primarily focus.

Much of the pre-1970's library literature on book reviews dealt with the critical evaluation and content of reviews, their use in book selection, the adequacy of the book reviews appearing in certain periodicals in the selection of books on specified topics, or library staff reviewing of books. An example of this approach, Reviews in Library Book Selection, (Merritt, 1958) was described by Maurice Tauber as an effort, "to consider objectively the status of book reviewing in the United States, particularly

as it relates to the development of library collections" (p. vii).

Hargrave's comparison of the quality of reviews in scholarly periodicals in the social sciences to reviews of social science books in general periodicals found, "the standards used by the reviewers are similar in the two types of reviewing media..." (1948, p. 216). Goldhor compared a number of books which had received three or more favorable reviews, one or two reviews, and no reviews with their recorded circulation in a public library. He found that the books receiving the most reviews did not circulate significantly more than books receiving no reviews-- therefore supporting the need for a library to select only the best books for the collection since the patron was unlikely to select from the best available materials (1959, p. 255).

In 1975, Young examined the state of scholarly book reviewing in the United States from several aspects. He noted that little was known "about the impact of book reviews on scholarship" (p. 174) and he suggested that future research should explore the relationship between "quantitative/qualitative review characteristics and library circulation patterns." (p. 181).

Geyer's 1977 dissertation examined not only the success of faculty selectors versus librarian selectors at a community college library, but also examined the success of

the six selection media, Booklist, Choice, Library Journal, Opening Day Collection, Publisher's Weekly, and Wilson Library Bulletin measured by the circulation of titles selected from these sources. He found no significant difference between the success of books measured by circulation and who selected them. He did find, however, that books selected from Booklist and Library Journal circulated more than books selected from Choice or Publisher's Weekly (63).

Bennion took a sample of 600 titles listed in Books for College Libraries, Opening Day Collection, and Choice and compared them with the holdings of three undergraduate libraries. He found very few of the titles from his sample in the holdings of these libraries and concluded that they made very little use of these particular tools, which have been identified primarily as selection aids for college libraries (1978).

Noting that "...objective evaluation of book review journals has been relatively neglected" (1979, p. 149), Ream examined Booklist, Choice, Library Journal, and the New York Times Book Review for factors such as the number of adult, juvenile, and young adult books reviewed, and the percentage of "Notable Books" reviewed. By weighting these factors based upon the needs of the individual library, the librarian would then have better understanding of "the role

of these journals in their libraries' book selection process" (p. 153).

The Macleod study (1981) is a thorough investigation of the way in which books are selected for review in Library Journal and Choice and an examination of the quality of the reviews in each journal. She found that librarians reviewed more of the books in Library Journal while college teachers reviewed more of the titles in Choice. She found little qualitative difference in the reviews of the two journals; the real decisions were made by the journal editors in their choice of which books to select for reviewing.

Discussing book reviews from the viewpoint of an academic psychologist, Furnham (1986) argued that books are rarely evaluated on the basis of "specific, objective agreed-upon criteria" (p. 34). He suggested that while the principle of using book reviews in the selection process is valid, in reality book reviews are subject to biases, errors, and are seldom checked for reliability (p. 40, 43).

Schmitt and Saunders (1983) examined the "strength of a reviewer's recommendation and the subsequent use of that title in a large university library" (p. 375). These researchers found that while 41 percent of the recommended Choice titles circulated several times in two years, "a book's critical acclaim is not as fully reflected in its frequency of circulation as a library selector might wish" (p. 378). In a related study, Saunders (1983) found that up

to 70 percent of a sample of high-circulation titles were not even reviewed in Choice, suggesting the need for further research on how to select titles which would be used.

Parker (1989) examined the role of scholarly book reviews in the selection of books and concluded that while these reviews were not written for the use of librarians in the selection of books, scholars would expect libraries to have the titles reviewed in scholarly sources.

Fox (1990) compared the "extent to which book titles reviewed by Choice coincide with what is reviewed by an individual academic discipline in its own review journal" (p. 135). She concluded that "Choice and sociology's leading review journal are not in strong agreement as to the most important new books in the discipline, the subject matter of books of interest to the sociological community, or the boundaries of the discipline itself" (p. 150).

The validity of Choice's annual list of "Outstanding Academic Books" was the topic of Leavy's recent research (1992). He found that the "outstanding" titles were not reviewed more favorably in other sources than a random sample of recommended Choice titles not on the "outstanding" list. He concluded that "reliance on Choice or any single book notice service may cause selectors to miss many favorably received works of interest and importance to faculty members" (p. 85). He questioned what is and should be the role of reviews in the book selection process.

Erickson (1992) described the major role that Choice reviews played in the cooperative collection development project in the Tri-College University Consortium libraries at Moorhead, Minnesota, and Fargo, North Dakota. No justification was given for the selection of Choice for this project except the goal of the project was to identify titles important for mutual curricular needs but believed to "have a low potential for circulation" (p. 46).

CHAPTER III

METHODOLOGY

The Research Setting

The Auraria Library, Denver, Colorado provided the source of data for this investigation. This library is somewhat unique in the United States in that it serves three academic institutions: the Community College of Denver, Metropolitan State College of Denver, and the University of Colorado at Denver with which it is affiliated administratively. These three institutions have shared the Auraria Higher Education Center campus and Auraria Library in downtown Denver since 1976. The Library serves a combined enrollment which exceeds 30,000 individuals and ranges from students engaged in doctoral programs to those in technical and remedial programs. Faculty members at all three institutions frequently refer to these students as much more serious than students found on more traditional campuses.

The largest of the three academic institutions, Metropolitan State College of Denver (MSCD), is one of the largest public, four-year urban colleges in the United States, with a student body of approximately 17,000 students. Students can earn the bachelor of arts or bachelor of science degrees in more than 55 areas including

business, human services, education, liberal arts, professional studies, science, engineering technology and mathematics or pursue individualized career plans. MSCD has 360 full-time faculty, 80 percent of whom have achieved the highest academic degree attainable in their fields. Excellence in teaching is the primary focus of this faculty, rather than research (MSCD, Catalog, 1991-1993, p. 7).

Students at MSCD include both traditional eighteen-year-olds as well as older students returning to complete degrees or update skills. According to the "MSCD Census Spring 1991 and 1992 Student Profile Summary", the average age of MSCD students, spring 1992 was 27.9 years, with age group 20 - 24 the largest single category at 6420 students. Age group 25 - 29 had 3,152 students, while all other age groups had under two thousand students each. Of the total student body, 52.5 percent were female, 47.4 percent male. Over 77 percent of the students were white, with Hispanic students making up the largest ethnic group at almost 9 percent. Less than 3 percent of all MSCD students were non-residents, and 55.7 percent were full-time students taking 12 hours or more.

The University of Colorado at Denver (CU-Denver) follows in size with over 12,000 students. According to the University of Colorado at Denver Catalog, 1992-1993, undergraduate students can earn degrees in over 40 different fields leading to the baccalaureate degree in the arts,

sciences, humanities, business, engineering, and music while graduate programs are offered in over 60 programs. The doctorate is available in public affairs, applied mathematics, and educational administration as well as other programs in cooperation with CU-Boulder. CU-Denver has about 360 regular, full-time faculty who engage in research and creative activities as well as teaching (p. 7-8).

According to statistics for the fall 1991 semester, over 70 percent of the CU-Denver student body were enrolled at the upper division or graduate level, contributing to the average student age of 30. As with MSCD, the largest single age group was that of 20 - 24 with 2,837 students, closely followed by the 25 - 29 age group with 2,395 students. The student body was 52 percent female and 48 percent male. The majority of the students were white (85 percent) with Asian and Hispanic students each at five and six percent respectively. Three percent of the student body were non-residents. Approximately 56 percent attended classes part time (University of Colorado at Denver, Institutional Facts and Characteristics, Fall 1991).

As the smallest of the three academic institutions on the Auraria Campus, the Community College of Denver (CCD) provides associate degrees and transfer courses for students who plan to pursue baccalaureate degrees and certificate programs in many occupational areas. It also provides remedial instruction, continuing education, community

services, and GED preparation (Community College of Denver, Catalog, 1991-1992, p. 1).

According to the "Auraria Facts, April 1992" the CCD fall 1991 student body consisted of 5,415 students, 60 percent of which were female and 40 percent male, with an average age of 28.4. All students were residents of Colorado while 32.8 percent were full-time students.

To meet the needs of these three diverse institutions, which combined have the largest campus of higher education in Colorado, the Auraria Library provides a collection of nearly 500,000 monographs, 2600 serial subscriptions, over 360,000 government documents and approximately 25,000 audio-visual and microformat materials. The collection is not considered adequate to meet the needs of the University of Colorado at Denver graduate students, however it is adequate for most undergraduate programs at the University of Colorado at Denver and Metropolitan State College of Denver as well as for the programs of the Community College of Denver (Yang, 1990, p. 45).

Collection development has followed at least two different models in the past several years. The current model, in place since fall 1991, utilizes five full-time bibliographers assigned to science and engineering, humanities, social science, professional studies, and architecture and fine arts. These bibliographers work with faculty from all three institutions to identify collection

needs and select materials. Previously, all of the public service librarians were responsible for collection development, reference, and bibliographic instruction in specified subject areas as well as other duties. Frequently referred to as the "liaison or matrix model", it was very unpopular with the librarians and was replaced by the current model which is a more traditional approach to librarianship.

For this research, it is important to note that regardless of the method, collection development at the Auraria Library is a librarian-directed activity and the use of book reviews and standard reviewing sources is common. The librarians work with faculty to identify needs, however, the final decisions regarding which materials to add to the collection rest with the librarians.

Finally, it must be noted that the Auraria Library is heavily used. In 1990-1991, just short of one million patrons used the facilities, for a total of 323,498 out-of-building or external circulation transactions to the campus community and 34,585 external circulations to non-campus users. CU-Denver faculty and students were the heaviest users with 159,389 external circulation transactions and MSCD users were next with 150,074 transactions. CCD and other campus administrators accounted for 14,035 external circulation transactions.

Research Design

This research examined monographs published in 1987 which were acquired by the Auraria Library in 1987 and their subsequent external circulation histories through the end of 1991. These circulation histories were correlated with the existence or non-existence of reviews for these monographs and selected sources of these reviews.

The time period of 1987 through the end of 1991 was selected for two reasons. First, the Auraria Library had begun to use the circulation module of the CARL automated library system by 1987, so the cumulative external circulation histories of all books were available in an automated database. Second, as reported by Kent et al. (1979), the majority of books which will ever circulate will have been brought into use by the third or fourth year after acquisition and declines rapidly thereafter (p. 24). A book which has not circulated at least once by its sixth year of ownership, has only one chance in fifty of ever being borrowed (p. 10).

Selection of the Sample

The Auraria Library's automated library system vendor, CARL Systems Inc. (CSI), produced a list, alphabetical by author, of all books published and acquired by the Auraria Library in 1987, along with each book's title, unique identification code, cumulative circulation history, and Library of Congress classification number. This list, which

constituted the population for this study, contained approximately 7,450 titles. It was decided that a ten percent systematic random sample would be adequate for the study.

The initial sample title was determined by randomly selecting a number from a random number table and counting from the beginning of the list to that number. It is assumed that an alphabetical list of books by author, acquired in 1987, does not contain any periodic tendency by virtue of alphabetical order. In compiling the sample, it was found that the population included some United States and Colorado government documents which should have been eliminated from the population. When one of these items appeared as the tenth item, it was skipped and the next item was selected for the sample. The resulting sample contained 708 titles.

Data Collection

The sample titles were searched against Book Review Index 1987 and 1988 annual volumes. Book Review Index "is a master key to the locations of reviews that appear in more than 460 publications ... such as Choice, Booklist, and Publishers Weekly;...and scholarly and literary journals such as American Notes & Queries, and Sewanee Review" (1987, p. 7). Entries in Book Review Index are alphabetical by author's or editor's name and include title, and an abbreviation identifying the source of the review. All

review source abbreviations for each title found were copied from the entries onto the CARL printout.

Of special interest were those books reviewed in the five reviewing sources commonly used by librarians (i.e., Booklist (BL), Choice (CH), Library Journal (LJ), New York Times Book Review (NYT), and Publishers Weekly (PW), as reported by Futas). Over the years a number of specialized reviewing tools have also been developed for the use of book selectors such as British Book News (BBN) and SciTech Book News (SCT). This research also looked at these sources as examples of specialized tools to determine if the books that they review are correlated with successful circulation histories.

Procedure for Analysis of Data

The resulting data were entered into a database on a personal computer for initial analysis. Each database record contained the following fields:

Author's last name (if applicable):

Brief title:

Brief Library of Congress Classification:

Number of Circulations:

BL: (Y--if reviewed in, N--if not reviewed in)

BBN: (Y--if reviewed in, N--if not reviewed in)

CH: (Y--if reviewed in, N--if not reviewed in)

LJ: (Y--if reviewed in, N--if not reviewed in)

NYT: (Y--if reviewed in, N--if not reviewed in)

PW: (Y--if reviewed in, N--if not reviewed in)

SCT: (Y--if reviewed in, N--if not reviewed in)

Total Number of Reviews:

Total Number of Scholarly Reviews:

Scholarly Reviewing Sources: (N--if none or BRI's
abbreviation for reviewing source)

The total number of reviews in both popular and scholarly journals was recorded. The total number of scholarly reviews and actual abbreviations for specific scholarly journals was recorded only for the subject areas selected for further analysis, that is, biology, business, education, history and mathematics. The determination of what constitutes a scholarly review source could easily be debated. The reviewing sources which were considered scholarly for the purposes of this study are listed in Appendix A.

The resulting database was manipulated to provide detailed descriptive statistics, to do a bibliometric analysis, chi-square, and to obtain the data necessary to do a simple regression analysis and a correlation analysis using the personal computer software Number Cruncher Statistical System, version 5.3 (1990).

Testing of Hypotheses

Descriptive statistics, correlation analysis, regression analysis, and a chi-square test for goodness of fit were used to analysis the data.

Reporting of Data

Findings were organized to provide responses to the purposes of the study, to compare the current findings to those of other researchers, and to address each of the hypotheses. Results are portrayed in tabular form to assist in the interpretation.

CHAPTER IV

ANALYSIS OF DATA

Librarians have made very little progress in defining successful book acquisitions in terms of circulation or in predicting which books will be successful prior to purchase. Because so few attempts have been made to use circulation data in this manner, this study includes a number of tables summarizing the finding's raw data and basic descriptive statistics. From Tables 1 and 2 it is interesting to note that 67 percent of the 708 titles in the study were reviewed at least once, while 33 percent were not reviewed. Eighty-eight percent of the entire sample circulated at least once, with only 12 percent or 86 books with no recorded external circulation.

The average book selected for the collection was reviewed 2.7 times and circulated 5.7 times. When the 87 books which had never circulated were removed from the sample, the average rate of circulation for the remaining items rose to 6.5. When books which had been reviewed and circulated were separated from the sample and examined, the average rate of circulation fell to 5.8, while the average circulation of books which had not been reviewed, was found to be 6.7 or almost one more circulation per item than reviewed books. Based upon this information, it might be

TABLE 1.--Descriptive analysis of books published and purchased in 1987, reviewed in 1987 or 1988, and their cumulative circulations through the end of 1991

| BOOKS | Totals | Circulations |
|-----------------------------|--------|--------------|
| Sample Size | 708 | 4050 |
| Circulated | 622 | 4050 |
| Not circulated | 86 | 0 |
| Reviewed | 473 | 2744 |
| Reviewed/Circulated | 428 | 2744 |
| Reviewed/Not circulated | 45 | 0 |
| Not reviewed | 235 | 1306 |
| Not reviewed/Circulated | 194 | 1306 |
| Not reviewed/Not circulated | 41 | 0 |
| REVIEWS | | |
| Total reviews | 1913 | 2744 |
| Mean reviews per book | 2.7 | |

TABLE 2.--Mean number of circulations per category

| | |
|-----------------------------------|-----|
| All books in sample | 5.7 |
| Circulated books | 6.5 |
| Reviewed books | 5.8 |
| Reviewed & Circulated | 5.8 |
| Not reviewed | 6.7 |
| Not reviewed & Circulated | 6.7 |
| Reviewed in Scholarly source (SS) | 4.5 |
| Reviewed SS & Circulated | 4.5 |

speculated that previous circulation is a more important gauge of future circulation than whether or not a book has been reviewed.

One of the stated purposes of this study was to attempt to determine exactly what constitutes a successful book acquisition measured in terms of circulation. One common way of looking at this is to determine which is the most cost effective--an outright purchase of a book or the borrowing of a book upon demand. Based upon this model, the definition of a successful acquisition is one that is more economical to own than to borrow.

Preliminary reports on a cost study of interlibrary loan (ILL) practices produced by the Association of Research Libraries in 1992 indicated that the cost of borrowing an item is \$18.00 for the borrowing library and another \$11.00 for the lending library, for a total transaction cost of \$29.00 (Baker and Jackson, 1992, p. 3). According to the 1992 Bowker Annual: Library and Book Trade Almanac, the average cost of a North American academic book is \$46.53, although this varies widely from subject to subject; that is, the average cost of an education title is \$34.39, business \$42.90, history \$36.25, mathematics \$49.33, and zoology \$79.91 (p. 486-487). Considering only the cost of borrowing an item (i.e., not taking into account the cost of the ILL transaction to the lending library, the value of customer satisfaction when the item is owned and does not

have to be borrowed via the interlibrary loan process, or the other costs associated with ownership), the threshold of a cost-effective acquisition can be defined with the equation, the successful circulation rate equals the cost of a book divided by the cost of borrowing a book. In other words, if the cost of an education title is \$36.00, then it must circulate at least two times before it is cost-effective to own. For subjects such as chemistry, physics, and zoology, the average cost of a title exceeds \$70.00, requiring a much higher rate of circulation before such an acquisition could be considered a success (Bowker Annual, 1992, p. 486-487).

Another approach involves the use of a cumulative frequency distribution and the application of Trueswell's 80/20 rule (1969). Table 3 is a cumulative frequency distribution of the circulations of the 708 titles in the sample. Eighty percent of the recorded circulation of these titles equals 3,240 circulations. From Table 3, the cumulative circulation frequency that is closest to 80 percent is 3,327 circulations (or 82 percent of the total circulation) and represents books which have circulated five or more times each. In this case, the titles which have circulated five or more times represent a total of 295 books or 42 percent of the sample (a figure consistent with the findings of Burrell, 1985a; Hardesty, 1981 & 1988; Trueswell, 1969). A manipulation of the database revealed

TABLE 3.--Cumulative circulation frequencies of 708 books
over 5 years

| No. of Books | No. of Circulations | Total Circulations | Cumulative Circulation |
|--------------|---------------------|--------------------|------------------------|
| 1 | 42 | 42 | 42 |
| 1 | 40 | 40 | 82 |
| 1 | 37 | 37 | 119 |
| 1 | 31 | 31 | 150 |
| 1 | 30 | 30 | 180 |
| 1 | 29 | 29 | 209 |
| 2 | 28 | 56 | 265 |
| 1 | 27 | 27 | 292 |
| 1 | 26 | 26 | 318 |
| 5 | 25 | 125 | 443 |
| 2 | 24 | 48 | 491 |
| 2 | 23 | 46 | 537 |
| 4 | 22 | 88 | 625 |
| 3 | 21 | 63 | 688 |
| 3 | 20 | 60 | 748 |
| 7 | 19 | 133 | 881 |
| 7 | 18 | 126 | 1007 |
| 7 | 17 | 119 | 1126 |
| 6 | 16 | 96 | 1222 |
| 6 | 15 | 90 | 1312 |
| 11 | 14 | 154 | 1466 |
| 23 | 13 | 299 | 1765 |
| 18 | 12 | 216 | 1981 |
| 14 | 11 | 154 | 2135 |
| 24 | 10 | 240 | 2375 |
| 21 | 9 | 189 | 2564 |
| 20 | 8 | 160 | 2724 |
| 29 | 7 | 203 | 2927 |
| 35 | 6 | 210 | 3137 |
| 38 | 5 | 190 | 3327 |
| 55 | 4 | 220 | 3547 |
| 70 | 3 | 210 | 3757 |
| 91 | 2 | 182 | 3939 |
| 111 | 1 | 111 | 4050 |
| <u>86</u> | 0 | <u>0</u> | |
| 708 | | 4050 | |

that the titles with five or more circulations each,
received an average of 2.8 reviews per book. The remaining

413 books, with an average of four or less circulations, represented 58 percent of the sample and received an average of 2.6 reviews each. Based upon these descriptive statistics, it appears that the number of reviews an item receives has little impact upon its circulation success. Additional descriptive information concerning the books reviewed in the seven selection sources is given in Table 4.

TABLE 4.--Circulation of books reviewed in Booklist (BL), British Book News (BBN), Choice (CH), Library Journal (LJ), New York Times Book Review (NYT), Publishers Weekly (PW), and SciTech Book News (SCT), n = 708

| Reviewing Sources | BL | BBN | CH | LJ | NYT | PW | SCT |
|--------------------------------------|-----|-----|------|-----|-----|-----|-----|
| Books | | | | | | | |
| Reviewed | 74 | 57 | 280 | 116 | 65 | 67 | 52 |
| Circulated | 63 | 48 | 253 | 105 | 57 | 59 | 50 |
| Not Circulated | 11 | 9 | 27 | 11 | 8 | 8 | 2 |
| Circulations | 336 | 282 | 1616 | 719 | 351 | 344 | 414 |
| Reviews | 704 | 237 | 1212 | 972 | 767 | 725 | 134 |
| Percent of Sample reviewed in Source | 10 | 8 | 40 | 16 | 9 | 9 | 7 |
| Mean Circulations | 4.5 | 4.9 | 5.8 | 6.2 | 5.4 | 5.1 | 8.0 |

Hypotheses One, Two and Three

A Pearson product-moment correlation was done to test hypotheses one, two and three to determine if there is any correlation between a book's cumulative circulation and the number of reviews it received, the fact that a book has been reviewed in the five book reviewing sources commonly used by librarians, or reviewed in the two specialized reviewing sources selected for this study. The results, shown in Table 5, gives both the coefficient of correlation (\underline{r}) and the more conservative coefficient of determination (\underline{r}^2). A correlation coefficient of less than .20 is generally considered insignificant.

An examination of Table 5 reveals that there are no significant relationships between the cumulative circulations of the books in this sample and the fact that they were reviewed in any of the seven reviewing sources tested. Neither is there a significant relationship between the number of reviews that a book has received and the number of times it has circulated. Thus it is possible to reject the first three hypotheses which state that books are more likely to circulate: 1) the more they have been reviewed, 2) if they have been reviewed in one of the five major book reviewing sources used by librarians, and 3) if they have been reviewed in the two specialized reviewing sources examined.

TABLE 5.--Pearson product-moment correlation between the number of circulations, the source of reviews, and total number of reviews, $n = 708$

| Review Source R = No. of Reviews | \underline{r} | \underline{r}^2 |
|-------------------------------------|-----------------|-------------------|
| Booklist, R = 74 | .063 | .0039 |
| British Book News, R = 57 | .037 | .0013 |
| Choice, R = 280 | .022 | .0005 |
| Library Journal, R = 116 | .035 | .0012 |
| New York Times, R = 65 | .015 | .0002 |
| Publisher's Weekly, R = 67 | .029 | .0002 |
| SciTech Book News, R = 52 | .10 | .01 |
| Total number of reviews, R = 473 | .019 | .0004 |

Hypotheses Four and Five

Hypothesis four states that books classified as literature which have been reviewed are no more likely to circulate than those which have not been reviewed. Hypothesis five states that books classified as literature are no more likely to circulate if they have been reviewed than books in all other subject areas which have been reviewed. Detailed statistical descriptions of these two groups are given in Tables 6 and 7. Table 6 shows the average number of circulations for books in Library of

Congress classification "P" (literature) versus all other books.

TABLE 6.--Circulation of literature books ("P" classifications) versus all other subjects

| BOOKS | Totals | Circulations | Mean Circulations |
|-----------------------------|--------|--------------|----------------------|
| LITERATURE "P" | 129 | 542 | 4.2 |
| Circulated | 111 | 542 | 4.8 |
| Not Circulated | 18 | 0 | |
| Reviewed/Circulated | 87 | 445 | 5.1 |
| Reviewed/Not Circulated | 17 | 0 | |
| Not reviewed/Circulated | 24 | 97 | 4.0 |
| Not reviewed/Not Circulated | 1 | 0 | |
| ALL OTHER SUBJECTS | 579 | 3960 | 6.8 |
| Circulated | 511 | 3960 | 7.7 |
| Not Circulated | 68 | 0 | |
| Reviewed/Circulated | 341 | 2299 | 6.7 |
| Reviewed/Not Circulated | 28 | 0 | |
| Not Reviewed/Circulated | 170 | 1209 | 7.1 |
| Not reviewed/Not Circulated | 40 | 0 | |

Literature books circulated only an average of 4.2 times each, compared to 6.8 times each for all other subjects. Only 14 percent of the literature books have never circulated and only 19 percent have not been reviewed.

Those books which have been reviewed circulated 5.1 times, compared to 4.0 times for those not reviewed. It is interesting that those literature books which have not circulated (19%) received, on the average, more than twice the number of reviews of those which have circulated.

Non-literature books circulated, on the average, 6.8 times each. Those which have been reviewed circulated less than those which have not been reviewed, and as shown in Table 7, those titles which have not circulated received more reviews than those which have circulated, however the difference of .3 reviews is small.

Table 7.--Reviews of literature books ("P" classifications) versus all other subjects

| REVIEWS | Totals | Mean Reviews |
|-------------------------|--------|--------------|
| LITERATURE | 487 | 3.8 |
| Reviewed/Circulated | 384 | 4.0 |
| Reviewed/Not Circulated | 139 | 8.2 |
| ALL OTHER SUBJECTS | 1429 | 2.5 |
| Reviewed/Circulated | 1311 | 3.8 |
| Reviewed/Not Circulated | 115 | 4.1 |

A chi-square statistical analysis was performed to test both hypotheses four and five. For hypothesis four, at the .05 level of significance with one degree of freedom, the

chi-square test gave a test value of 2.558 when the value of chi-square is equal to 3.841. This result is not significant and requires the acceptance of the hypothesis that books classified as literature which have been reviewed are no more likely to circulate than those which have not been reviewed. (See Appendix B for chi-square contingency Table 15.)

For hypothesis five, at the .05 level of significance with one degree of freedom, the chi-square test gave a test value of 5.76339 when the value of chi-square is equal to 3.841. This result is significant at the .05 level of significance, thus requiring rejection of the hypothesis that books classified as literature which are reviewed are no more likely to circulate than reviewed books in all other subject areas. An examination of the chi-square contingency table given in Table 16 (See Appendix B) leads to the interesting conclusion that reviewed non-literature books circulate less than expected while those which are not reviewed, circulate more than expected.

Hypothesis Six

Hypothesis six examines the relationship between scholarly book reviews and reviews from the five major librarian's reviewing sources to the cumulative circulation of books classified in the subject areas of biology, business, education, history and mathematics. The value of reviews appearing in scholarly journals for the selection of

materials for libraries is another source of debate. It is frequently assumed that these reviews are more likely to be prepared by scholars in the field than reviews appearing in the librarian's major reviewing sources and are thus very important for selecting materials for library collections (Parker, 1989).

For the purpose of testing the relationship between books which have been reviewed in scholarly reviewing sources and the number of times they circulate, it was necessary to limit the study of scholarly reviewing sources to a manageable group. This was done by selecting a group of subjects which have scholarly journals including book reviews. Because there was not a sufficient number of observations from any one scholarly reviewing source to study these sources independently, they were grouped as one for each of the five subject areas studied. The specific titles which constituted the scholarly reviewing sources for each of the subject areas are listed in Appendix A.

The total and average numbers of circulations and reviews for books in biology, business, education, history and mathematics are summarized in Table 8. For all of these subject areas except education, there are more reviews per book in the major librarian's reviewing sources than in the scholarly reviewing journals. In education, twice as many reviews appear in scholarly journals as appear in librarian's sources.

TABLE 8.--Circulation and reviews of books in Mathematics (Math), Biology, Business, Education (Educ), and History

| Totals | Biology | Business | Educ | History | Math |
|------------------------|---------|----------|------|---------|------|
| Books | 14 | 66 | 20 | 98 | 18 |
| Total Circ. | 59 | 386 | 128 | 432 | 65 |
| Circulated | 13 | 58 | 16 | 86 | 15 |
| Not Circulated | 1 | 8 | 4 | 12 | 3 |
| Reviews | 35 | 176 | 60 | 465 | 10 |
| Scholarly | 8 | 33 | 21 | 96 | 1 |
| Librarians' Sources | 19 | 60 | 11 | 147 | 9 |
| Mean Circulations | | | | | |
| All Books | 4.2 | 5.8 | 6.4 | 4.4 | 3.6 |
| Circulated Books | 4.5 | 6.7 | 8.0 | 5.0 | 4.3 |
| Mean Reviews | | | | | |
| All Reviews | 2.5 | 2.7 | 3.0 | 4.7 | .55 |
| Scholarly Reviews | .6 | .5 | 1.0 | 1.0 | .06 |
| Librarians' Sources | 1.4 | .9 | .5 | 1.5 | .5 |

Books which were analyzed for scholarly reviews resulted in a sample of 216 which are described in Table 9. An examination of this table shows that only 37 percent of

these books were reviewed in scholarly reviewing sources. However, of those reviewed in scholarly sources, 90 percent circulated an average of 4.5 times each.

TABLE 9.--Descriptive analysis of books reviewed in scholarly reviewing sources

| BOOKS | Totals | Circulations |
|-----------------------------------|--------|--------------|
| Sample Size | 216 | 1170 |
| Reviewed in Scholarly Source (SS) | 81 | 364 |
| Reviewed in SS/Circulated | 73 | 364 |
| Reviewed in SS/Not Circulated | 8 | 0 |
| Mean Circulations | | Mean |
| Reviewed in Scholarly Source | | 4.5 |
| Reviewed in SS/Circulated | | 4.5 |

To test hypothesis six, a simple regression analysis with one predictor variable was done for each of the five subject areas. The results of these regression analyses are shown in Tables 10-14. For all five subjects, the scholarly reviewing sources are grouped together and treated as one.

An examination of the data in the tables for biology, education and mathematics reveals, for the most part, that there are not adequate numbers of reviews for the books in these subjects to make valid judgements. In only one case

is the coefficient of determination (\underline{r}^2) somewhat significant at .25, indicating that there is some relationship between mathematics books reviewed in SciTech Book News and circulation. Looking at the less conservative coefficient of correlation (\underline{r}), there are a number of instances that indicate some significant correlations, but in each case that relationship is negative. In other words, biology books reviewed in scholarly journals, business books reviewed in scholarly journals and in Choice, and education books reviewed in scholarly journals and in Choice are more likely not to circulate than to circulate.

TABLE 10.--Correlation between circulation and source of reviews for biology books, $\underline{n} = 14$

| Review Source R = No. of Reviews | \underline{r} | \underline{r}^2 | \underline{p} | \underline{t} |
|-------------------------------------|-----------------|-------------------|-----------------|-----------------|
| Booklist, R = | 2.44 | .19 | .121 | .69 |
| British Book News, R = 1 | -.12 | .02 | .67 | -.43 |
| Choice, R = 7 | .13 | .02 | .66 | .46 |
| Library Journal, R = 1 | -.24 | .06 | .41 | -.85 |
| New York Times, R = 0 | | | | |
| Publisher's Weekly, R = 1 | -.24 | .06 | .41 | -.85 |
| SciTech Book News, R = 7 | .10 | .01 | .73 | -.35 |
| Scholarly reviews, R = 6 | -.26 | .07 | .39 | -.90 |

The business sample of 66 books (Table 11) and the history sample of 98 books (Table 13) had a satisfactory number of observations for each reviewing source, except

TABLE 11.--Correlation between circulation and source of reviews for business books, $n = 66$

| Review Source R = No. of Reviews | \underline{r} | \underline{r}^2 | \underline{p} | \underline{t} |
|-------------------------------------|-----------------|-------------------|-----------------|-----------------|
| Booklist, R=7 | .15 | .02 | .22 | 1.23 |
| British Book News, R=5 | -.11 | .01 | .37 | -.91 |
| Choice, R=22 | -.26 | .07 | .04 | -2.14 |
| Library Journal, R=9 | .25 | .06 | .042 | .07 |
| New York Times, R=6 | .14 | .02 | .261 | .14 |
| Publisher's Weekly, R=9 | .05 | .002 | .72 | .37 |
| SciTech Book News, R=2 | .05 | .002 | .71 | -.37 |
| Scholarly reviews, R=20 | -.24 | .059 | .05 | -2.01 |

SciTech Book News which obviously is not intended as a reviewing source for books classed in history or business although a few reviews of books in these subjects do occur in this source. For these two subject areas, there are no significant coefficients of determination (\underline{r}^2).

Examining the coefficient of correlation (\underline{r}), there is one moderately strong correlation in the history sample for those books reviewed in a scholarly source. For history books in general, there appears to be some weak, but positive correlations between circulation and several of the librarian's reviewing sources. It is also interesting to note that there is a weak, negative correlation between circulation and history books reviewed in British Book News.

For business books, there is also a weak, but positive, correlation between circulation and books reviewed in Library Journal and New York Times. As cited earlier, there is a much stronger, but negative correlation between circulation and business books reviewed in Choice.

TABLE 12.--Correlation between circulation and source of reviews for education books, $n = 20$

| Review Source R = No. of Reviews | \underline{r} | \underline{r}^2 | \underline{p} | \underline{t} |
|-------------------------------------|-----------------|-------------------|-----------------|-----------------|
| Booklist, R=1 | -.21 | .05 | .36 | -.93 |
| British Book News, R=1 | -.11 | .01 | .63 | -.49 |
| Choice, R=5 | -.19 | .03 | .43 | -.80 |
| Library Journal, R=3 | -.06 | .003 | .81 | -.24 |
| New York Times, R=1 | -.21 | .05 | .36 | -.93 |
| Publisher's Weekly, R=0 | | | | |
| SciTech Book News, R=0 | | | | |
| Scholarly reviews, R=5 | -.25 | .06 | .28 | -1.11 |

Based upon these results, hypothesis six, which states that books classified in the specific subject areas of biology, business, education, history, and mathematics are more likely to circulate if they have been reviewed in a scholarly reviewing source or a librarian's reviewing source than if not reviewed at all must be rejected. Although there are some weak correlations, none are significant. However, in three cases, the relationships are strong enough to suggest additional study; that is, Booklist and biology,

scholarly reviews and history, and SciTech Book News and mathematics.

TABLE 13.--Correlation between circulation and the source of reviews for history books, $n = 98$

| Review Source R = No. of Reviews | \underline{r} | \underline{r}^2 | \underline{p} | \underline{t} |
|-------------------------------------|-----------------|-------------------|-----------------|-----------------|
| Booklist, R=19 | .02 | .0004 | .84 | .20 |
| British Book News, R=10 | -.17 | .03 | .10 | -1.64 |
| Choice, R=54 | .16 | .03 | .111 | .63 |
| Library Journal, R=25 | .17 | .03 | .101 | .64 |
| New York Times, R=19 | .17 | .03 | .101 | .68 |
| Publisher's Weekly, R=19 | .03 | .001 | .75 | .32 |
| SciTech Book News, R=1 | .14 | .02 | .18 | 1.35 |
| Scholarly reviews, R=40 | .41 | .16 | .04 | .34 |

TABLE 14.--Correlation between circulation and the source of reviews for mathematics books, $n = 18$

| Review Source R = No. of Reviews | \underline{r} | \underline{r}^2 | \underline{p} | \underline{t} |
|-------------------------------------|-----------------|-------------------|-----------------|-----------------|
| Booklist, R=0 | | | | |
| British Book News, R=1 | -.08 | .007 | .74 | -.33 |
| Choice, R=4 | .27 | .07 | .281 | .12 |
| Library Journal, R=0 | | | | |
| New York Times, R=0 | | | | |
| Publisher's Weekly, R=0 | | | | |
| SciTech Book News, R=4 | .50 | .25 | .042 | .29 |
| Scholarly reviews, R=1 | .28 | .08 | .271 | .15 |

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

Summary

The primary purpose of this study was to determine if book reviews in general, are useful and significant indicators of the circulation potential of the books that are reviewed. In addition, specific book reviewing sources were also studied to determine if some sources are more useful than others in selecting books which will circulate. From these purposes, six hypotheses were developed and tested. A random sample of books published and purchased in 1987 was taken from the circulating book collection of the Auraria Library and utilized to test the six hypotheses using correlation analysis, regression analysis, and chi-square. Detailed descriptive statistics also allowed comparisons between the findings of this research and that of other researchers.

The results of the correlation analysis indicated that there were no significant relationships between the total number of reviews that a book receives and cumulative circulation, between books reviewed in major selection sources used by librarians and cumulative circulation or between books reviewed in specialized reviewing sources and cumulative circulation.

Regression analysis found little in the way of significant relationships between books in biology, business, education, history and mathematics and scholarly reviewing sources or reviewing sources frequently used by librarians. Using the conservative coefficient of determination (r^2), only the reviewing source, SciTech Book News showed some positive correlation with mathematics books. Additionally, chi-square tests found that reviewed books classified as literature were no more likely to circulate than literature books which had not been reviewed. However, reviewed literature books are more likely to circulate than reviewed books in all other subjects, but with the interesting twist that reviewed non-literature books circulate less than expected while those which are not reviewed, circulate more than expected.

Discussion

While not strictly generalizable to all other academic libraries, these findings basically confirm the positions and research that other writers have reported in the literature over the past forty or so years. Goldhor (1959) found that in a public library reviewed books did not circulate significantly more often than books with no reviews. Schmitt and Saunders (1983) found that at the Purdue General Library (West Lafayette, Indiana), critical acclaim is not reflected in frequency of circulation and

Saunders (1983) found that up to 70 percent of highly circulated titles were not reviewed in Choice.

Other researchers have looked at the relationship between scholarly reviewing sources and librarians' reviewing sources. Hargrave (1948) found that the standards used by the reviewers are similar. Macleod (1981) found little difference between book reviews in Library Journal and book reviews in Choice other than librarians are the primary reviewers of books appearing in Library Journal while college teachers review more of the titles in Choice. Furnham (1986, p. 42), a psychologist, suggested that "using books reviews as a selection tool is a dangerous business" for several reasons, among which is that "reviewers are apt to be over critical and show-off their wit, vocabulary, etc. rather than outlining the contents of the book" (p. 40). Parker (1989) concluded that reviews in scholarly journals are not written specifically for the use of librarians. Fox (1990) concluded that Choice and a leading scholarly reviewing source in sociology are not in agreement as to the most important books in the discipline.

Geyer (1977, 63) found that books selected from Booklist and Library Journal circulated significantly more than books selected from Choice or Publisher's Weekly at a community college library. In the present study the average number of circulations per reviewing source varied from

eight circulations if the item was reviewed in SciTech Book News to four and a half circulations if reviewed in Booklist. However there were no significant positive correlations between circulation and the reviewing sources. In some subject areas, specifically biology, mathematics and education, there may not be enough book reviews available to make any significant impact upon the selection process.

Unlike the mature collections of the University of Pittsburgh and the University of Chicago where Kent et al. (1979) and Fussler and Simon (1969) found, respectively, that approximately one-half of all books did not circulate within the first five years of ownership, 88 percent of the sample from the Auraria Library circulated at least once within the first five years of ownership, with an overall average of 5.7 circulations in the first five years.

There is no industry-wide standard by which to measure the number of circulations a book should obtain before it can be considered a successful purchase in terms of cumulative circulation. A study at the University of Tennessee found that the average circulation for that collection, over an eight year period, was 2.65 circulations per item (Britten & Webster, 1992, p. 240). Trueswell (1969) predicted that approximately 20 to 40 percent of a library's collection would satisfy 80 of the circulation needs. At the Auraria Library, 42 percent of the sample of books published and purchased in 1987 represented 82 percent

(3,327 circulations) of the total cumulative circulation of that group. The cumulative circulation frequencies of this group of books (representing 82 percent of the circulation) have circulated an average of five or more times each. Since it has been well documented that the circulation rate of titles begins to decrease after the first five or six years of ownership, perhaps it is the characteristics of these successful, five year old books which should be studied in more detail.

The final findings of this study concern books classified as literature as opposed to all other subjects. Although no research was found to support this perception, there may be a common belief based upon such texts as Haines' Living With Books and traditional teaching, that librarians would expect reviewed literature books to circulate more than literature books which were not reviewed, and that they would expect that reviewed books in all other subjects would circulate more than those which were not reviewed.

Reviewed literature books do circulate more than literature books which have not been reviewed, and reviewed literature books circulate more than reviewed books of all other subjects. What is more interesting, however, is the fact that the reviewed literature books which have not circulated, received twice the number of reviews of those which have circulated. And while reviewed literature books

circulate more than non-literature books which have been reviewed, non-literature books which have not been reviewed experience a higher than expected rate of circulation while those that have been reviewed, receive a lower than expected rate of circulation.

Conclusions

Based upon the findings of this study, the following conclusions are warranted.

1. Whether or not a book has been reviewed or reviewed multiple times, will have little bearing upon its potential for successfully circulating at the Auraria Library.

2. There is basis to question some of the assumptions that librarians and others have long held in regard to the value of reviews.

Recommendations

The results of this study suggest a number of recommendations which could lead to improved models of book selection.

1. Librarians, who practice book selection based largely upon the purchase of new books which have received good reviews, should replicate this research to see if their results duplicate the results of this research. They should pay special attention to the book reviewing sources they use to determine if any one or more sources are more valuable

than other sources in reviewing titles which have successful circulation histories.

2. Researchers should continue searching for factors or characteristics which might influence the successful circulation of individual titles or groups of titles. It could be inferred from this research that this investigation should focus much more vigorously than ever before on the end user as well as on the characteristics of books which are considered successful purchases.

3. A definitive definition of just what a successful acquisition is or even what a cost-effective acquisition is, must also be formulated. This becomes even more important as the famine years in higher education continue into yet another decade and the prospects that libraries will ever again have adequate materials budgets appear dim. Coupled with very limited growth library budgets, the overall inflation for library materials has far exceeded that growth, leaving libraries, in general, with greatly reduced purchasing power. Added to this situation is the ever-growing numbers of new books published, new serial titles started, and new electronic forms of information which, in many cases, far exceed the cost of traditional print materials.

4. Publishers and librarians should forge a more interactive partnership. If publishers are now anxious to get their books reviewed so that libraries will purchase

them, it would be far more cost-effective for both sides to work together closely in determining what should be published in the first place. At least for that portion of the book market which is purchased primarily by librarians, librarians should be actively supplying publishers with information about just what kinds of books are used and circulated.

APPENDIX A
JOURNALS CONSIDERED SCHOLARLY REVIEWING SOURCES
FOR THE PURPOSES OF THIS STUDY

JOURNALS CONSIDERED SCHOLARLY REVIEWING SOURCES FOR THE
PURPOSES OF THIS STUDY IN THE FOLLOWING SUBJECTS

BIOLOGY--LC Classifications QH-QL; QM-QR

Earth Science

Geographical Journal

Nature

Science

Virginia Quarterly Review

BUSINESS & ECONOMICS--LC Classifications HB-HD, HF, HG, KF
6200-6795

American Anthropologist

American Academy of Political and Social Science.

Annals

American Historical Review

Accounting Review

Business Horizons

Contemporary Sociology

Economist

Economic Geography

Educational Leadership

Geographical Journal

Historian

History Today

Journal of American History

Journal of Economic History

Journal of Economic Literature

Journal of Marketing

New Statesman

Public Opinion Quarterly

Reviews in American History

EDUCATION--LC Classification L (not LD or LT)

American Journal of Sociology

Change

College Composition and Communication

Commentary

College & Research Libraries

College and University

Contemporary Sociology

Educational Leadership

Human Events

Harvard Educational Review

Instructor

Journal of Higher Education

Journal of Negro Education

Journal of Reading

Nation

Performing Arts Journal

Reviews in American History

Theology Today

Virginia Quarterly Review

HISTORY--LC Classifications C, D-DR, DS, ST-DX, E, F, U-V

American-Arab Affairs

American Academy of Political and Social Science.

Annals.

American Historical Review

American Journal of Sociology

American Spectator

Antioch Review

Bulletin of the Atomic Scientists

Commentary

Contemporary Review

Current History

Economist

Ethics

Foreign Affairs

Human Events

History: Reviews of New Books

History Today

Journal of American History

Journal of Asian Studies

Journal of Economic Literature

Journal of Historical Geography

Journal of Southern History

Middle East Journal

Modern fiction Studies

Modern Language Notes

Nation

National Review

Nature

New Statesman

Pacific Affairs

Policy Review

Partisan Review

Political Science Quarterly

Quarterly Journal of Speech

Religious Studies Review

Virginia Quarterly Review

MATHEMATICS--LC classifications QA (except QA 76-100)

Journal of Economic Literature

APPENDIX B
CHI-SQUARE CONTINGENCY TABLES

Table 15.--Chi-square Contingency Table for Hypothesis 4

H4: Books classified as literature which have been reviewed are no more likely to circulate than books classified as literature which have not been reviewed.

| Literature | Circulated | Not Circulated | |
|--------------|------------|----------------|-------|
| Reviewed | 87 | 17 | = 104 |
| Not-Reviewed | 24 | 1 | = 25 |
| | 111 | 18 | = 129 |
| | T = 2.558 | | |

Table 16.--Chi-square Contingency Table for Hypothesis 5

H5: Books classified as literature are no more likely to circulate if they have been reviewed than books in all other subject areas which have been reviewed.

| | Reviewed & Circulated | Not Reviewed & Circulated | |
|----------------|-----------------------|---------------------------|-----------|
| Literature | O 87 | E (76) | 24 (35) |
| Not-Literature | O 341 | E (352) | 170 (159) |
| | 428 | 194 | = 622 |
| | T = 5.76339 | | |

BIBLIOGRAPHY

- Auraria Facts. (1992, April). [Broadside]. Denver, CO:
Privately printed.
- Baker, S. K. & Jackson, M. E. (1992). Maximizing Access,
Minimizing cost: A first step toward the information
access future. Washington, D.C.: Association of
Research Libraries. Photocopied.
- Bennion, B. C. (1978). The use of standard selection
sources in undergraduate library collection
development. Collection Management, 2(2), 141-152.
- Bingham, R. B. (1979). Collection development in university
libraries: an investigation of the relationship
between categories of selectors and usage of selected
items. Dissertation Abstracts International, 40,
5230A. (University Microfilms No. DDJ80-08858)
- Blake, V. L. P. (1989). The role of reviews and reviewing
media in the selection process: An examination of the
research record. Collection Management, 11,(1/2), 1-
39.
- Book review index. (1965-). Detroit: Gale
Publications. (Bimonthly with yearly and multi-year
cumulation).
- Booklist. (1905-). Chicago: American Library
Association. (Semimonthly).

Books for college libraries: A core collection of 50,000 titles (3rd ed). (1988). Chicago: American Library Association.

Books in print. (1948-). New York: R. R. Bowker.
(Annual with semiannual supplement).

Borkowski, C. & MacLeod, M. J. (1979). A faculty response from the University of Pittsburgh. Journal of Academic Librarianship, 5(2), 63-65.

Bowker annual: Library and book trade almanac, 37th edition. (1992) New Providence, N.J.

Bradford, S. C. (1934). Sources of information on specific subjects. Engineering, 137, 85-86.

British Book News: The British Council's monthly survey for bookbuyers throughout the world. (1940-). London: British Council. (Monthly).

Britten, W. & Webster, J. (1992). Comparing characteristics of highly circulated titles for demand-driven collection development. College & Research Libraries, 53, (3), 239-248.

Broadus, R. N. (1973). Selecting Materials for Libraries. New York: H. W. Wilson Company.

Buckland, M. K. (1975). Book Availability and the Library User. New York: Pergamon Press.

Bulick, Stephen. (1978). Book Use as a Bradford-Zipf Phenomenon. College and Research Libraries, 39 (3), 215-219.

- Burrell, Q. L. (1980). A simple stochastic model for library loans. Journal of Documentation, 36(2), 115-132.
- _____. (1985). The 80/20 rule: Library lore or statistical law? Journal of Documentation, 41(1), 24-39.
- _____. (1985). A note on ageing in a library circulation model. Journal of Documentation, 41(2), 100-115.
- _____. (1986). A second note on ageing in a library circulation model: The correlation structure. Journal of Documentation, 42(2), 114-128.
- _____. (1987). A third note on ageing in a library circulation model: Applications to future use and relegation. Journal of Documentation, 43(1), 24-45.
- _____. (1988) A simple empirical method for predicting library circulations. Journal of Documentation, 44(4), 302-314.
- _____. (1990). Using the Gamma-Poisson model to predict library circulations. Journal of the American Society for Information Science, 41(3), 164-170.
- Busha, C. (1968). Book selection in public libraries: An evaluation of four commonly used review media. Southeastern Librarian, 18(2), 99-100.
- Carter, M. D. & Bonk, W. J. (1959) Building Library Collections. New York: Scarecrow Press.

- Carter, M. D., Bonk, W. J., & Magrill, R. M. (1974). Building Library Collections (4th ed.). Metuchen, N. J.: Scarecrow Press, Inc.
- CHOICE. (1964-). Middletown, Conn.: CHOICE. (11 issues per year).
- CHOICE. (1975). Opening day collection (3rd ed.). Middletown, Conn.: Author.
- Community College of Denver. (1991-1992). Catalog. Denver, CO: Printed by author.
- De Solla Price, Derek. (1976). A general theory of bibliometric and other cumulative advantage processes. Journal of the American Society for Information Science, 27, 292-306.
- Erickson, R. Choice for cooperative collection development. Library Acquisitions: Practice & Theory, 16(1), 43-49.
- Evans, G. E. (1970). Book selection and book collection usage in academic libraries. Library Quarterly, 40, 207-308.
- _____. (1987). Developing library and information center collections (2d ed.). Littleton, CO: Libraries Unlimited, Inc.
- Fox, J. H. (1990). Choice as a book selection tool in sociology: A comparison with Contemporary Sociology. Collection Management, 13(1/2), 135-152.

- Furnham, A. (1986). Book Reviews as a selection tool for librarians: Comments from a psychologist. Collection Management, 8(1), 33-43.
- Futas, E. (1977). Library Acquisition Policies and Procedures. Phoenix, AZ: Oryx Press.
- Futas, E. (1984). Library Acquisition Policies and Procedures. (2nd ed.) Phoenix, AZ: Oryx Press.
- Fussler, H., & Simon, J. L. (1969). Patterns in the use of books in large research libraries. Chicago: University of Chicago Press.
- Gardner, R. K. (1981). Library collections: Their origins, selection and development. New York: McGraw-Hill.
- Geyer, J. E. (1977/1978). A comparative analysis of book selection agents and tools with student use at the Long Beach Community College Library (Doctoral dissertation, University of Southern California, 1977). Dissertation Abstracts International, 38, 5868A.
- Goldhor, H. (1959). Are the best books the most read? Library Quarterly, 29(4), 251-255.
- Gorman, G. E., & Howes, B. R. (1989). Collection Development for Libraries. (Series: Topics in Library and Information Studies) London: Bowker-Saur.
- Greeley, A. (1987). Who reads book reviews anyway? Publishers Weekly, 231(14), 78.
- Haines, H. E. (1950). Living with Books (2d ed.). New York: Columbia University Press.

- Hardesty, L. (1981). Use of library materials at a liberal arts college. Library Research, 3, 261-282.
- _____. (1988). Use of library materials at a small liberal arts college: a replication. Collection Management, 10(3/4), p. 61-80.
- Hargrave, V. E. (1948). A comparison of reviews of books in the social sciences in general and in scholarly periodicals. Library Quarterly, 18(3), 206-217.
- Hintze, J. L. (1990). Number cruncher statistical system, Version 5.3 [Computer program]. Kaysville, Utah.
- Katz, B. & Katz, L. S. (Eds.). (1992) Magazines for libraries. (7th ed.). New York: R.R. Bowker.
- Kent, A., Cohen, J., Montgomery, K. L., Williams, J. G., Bulick, S., Flynn, R. R., Sabor, W. N., & Mansfield, U. (1979). Use of library materials. New York: Marcel Dekker, Inc.
- Kirkus Service, see Kirkus reviews.
- Kirkus reviews. (1933-). New York: Kirkus Service Inc. (Irregular).
- Leavy, M. D. (1992). An Exploration of the validity of Choice's "Outstanding Academic Books." Journal of Academic Librarianship, 18(2), 83-86.
- Library Journal. (1876-). New York: R. R. Bowker Company. (Semimonthly).

- Macleod, B. (1981). Library Journal and Choice: A review of reviews. Journal of Academic Librarianship, 7(1), 23-28.
- Macphail, B. D. (1980). Book reviewers and the scholarly publisher. Scholarly Publishing, 12(1), 54-63.
- McColvin, L. R. (1925). The theory of book selection for public libraries. London: Grafton.
- McGrath, W. E. (1971). Correlating the subject of books taken out of and books used within an open-stack library. College & Research Libraries, 32, 280-285.
- _____. (1976-77). Predicting book circulation by subject in a university library. Collection Management, 1(3-4), 7-23.
- _____. (1978). Relationships between hard/soft, pure/applied, and life/nonlife disciplines and subject book use in a university library. Information Processing and Management, 14, 17-28.
- _____. (1980). Circulation studies and collection development: Problems of methodology, theory and topology for research. In R. D. Stueart & G. B. _____.
- _____. (1986). Circulation clusters--an empirical approach to decentralization of academic libraries. Journal of Academic Librarianship, 12, 221-226.
- _____. (1988). Matrix models and the search for structure in subject-majors circulation: A

- methodological study. Library and Information Science Research, 10(1), 77-94.
- Miller, Jr. (Eds.), Collection development in libraries: A treatise (pp. 373-403). Greenwich, Conn.: JAI Press Inc.
- Metropolitan State College of Denver. (1991-1993). Catalog. Denver, CO: Printed by author.
- Merritt, L. C., Boaz, M., & Tisdell, K. S. (1958). Reviews in library book selection. Detroit: Wayne State University Press.
- Millson-Martula, C. (1985). The effectiveness of book selection agents in a small academic library. College & Research Libraries, 46, 504-510.
- Morse, P. M. (1968). Library Effectiveness: A systems approach. Cambridge: M.I.T. Press.
- New York Herald Tribune Weekly Book Review. (1943-). New York: New York Herald Tribune. (Weekly).
- New York Times Book Review. (1890-). New York: New York Times. (Weekly).
- Parker, J. M. (1989). Scholarly book reviews in literature journals as collection development sources for librarians. Collection Management, 11(1/2), 41-57.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics? Journal of Documentation, 25(December 1969), 348-349.

- Publishers Weekly: The international news magazine of book publishing. (1872-). New York: R. R. Bowker Company. (Weekly).
- Ranganathan, S. R. (1952). Library Book Selection. New Delhi: India Library Association.
- Ream, D. (1979). An evaluation of four book review journals. RQ, 19, 149-153.
- Saturday Review of Literature. (1924-1952). New York: Saturday Review Associates. (Weekly).
- Saunders, Stewart. (1982). Student reliance on faculty guidance in the selection of reading materials: The use of core collections. Collection Management, 44(4), 9-23.
- Schad, J. G. (1979). Missing the brass ring in the iron city. Journal of Academic Librarianship, 5(2), 60-63.
- SciTech Book News; An annotated bibliography of new books in science, technology, & medicine. (1977-). Portland, OR: Book News Inc. (Monthly).
- Schmitt, J. P. & Saunders, S. (1983). An assessment of Choice as a tool for selection. College & Research Libraries, 44, 375-380.
- Selth, J., Koller, N. & Briscoe, P. (1992). Use of books within the library. College & Research Libraries, 53(3), 197-205.

- Serebnick, J. (1978) The relationship between book reviews and the inclusion of potentially controversial books in public libraries. Ph.D. diss., Rutgers University.
- _____. (1981). Book reviews and the selection of controversial books in public libraries. Library Quarterly, 51(4), 405-406.
- Stubbs, W. R. & Broadus, R. N. (1969). The value of the Kirkus Service for college libraries. Library Resources & Technical Services, 13(2), 203-205.
- Tisdell, K. S. (1958). Staff reviewing in library book selection. In Merritt, L. C., Boaz, M. & Tisdell, K. S.'s Reviews in library book selection (pp. 133-182). Detroit: Wayne State University Press.
- Trueswell, R. W. (1965, January). A quantitative measure of user circulation requirements and its possible effect on stack thinning and multiple copy determination. American Documentation, 16, 20-25.
- _____. (1969, January). Some behavioral patterns of library users: The 80/20 rule. Wilson Library Bulletin, 43, 458-461.
- _____. (1979). Balancing library objective with book circulation. Journal of Academic Librarianship, 5(2), 68-69.
- University of Colorado at Denver. (1991). Institutional facts and characteristics. Denver, CO: Printed by author.

- University of Colorado at Denver. (1992-1993).
Undergraduate and graduate catalog. Denver, CO:
Printed by author.
- Vidor, D. L. & Futas, E. (1988). Effective collection
developers: librarians or faculty? Library Resources
& Technical Services, 32, 127-136.
- Voigt, M. J. (1979). Circulation studies cannot reflect
research use. Journal of Academic Librarianship, 5(2),
66.
- Walford, A. J. (1986). Reviews and reviewing: A guide.
Phoenix: Oryx Press.
- Wallace, D. P. (1989) "Bibliometrics and citation
analysis." In Principles and Applications of
Information Science for Library Professionals, ed. John
N. Olsgaard. Chicago: American Library Association.
- Weeks, K. (1973). Determination of pre-acquisitions
predictors of book use. Berkeley, CA: University of
California, Institute of Library Research. (ERIC
Document Reproduction Service No. ED 082 776).
- Whaley, J. H., Jr. (1981). An approach to collection
analysis. Library Resources & Technical Services,
25(3), 330-338.
- Wortman, W.A. (1989). Collection Management: Background
and Principles. Chicago: American Library Association.

- Yang, E. L. (1990). Psychology collection review: A cooperative project between librarians and departmental faculty members. Collection Management, 13(3), 43-55.
- Young, A. P. (1975). Scholarly Book Reviewing in America. Libri, 25(3), 174-182.