FORMALIZATION OF COLLECTION DEVELOPMENT IN SELECTED MEDIUM-SIZED ACADEMIC LIBRARIES

DISSERTATION

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

For the Degree of

Doctor of Philosophy

by

Melba S. Harvill, M.L.S.

Denton, Texas

December, 1984
The degree of formalization of collection development (the dependent variable) in selected medium-sized academic libraries and six independent variables believed to be related to the dependent variable were examined. The formalization of collection development was measured by an index of five dimensions. The six independent variables examined were age of the library, number of graduate degrees offered by the parent institution, estimated years of growth potential in terms of available shelf space, attitude of the library director toward cooperation, number of memberships held by the library in cooperative endeavors, and percentage of increase in the materials budget from 1972 to 1982.

A medium-sized academic library was defined by the researcher. The 35th edition (1982) of the American Library Directory contained 206 libraries fitting the definition. A questionnaire was sent to each of them; 149 (72.33 per cent) responded, and 128 (62.13 per cent) were complete and usable.

The following hypotheses were tested:

1. The older the library, the less formalized will be
the collection development function.

2. The greater the number of graduate degrees offered by the parent institution, the greater the degree of formalization of the collection development function.

3. The greater the library's growth potential in terms of available shelf space, the less formalized will be the collection development function.

4. The greater the desire for cooperation on the part of the library director, the greater the degree of formalization of the collection development function.

5. The greater the number of memberships in cooperative endeavors, the greater the degree of formalization of the collection development function.

6. The greater the percentage of increase in the materials budget, the less formalized will be the collection development function.

The findings of this study fail to support hypotheses one, three, four, and six. The relationship between the number of memberships in cooperative endeavors (hypothesis five) is weak, but significant. Hypothesis two is not supported when the total group is considered, but it is supported only when publicly-supported libraries are considered. A positive relationship between size of collection and level of collection development formalization was found to be significant, as was the relationship between number of graduate degrees and size of collection.
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CHAPTER I

BACKGROUND TO THE PROBLEM

A university's library is its most important and indispensable resource. The material quality of that resource is determined by the book collection. The quality of the book collection depends in turn upon selection policy and practice. Any means to improve that policy and practice will result in collections better suited to the university's educational and scholarly needs.¹

In its role as the repository of the world's recorded knowledge, the university library must acquire representations of that knowledge in every available form. Through its collections the university library aids the parent institution in fulfilling its functions of teaching, research, and service. These appear to be very straightforward statements, but they are deceptively simple. Libraries are not static; their collections must contain the results of the most recent research, else they will soon die. Their growth is cumulative. The purchase of each new volume does not mean that an old volume is discarded. Materials are constantly changing—in subject matter, in language, and in availability. But no single library can preserve everything. Furthermore, the many fields of learning and academic disciplines as we know them today are bound together in one

huge panorama. The university library is the sole instrument for reflecting this panorama. It is the one indispensible facility to all university departments. It is from the need to preserve this universality of recorded knowledge that the library derives its fundamental imperative for collection building.\(^2\)

From the clay tablets and papyrus scrolls of the great library at Alexandria to the videodiscs and computer tapes of the modern academic library, the acquisition of materials has been a responsibility of libraries throughout the centuries. Good library collections are not built hastily, nor do they just happen. However, it appears that the selection of materials has been an activity to which most academic librarians have given little conscious thought until recently. Librarians accepted faculty suggestions and purchased materials for their libraries' collections, but there appeared to be no plan or sense of direction to these efforts. Thus, academic library collections are often the product of years of day-to-day selection in response to faculty requests.

Perhaps a brief examination of the history and development of American academic libraries and the collections they house will aid in understanding this phenomenon. It may also aid in explaining the significance of collection development and management as a concern of the profession within the last ten to twenty years.

\(^2\)Ibid., pp. 1-2.
THE DEVELOPMENT OF AMERICAN ACADEMIC LIBRARIES

From the early beginnings until the latter quarter of the nineteenth century, most American academic libraries scarcely deserved the name "library." Few of the institutions were really universities as we know them today. The bulk of the libraries' collections came as gifts, usually from some benefactor. University teaching was done by textbook, so little was needed in the way of libraries. Often the libraries were run by faculty members who supervised the library part-time, and many did not circulate books at all, even to faculty. Collections were small and ill-suited to the students' needs. Classification schemes were unknown; books were usually shelved by broad subject category.3

Few of the early libraries had regular book budgets, though some did charge students a special fee for library support. Most governing boards and college or university presidents paid lip service to the importance of libraries. Others felt that the library was of secondary importance in the development of the university, scientific equipment being far more important. The most notable exception to this apathetic attitude toward the library was Harvard,

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where from the very first the importance of a strong library was emphasized.4

If there was any selection responsibility exercised in these early libraries, it was usually in the hands of the board of trustees. Then the responsibility was often passed on to a faculty committee. The faculty committee at Virginia, first appointed in 1836, had the power both to approve faculty requests for materials and to select general titles which did not fall clearly within a single discipline. However, some semblance of a book selection policy appeared at Harvard in 1881 with John L. Sibley and his successor, Justin Winsor. Sibley announced that the Harvard Library would be grateful for a copy of everything that was printed. Winsor indicated that the university that strove to provide for the wants of its advanced students should have the means to buy each year all the really good books issued in the civilized world. A few years later, Yale's Addison Van Name and Columbia's James H. Canfield expressed similar views.5

However, the seeds of change were being sown around the country, and the year 1876 marked the genesis of that change, both in the character of academic institutions and in their libraries. The change that came to the nation's institutions


of higher education with the Centennial Year had several causes. There was a change in the nature of society itself. The Industrial Revolution was in full swing, and the nation's society and economy began their shift from an agricultural to an industrial base. This change gradually affected the curricula of the nation's colleges and universities. Less emphasis was placed on the classics. Institutes and technological schools began to appear, along with land-grant institutions that resulted from the Morrill Act. The appearance of these institutions brought with it the concept of service as one of the responsibilities of higher education.

The change in the nature of the curricula also brought an increased emphasis on research. Johns Hopkins University, founded in 1876, led the way. It was patterned after the German universities, with their research seminars and the seeking of knowledge for its own sake. Thus it was that the universities began to collect the resources required to support and stimulate the creation of new knowledge rather than the transfer of old knowledge.

Paralleling this change in character of the American university was a revolution in instructional methods and philosophy. Course offerings were expanded, electives were

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7Ibid., 408-409.
added, and students began to choose programs based upon their interests. Instruction became more student-centered. The library emerged as an instrument for both instruction and research. As such, it required the systematic acquisition of library materials. 8

The practices of acquiring these materials varied little during the early decades of the twentieth century. In 1926, an American Library Association survey of academic libraries indicated that for most libraries responding, academic departments did the selecting. At about the same time, a survey of land grant institutions revealed that the only selection responsibility the librarians assumed was to prevent duplicate purchases. Most of the book funds were allocated to academic departments, although librarians did generally select reference materials. This method of building collections was opposite from the system found in most European institutions, where the library staff had full responsibility for book selection. 9 But events were underway that were destined to affect American academic libraries and the collections they housed.

The period between the two world wars witnessed a moderate growth of both academic institutions and their libraries. However, after World War II, there was a period of tremendous expansion of both universities and libraries.

8Ibid., p. 409.

9J. Periam Danton, Book Selection, pp. 61, 68.
In the next two decades, universities and university libraries experienced their greatest growth ever. The watchword was "more"—more materials, more buildings, and more staff. And libraries got them all.10

The decade of the 1960's, particularly, saw unprecedented growth in materials budgets as well as funds for academic library buildings. Federal, state, and foundation coffers yielded millions to libraries to increase their holdings. Domestic publication increased at a rapid rate, as did interest in foreign materials. As money continued to flow, library directors often were bolder in their acquisitions. For example, Robert Vosper of UCLA bought the entire stock of a Jewish bookstore to enhance the library's collection of Jewish materials. The University of Baltimore purchased a ten thousand volume stock of another book dealer.11 Libraries made the most of the available funds. Along with the money came bigger collections that contained many strange and exciting materials in wonderful new forms.

The post-war years brought another change that was to affect the academic library. Actually beginning with the Pre-World War II years, the character of academic scholarship

10Arthur T. Hamlin, The University Library, pp. 60, 68.
and research underwent a change. Generally, there was a shift away from things of the past to an emphasis on coping with the world of the present and even of the future. The major concern appeared to be the application of research to the understanding of the human condition and the solution of human problems. The most effective implementation of this pattern of research was the cross-disciplinary approach adopted in many disciplines. This shift in research altered the role of the university from an agent that emphasized the past to an agent that uses the past as an instrument to understand and cope with the present. It is in this environment that university library collections have developed.\textsuperscript{12}

Economic events of the 1970's brought still other changes to the academic library. Federal and state funding slowed down, as did voluntary giving to universities and to their libraries. Along with the funding slowdown came the added burdens of rising prices and inflation. Yet the academic community continued to place new demands upon its library—more students, new programs, new teaching methods and materials, and more individual research. These new demands combined to further emphasize the economic plight

of the library. In addition, accountability in higher education received much public attention, and libraries did not escape.

Another change to appear in academic libraries was the greater involvement of the library staff in the selection of materials. The reasons for this change are varied. The difficulty of keeping up with new publications, new pressures and demands on faculty members' time, and the lessening of a faculty member's identification with a particular institution and library rendered the faculty, as a group, no longer reliable to perform the selection responsibility in a regular, objective, systematic way. Neither could faculty members be relied upon to maintain any semblance of a balanced collection. Most professors, pressed for time and immersed in their own research projects, are prone to view the library in terms of their disciplines only. Oftentimes, faculty selection results in neglect, overlapping, and inconsistent ordering. Finally, the ultimate responsibility for the building of the library collection rests with the library administration. It is the library administration to whom the

president of a university goes for answers to criticisms of the library, not to the department chairman or teaching faculty. Yet some librarians almost shunned this collection development responsibility.

This brief review of the development of academic libraries indicates how they have grown in size, how selection responsibility has shifted, and how the shift in the character of research and scholarship has affected them. The economic growth and decline in the 1960's and 1970's respectively also left their marks on academic libraries. Paralleling these economic changes was an unprecedented growth in information and materials, and both presented academic librarians with a new challenge in building their collections.

THE EMERGENCE OF COLLECTION DEVELOPMENT

The changing nature of research, the funding cutbacks, and the ever-expanding amount and type of materials available to libraries made it even more obvious that academic libraries could no longer hope to be either self-sufficient in their own right or to provide for the needs of their users without long range planning. Some method had to be devised whereby libraries could purchase the most-needed materials at the best prices while insuring the least possible present and future damage to their collections. Thus collection devel-

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Development began to emerge as a prominent theme within the profession in the 1950's and 1960's, as librarians attempted to respond to changes in higher education and the demands placed upon university libraries. Long range planning, collection development policies and procedures, and budget allocation became matters of serious concern to the academic librarian. However, mere lip service to the concept of collection development was not sufficient. The formalization of procedures with written policy statements addressing acquisitions and budget allocation formulas began to appear in many academic libraries, particularly the large research libraries.

In the 1950's and early 1960's, these written statements addressing selection priorities were usually developed as a defense against censorship and in support of intellectual freedom. The McCarthy era brought many attacks on certain books and authors, and librarians felt the need for written statements justifying the library's selection rationale, even in academic libraries. There was a shift in motivation for policy development in the 1970's, this time as a result of reduced funding. Librarians were concerned that their limited funds be expended as wisely as possible and that their selections be based upon a reasonable plan that could be defended before budgetary authorities and the general public.15

As the 1980's dawned, academic librarians were aware of a number of issues facing those who are charged with building library collections. They must pay more attention to the immediate and expressed needs of their users and less to future research needs. As prices for library materials rise, stable or slightly increased budgets result in a decrease in buying power. Federal funding has been drastically reduced and it is not likely to increase to any great degree. Finally, it is becoming more difficult to justify the collection of little-used materials.16

Thus within the last two decades, the subject of library collection development has received wide attention in the literature of librarianship. For example, Volumes XV (1966) and XIX (1970) of Library Trends and Volumes XVIII and XIX (1974 and 1975) of Library Resources and Technical Services all devote a large part of their issues to various aspects of collection development. In addition, at least three new journals dealing with the subject have been added to the literature during this time: Collection Management's first issue appeared in the fall of 1976, Collection Building first appeared in 1978, and Library Acquisitions: Practice and Theory began publication in 1977. But for the most part, the literature addressed

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the problems and concerns of the large university research library.

DEFINITION OF THE PROBLEM

The collection development problems of the medium-sized academic library have received little specific treatment in the literature. These libraries are neither large nor small. They are not heavily committed to research, nor are they divorced from it altogether. They may be considered to be primarily teaching libraries. Their collections must be large enough to support the teaching function of the parent institution and to provide adequate learning materials to complement the classroom experience. At the same time, since most of the parent institutions offer at least one graduate degree, some amount of research is carried on there. In most institutions of this type, faculty are also involved in research, at least to some degree; therefore, the library must support research at some level. The library is not expected to have an exhaustive collection, so its collection development will not parallel that of the research library. The medium-sized academic library cannot buy everything that it needs; neither can it borrow all that it needs. Thus it becomes even more important that the medium-sized library staff have a knowledge of the needs of the library's users and a well-developed collection policy that will enable it to
fulfill those needs in the most economical manner possible.

The unique problems of the medium-sized academic library merit investigation, but they have not been the subject of much research. By the same token, there has been little study relative to the factors that seem to be related to the achievement of a formal organization of the collection development function in the medium-sized academic library. It has been suggested that collection development is made up of at least five definable elements: written policies and procedures covering activities; control of the materials budgets by librarians; responsibility for coordinating collection development vested in a chief collection development officer; librarians who select, weed, evaluate, allocate, and budget; and the presence of a formal organization for carrying out the library's collection development function.17

Organizational theory tells us that three basic types of organizations exist: formal, informal, and social. Formal organizations are those that have been deliberately established for the explicit purpose of achieving certain goals.18 It is with the formal organization of the


collection development function that this study is concerned. In this instance, the goal to be achieved is a library collection designed to fit the present and future needs of its users.

The foundation of formal organizations rests upon four basic conditions that must exist before any unity of action is possible:

1. Authority, the source of governance for any given organization or function;

2. Mutual service, upon which the social legitimacy of the organization is based;

3. Doctrine, the mission or purpose of the organization;

4. Discipline, the regulation of behavior. If one applies these four conditions to the collection development function in a library, that function may be defined as "a system of coordinated activities of a group of people working cooperatively toward a common goal under authority and leadership." Using this framework or concept of a formalized organization, the study described here will attempt to determine the degree of formal organization of the collection development function that exists in selected

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20 Ibid., p. 36.
medium-sized academic libraries and the factors that relate to this degree of formalization. A medium-sized academic library is defined as one whose parent institution offers at least one graduate degree and whose collection numbers 250,000-600,000 volumes with a materials budget in excess of $100,000.

Inherent in any process of movement from one state to another is the concept of a continuum—a series of steps or stages that finally lead to the desired state. It is difficult to state with any degree of certainty what steps constitute this continuum for collection development. Little treatment has been accorded the subject in the literature. However, for the purpose of this study, the formal collection development function will be defined as one that has the following elements:

1. A written policy statement defining various collection levels and outlining by subject how those levels will be applied to that specific collection;

2. At least one staff position that has responsibility for collection development with the authority to carry out collection development duties as defined by an organizational chart and/or job description;

3. An organizational structure that separates the evaluative judgment function of collection development from the business operation of purchasing and ordering (or the acquisition function;)


4. An organizational structure that includes involvement of the professional library staff in a formal way in the materials evaluation and selection process through committees or subject assignments;

5. Collection evaluation (recent and formal) that is specified as part of the collection development function.

While there is general recognition of the fact that libraries vary in the degree to which their collection development is formalized, opinions differ about the factors which may be most closely related to the presence or absence of formalization. This study proposes to look at six variables which may be related to the degree of formalization.

These may be operationally defined as follows:
1) age of the library, 2) number of graduate degrees offered by the parent institution, 3) growth potential, 4) commitment to a philosophy of cooperation, 5) participation in cooperative groups, and 6) percentage of increase in materials budget.

1. The age of the parent institution refers to the length of time the institution of which the library is a part has existed as an educational entity. It will be measured in number of years since its founding date.

2. Number of graduate degrees are those degrees offered by the parent institution that carry the following
titles: Master of Arts, Master of Science or their equivalents in other areas; or the Ph.D or its equivalent. Number of degrees will be based upon the parent institution's most recent catalog.

3. Growth potential is defined as the number of years of available growth space in the present building. It will be determined by the library director, with instructions to consider volumes added during the past ten years and based upon the assumption that a shelf is considered full when two-thirds of its space is occupied with books.

4. Library cooperation will be approached in two ways: the first will be a measure of commitment to the philosophy of cooperation on the part of the library director, to be determined by an attitudinal survey. (See Appendix A, page 5). The second approach will be the library's participation in cooperative endeavors, to be determined by its membership or affiliation with consortia and/or networks. Such memberships should reflect the extent to which the library participates in cooperation.

5. Materials budget is defined as the amount of monies (increase or decrease) available to the library for the purchase of materials. Figures of record will be the percentage of increase or decrease in the materials budgets during the period 1972 to 1982.

The following hypotheses are proposed concerning
these variables:

1. The older the academic institution of which the library is a part, the less the degree of formalization of the collection development function.

2. The greater the number of graduate degrees offered at the institution, the greater the degree of formalization of the collection development function.

3. The smaller the available growth potential in terms of space as perceived by the director, the greater the degree of formalization of the collection development function.

4. The greater the desire for cooperation on the part of the library director, the greater the degree of formalization of the collection development function.

5. The greater the opportunity for cooperation as expressed by cooperative agreements/network memberships, the greater the degree of formalization of the collection development function.

6. The greater the percentage of increase in the materials budget from 1972 to 1982, the less the degree of formalization of the collection development function.

These hypotheses are based upon certain assumptions. Old established libraries are less likely to take a formal approach to collection development. Libraries are traditionally slow to change and are more likely to cling to the 'historic' way of doing things. Libraries tend to
change only when forced to do so, either by internal pressures such as limited funding or limited shelving space. Outside pressures such as those exerted by external library agencies or by users can also be agents of change.

Graduate degrees usually imply additional library funding for those departments that support them. They also mandate a more careful selection process by those responsible for the selection of materials in order that these programs be adequately supported. Thus it might be assumed that the collection development process will be more formalized in libraries whose institutions offer a number of graduate degrees.

The library's ability to accommodate additional bookstacks without substantially affecting the seating capacity is likely to have a bearing on collection management. If the library has ample growth space in terms of stack area, growth space probably will be an insignificant factor. Thus it may be assumed that the formalization of the collection development function is inversely related to the library's available growth space.

The philosophy of the library director toward cooperation and the library's ability to cooperate may take different directions. A geographically isolated library may be committed to cooperation, but limited in its endeavors to do much more than participate in interlibrary
loan. If there is no other library in close proximity, it would be difficult to consider cooperative acquisitions, storage, or the circulation of materials. Budget constraints may also curtail libraries' abilities to cooperate on a large scale. Often consortia and/or networks are expensive, both from the standpoint of required hardware and of services supplied. Thus it may be assumed that a greater formalization of the collection development function will be found where there is both the desire and the ability to cooperate with other libraries.

Funding must be considered as a major factor in the building of library collections. Libraries with large materials budgets may be less concerned about formal collection development than are those libraries with smaller budgets because those with large budgets can respond to most demands without establishing priorities. Thus it may be assumed that the collection development function is inversely related to the percentage of increase in the materials budget from 1972 to 1982.

LIMITATIONS OF THE STUDY

Collection development in libraries is a broad topic with a variety of components. This study is concerned with only the series of steps leading to the formalization of the collection development function. Furthermore, it will examine only a selected list of six factors that are believed to
influence the establishment of a formal collection development procedure.

The six factors appear, from the writing and comments of academic librarians, to be significant in the formalization of the collection development procedure, as discussed in the following chapters. The size of the library staff and the number of teaching faculty at the parent institution have not been identified as important factors, nor has the extent to which the library may or may not be automated. The use of approval plans is more likely to be a characteristic of libraries that are too large to fall within the group used in this study. The study is limited further by the fact that it looks at one group of libraries only, medium-sized academic libraries. In addition, the limitations imposed on any study that relies upon a survey for its information will be present in this study: rate of return, ambiguity, lack of comprehension, inability to study the context within which the phenomenon occurs, and the inability to make any modifications as a result.
CHAPTER II

REVIEW OF THE LITERATURE

Various aspects of collection development have been explored in the literature of librarianship over the past two decades. General discussions and expressions of opinion on the development of collections and assorted problems have appeared frequently in recent years.\(^1\) At least two bibliographies have focused exclusively on collection development. The School of Library Science

at the University of Iowa published in 1977 a bibliography
emphasizing the problems of collection development, including
sources of information for the acquisition of materials.

The other bibliography--a selective list of over three
hundred citations on collection development and acquisitions
covering the years 1970 to 1980--contains state-of-the-art
reviews, apparent trends, and new slants on old problems. 2


2Library Materials Collection Building: Problems and
Since this study emphasizes the five dimensions of collection development that relate to formalization of the process, the literature review will be limited to those five dimensions:

1. The development of a written collection development policy statement;

2. The designation of a collection development librarian;

3. The incorporation of formal collection evaluation into the regular collection development function;

4. The separation of collection development from acquisition;

5. The retention of budgetary control within the library staff. Opinion pieces, program descriptions, and research reports published during the past two decades will be identified and, in some cases, discussed.

THE COLLECTION DEVELOPMENT POLICY

Collection development policies probably have received more attention in the literature than has any other aspect of the subject. The policy statement—the importance of it, how to write it and what to include in it—has been the subject of articles by Hall, Merritt, Evans, Richter,

Osburn, Buzzard, Pettit, Feng, Dowd, Miller, and Fletcher.\(^3\)

J. G. Miller\(^4\) goes a step further in reporting on a study of collection development at Cornell University. He details a university-wide collection development and information planning program. The basic pattern advocated in all these articles appears to be consistent with the "Guidelines for the Formulation of Collection Development Policies" of the Collection Development Committee of the Resources and Technical Services Division of the American


Library Association. This ALA document includes the purpose of a collection development policy, the assumptions upon which it rests, definitions of levels of collecting, and guidelines for establishing these levels. Perkins advocates that there should be a collection development manual specifying the collection development procedures in detail, as well as a policy statement.

Collection development policies for special subjects/collections have also been discussed in the literature. Henry, Davis, and Volkersz examine special collections and archives. Holley and Larson treat twentieth-century literature, while McCree discusses the role of gifts in collection building. Hernon, Morton, Gardiser, and

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Hammell 10 all discuss government publications from varying points of view, as does the entire issue of Volume VII-A of Government Publications Review. Harmon 11 examines the role of serials in collection development, and Lehocky and Neely 12 deal with the problem of reference acquisitions. Guilfoyle 13 examines the role of microforms in collection development. Fitzgibbon and Subramanyam 14 explore citation


13 Marvin C. Guilfoyle and others, Guidelines for the Acquisitions, Control, and Handling of Microforms and Other Non-Print Materials in the University of Oklahoma Libraries (Norman, 1977).

studies in the social sciences and sciences respectively as collection development tools. Taylor\textsuperscript{15} details policies for non-print media, juvenile literature and reference materials. The selection of alternative materials provides the subject for the complete issue of Volume II of \textit{Collection Building} (1980).

The collection planning experiences of specific libraries and special groups of libraries have also been detailed in the literature. Conway, Gallagher, and Holbrook\textsuperscript{16} recount how the library at Washington University School of Medicine revised its acquisitions statement after eleven years and the changes made in that revision. Craig and Strain\textsuperscript{17} trace the collection development activities of the National Library of Medicine from 1965 to 1977. Using the CATLINE files, they analyzed by subject, language, and date to determine the consistency of collection development activities. The problems of

\begin{flushright}
\textsuperscript{15}Charles T. Taylor, \textit{Educational Reference Department Book Collection Policy} (Long Beach, California, 1979), ED 175 476.


\end{flushright}
collection development faced by Nigerian universities are
the subjects of articles by Anyakoha and Onadiran and
Onadiran. Hellenga expresses the view that specifying
levels of collection density in specific subjects is not
appropriate for small college libraries. Instead, he
recommends that there be departmental acquisition policies
to help insure an adequate collection. Bryant examined
collection development in medium-sized academic libraries,
ascertaining which libraries had formal policies, whether
the writing of such policies was in progress, and who had
the overall responsibility for collection development/
selection. Gwinn and Mosher discuss the development of
the Research Libraries Group's Conspectus—a summary,
by subject, of existing collection strengths and future
collection intensities of RLG libraries.

18 W. W. Anyakoha, "Our Stars Are to Blame: Persistent
Problems of Collection Development at Nsukka," Libri,
XXXIX (March, 1979), 27-35; G. T. Onadiran and R. W.
Onadiran, "Building Library Collections in University
Libraries in Nigeria," Collection Building, IV, No. 2
(1982), 44-54.

19 Robert R. Hellenga, "Departmental Acquisitions
Policies for Small College Libraries," Library Acqui-
sitions: Practice and Theory, III, No. 2 (1979), 81-84.

20 Bonita Bryant, "Collection Development Policies
in Medium-Sized Academic Libraries," Collection Building,

21 Nancy E. Swinn and Paul H. Mosher, "Coordinating
Collection Development: The RLG Conspectus," College
and Research Libraries, LXIV (March, 1983), 128-139.
A number of publications containing policy statements have appeared over the years. One of the first was by Boyer and Eaton. This work is a representative collection of book selection policies from fourteen American public libraries, ten academic libraries, and seven school libraries. The Association of Research Libraries has published at least three works with excerpts from collection development policies: Acquisition Policies in ARL Libraries and Collection Development in ARL Libraries, both in 1974; and Collection Development Policies (SPEC Kit No. 38) in 1977. Futas details twenty-six complete and fifty-six partial collection development policies from both public and academic libraries. The Association of College and Research Libraries' Collection Development Policies appeared in 1981 and is a collection of five complete and five partial policy statements from medium-sized academic libraries.

A number of American college and university libraries have published their collection development policies as separate documents. Examples are the University of

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California at Northridge, DePaul University, and the University of Wisconsin at Stout. Valdosta State College of Georgia has also made its collection development policy available through the ERIC clearinghouse. The University of California at Berkeley made its preliminary statement available in January, 1980. Another widely-circulated policy is that of the University of Texas at Austin, now in its second edition. At least two community colleges have published their policies also: Northhampton County Area Community College of Pennsylvania and Austin (Texas) Community College.

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30 University of Texas, Austin, Collection Development Policy, 2nd ed. (Austin, Texas, 1980).

In addition to the collection development policy, models for its implementation have appeared in the literature. Both Edelman and Hazen\(^{32}\) deal with such models. Edelman describes a model for the decision-making process in book selection, describing collection development as a planning function. He sees selection as the implementation of collection development and the acquisition of materials as the implementation of selection. Hazen examines factors to be considered in a collection development model for a single discipline, then transfers the model to a total selection program. Voigt\(^{33}\) presents a quantitative model for estimating appropriate collecting levels of current materials, both monographs and serials. This model is based largely upon numbers and levels of programs, thus it is more applicable to large research libraries. Dym and Shirey\(^{34}\) attempt to define a quantitative method for the identification and evaluation of journal publications for a specialized collection. They designed a statistical decision model, developed criteria questions, a training


technique for the model, and a quality control check to
determine the consistency of selectors' judgments.
Converse and Standers discuss a computerized approach to
collection development in use at the University of Calgary.
From another point of view, studies at Wayne State University indicated that collection development is too complex
to be reduced to a mathematical model and should, instead, be based upon the communication structure of scholarship or upon a system of information dissemination.

A discussion of collection development policies and their formalization would not be complete without some mention of approval plans. If such a plan is used, it must be considered in the formulation of the collection development profile. Approval plans have received varied treatment in the professional literature.

Morrison, reporting on a symposium on approval plans in academic libraries, noted two trends: less faculty selection of library materials and a growing reliance upon


approval plans. He lists a variety of reasons for these trends, as well as some of the disadvantages of approval plans. Meyer and Demos\(^{38}\) begin by assuming that there is a difference between selection and collection. They then review a number of questions that bear on the purchase of current materials, and the experience with an approval plan at Ohio State University. Merrit and Dobbyn\(^{39}\) express concern with the quality of selection that results from the approval plan, suggesting that a minimum amount of selection takes place after the books are actually received. Evans and Argyres\(^{40}\) also question the utility of the materials received as a result of approval plans. Rouse, DeVolder, and DeVilbiss\(^{41}\) review the negative


\(^{39}\)Leroy C. Merritt, "Are We Selecting or Collection?" Library Resources and Technical Services, XII (Spring, 1968), 140-142; Margaret Dobbyn, "Approval Plan Purchasing in Perspective," College and Research Libraries, XXXIII (November, 1972), 480-484.


aspects of approval plans, using the experiences of three different academic libraries.

McCullough surveys the literature on approval plans and points out that research has failed to justify the satisfaction with approval plans expressed by administrators were more interested in theory than in technique. Two basic problems exist with approval plans: vendor performance and difficulties of acquiring unvolunteered books. Two years later, McCullough reviews a study done at Purdue University to determine whether academic departments get their fair share of books on an approval plan. Thom and Rebuldela treat approval plans from the administrative viewpoint, while Axford discusses the economics of domestic approval plans.


Dudley reports the results of a survey of seventy-nine ARL libraries concerning their use of approval plans. Of the fifty-two libraries responding, the majority favored approval plans and indicated that they would expand them if they had the funds to do so. The papers of the Fourth International Conference on Approval Plans trace the historical development of such plans and assess their future value.

Interest in the collection development policy has thus run the gamut—from how to write it and what it should contain—to policies for special subjects and in special groups of libraries—to collection development models. Perhaps Charles Osburn's comments on such policies best summarized their significance:

. . . the essential message intended in these paragraphs is that the adoption of a comprehensive and detailed policy on collection development has far-reaching implications both for the routine of collection development and for the atmosphere in which it will function. As a management tool endowed with something more than a hint of precision, the policy serves as a new measure of performance, stimulating at the same time a heightened sense of accountability in decision-making.


THE COLLECTION DEVELOPMENT LIBRARIAN

Once the collection development policy is written, someone must be responsible for seeing that it is implemented. In other words, one person on the library staff should have the authority to carry out the policy—its selection criteria and its budgetary implications. The literature has a variety of labels for such a staff member: bibliographer, subject specialist, collection development librarian. Whatever the title, theirs is the responsibility for the judgmental function of selection.

There is fine line between book selection and collection development. Wadsworth and Hamlin aid in making a distinction between the two. Hamlin states that the collection process has two aspects: 1) selection is a process within the collection development function which results in decisions on what will and will not be purchased, and 2) selection is the means by which the decisions are made within the organization. She also distinguishes between the planning and decision-making functions. Wadsworth believes that the salvation of the library as an effective instrument for research depends upon the judgment that goes into the selection process.

He contends that this process is a delicate balance of forces—past, present, and future; quick judgment, and experience. Selection requires a decision, and he feels that experience is the only teacher of a wise selector.

Downs, R. D. Stevens, and R. E. Stevens all examine the problem of selection in academic libraries. Downs believes that selection policies and fields of specialization will have to be carefully defined because increases in publishing prohibit libraries from acquiring everything they need. R. D. Stevens examines two basic philosophies of selection: build a sound collection of bibliographies and reference tools or collect and keep everything. R. E. Stevens examines some of the problems faced by research libraries as they relate to acquisitions.

The concept of book selection and the role of the bibliographer has changed over the years, as revealed in the literature. Danton and Hill both believe that the subject specialist in a library should have selection responsibilities, as does Guttsman. On


the other hand, Dickinson argues that the selection of materials is more properly and adequately done by faculty members, and he suggests a way of dealing with the problem of accountability.

Between 1961 and 1977, various authors have expressed opposing ideas on the role of the subject specialist in the academic library. Crossley sets down a list of strategies and objectives for the subject specialist, while Lopez and Humphries provide a good overview of the role of the bibliographer, including a guide for him/her to follow. Coppin defines the subject specialist and indicates that his/her effectiveness as a book selector will vary with both the times and the


52 C. A. Crossley, "The Subject Specialist Librarian in an Academic Library: His Role and Place," Aslib Proceedings, XXVI (June, 1974), 236-249.


institution. Gleason\textsuperscript{55} believes that providing a training program for those librarians who are building collections would be of great benefit. Gration and Young and Reino\textsuperscript{56} suggest that the subject specialist should be more than a selector, spending more time at the reference desk. On the other hand, Holbrook\textsuperscript{57} defines the subject specialist as a member of the staff appointed to organize library resources and services in a particular subject field, and he sees him/her performing a variety of duties.

The role of the subject specialist appears to be expanding. He/she may be seen as an advanced reference librarian—one who serves as a liaison with faculty—and a materials selector—one who can assist in building a collection on the basis of some kind of qualitative standards. This involves professional judgment, not mere recognition of subject matter. It requires critical analysis, control, and broadmindedness—all designed to provide the best representation of viewpoint, subject matter, and breadth of coverage that are part of a well-


\textsuperscript{57} A. Holbrook, "The Subject Specialist in Polytechnic Libraries," \textit{New Library World}, LXXIII (September, 1972), 393-396.
rounded library collection.  

Schad and Adams, Harrer, and Taggart express the opinion that collection development could be done with librarians who possess bibliographic knowledge and faculty who have subject expertise. Haro indicates that bibliographers should also serve as a liaison with faculty. Osiobe reports on a study of Nigerian libraries in which he determined that recommendations for purchases made by librarians almost doubled those of faculty.

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Woodhead\textsuperscript{62} examines the role of the subject specialist in British university libraries.

Taking a different approach, Byrd\textsuperscript{63} considers subject specialists primarily as selectors. He likens them to the branch librarians who serve departmental and professional school libraries. Lane and Morrison\textsuperscript{64} see the return of selection to librarians from faculty as a definite trend. As noted earlier, it appears that gradually the major responsibility for materials selection in academe is moving from the faculty to the librarian.

**THE EVALUATION OF THE COLLECTION**

Closely related to the work of the subject specialist/bibliographer is collection evaluation. A library staff must know the state of the library's collection in order to determine wisely how that collection should be developed. The Association of Research Libraries has published at least two reports on collection evaluation:


Collection Assessment (SPEC Kit No. 41) includes the draft of the guidelines for evaluation and a section on collection-centered evaluations. Collection Analysis in Research Libraries reports on the progress of the Collection Analysis Project and describes the procedure and pilot tests at three ARL libraries. Mosher reviews the history, literature, and methodology of collection evaluation in research libraries. He examines current problems, the tools needed, and describes the ongoing evaluation program at Stanford University. Ottersen and Nisonger provide annotated bibliographies that aid in the determination of guidelines for evaluation, while Bonn, Cassata and Dewey, and Machlup address the difficulties inherent in collection


evaluation and the various methods that can be used.

Whaley\textsuperscript{69} indicates that library collections should serve the needs of present and future users. He proposes a method to identify needs and to measure a collections' ability to satisfy them. Voos\textsuperscript{70} agrees that collections should meet the needs of their users. However, he is critical of the standard means of evaluation and suggests that the bibliometric method might be more viable. Abrams\textsuperscript{71} examines the extent to which evaluation methods described in the literature are actually used by practicing librarians.

Taking a different approach, Moran\textsuperscript{72} discusses the difficulty in measuring the adequacy of libraries because it is not possible to determine their educational performance. He suggests three ways of determining adequacy: 1) formula budgeting with an annual growth rate of approximately five per cent, 2) use of the Clapp-Jordan formula, and 3) program planning budgeting systems. The whole idea behind his plan is to match the library to


\textsuperscript{71}D. M. Abrams, Collection Evaluation in the College Library (Provo, Utah, 1974). ED 102 994.
faculty/student needs. Lancaster enumerates three different approaches to evaluation. First, he suggests a subjective evaluation of parts of the collection by subject specialists. Secondly, he suggests that one check the collection against available lists, and finally, he suggests that one evaluate the collection in terms of its volume and type of use. Comer examines list-checking as a means of evaluation, but feels that list-checking presents problems for academic libraries because few lists exist for scholarly collections. The formula approach is treated by Clapp and Jordan (revised in 1965) and by McInnis in 1972. Evaluation studies of specific libraries are discussed by Golden, Reed, Saete, and Converse and Standers, the latter being a computerized approach.


Gallagher suggests still two other methods of evaluation: 1) a retrospective measure to evaluate what currently exists, and 2) measures to determine how the collection is evolving to meet the current needs and anticipated demands. McInnis discusses a procedure for evaluation based upon a discipline or sub-discipline. Scientific checking of citations from a random sample of published research in a selected discipline is his method. Holt elaborates on collection evaluation as a management tool. Inventory studies are discussed by Braden, Bluh, and Clark.


Burr\textsuperscript{81} related the plan for evaluation used at Gonzaga University. Special aspects or areas of collection evaluation also have found their way into the literature. Amir and Newman\textsuperscript{82} discuss a method of evaluation of scientific journals in the Gibson Library at Johns Hopkins University using the faculty to help with the process. Wenger, Sweet, and Stiles\textsuperscript{83} discuss a computerized method of monograph evaluation based upon use. It uses a circulation inventory ratio to identify areas of high and low interest. Nisonger\textsuperscript{84} examines two techniques of journal citations that aid in evaluating political science collections. Gardner\textsuperscript{85} discusses the Association of Research Libraries' Collection Analysis Project and what it

\begin{itemize}
  
  \item \textsuperscript{82}Michlean Amir and Wilda Newman, "Information: Unlimited Demands-Limited Funds (Testing the Validity of a Scientific Journal Collection in Light of Economic Realities)," \textit{Collection Management}, III (Spring, 1979), 111-199.
  
  
  \item \textsuperscript{84}T. E. Nisonger, "A Test for Two Citation Checking Techniques for Evaluating Political Science Collections in University Libraries," \textit{Library Resources and Technical Services}, XXVII (April/June, 1983), 163-176.
  
\end{itemize}
A unique method of collection evaluation was reported by the central administration of the State University of New York. They worked on a project to develop a set of computer programs to perform several collection development analyses on MARC records. Using OCLC archival tapes, the study demonstrated that valuable management information on collection development was available from the program. Townley reports on the use of the Statistical Package for the Social Sciences (SPSS) to analyze book collections. He indicates that from a random sample, data can be analyzed to provide sound information for collection development.

In the two areas of collection evaluation and the role of the subject specialist/bibliographer, the studies appear to be more substantial, more sophisticated, and more formal. Depending upon who one reads, the subject specialist's role varies from that of selector to reference librarian to faculty liaison. At the same time, collection evaluation studies have also changed. Because quality and quantity are not necessarily the same thing, collection evaluation methods have witnessed a change from the quan-

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titative method of the Clapp-Jordan formula to more qualitative methods, such as those at Gonzaga University and the universities in Ontaria. 88

Collection development and evaluation are difficult, if not impossible to separate. As Paul Mosher so aptly expresses it:

The move or primary collection development responsibility from the faculty to the library, the increase of attention to collection development which resulted, and the common attempt to systematize, rationalize, and improve the planning and procedures of library collection development during the ensuing decade and a half... has been one of the most significant and original contributions to the growth of professional librarianship in the United States during the last generation. 89

THE SEPARATION OF COLLECTION DEVELOPMENT AND ACQUISITIONS

The separation of the acquisitions or business function from the judgmental function of collection development has not been specifically addressed to any great degree in the literature. Some of the authors mentioned previously have apparently assumed


that the functions are separate, but they do not specifically say that they are. Likewise, the collection development policy statements assume a separation of functions, but fail to make this explicit. Bruer\textsuperscript{90} does mention a separation of the two as he reviews acquisitions in 1973. He indicates that trends related to acquisitions in terms of collection development are distinct from the regular operations and procedures.

**BUDGETARY CONTROL BY LIBRARIANS**

Control of the materials budget by librarians is the foundation upon which all other aspects of formal collection development are based. This assumption appears in the literature in a variety of concepts, formulas, and models. Tolman\textsuperscript{91} discusses how tight budgets are affecting research libraries, especially the continued development of their collections. Edelman\textsuperscript{92} mentions the same problem with specific reference to Cornell University, and Johnson and Rutstein\textsuperscript{93} recount how


Colorado State University dealt with the maldistribution of funds. Martin\(^4\) examines the reasons for budgetary planning, and various methods of allocation of funds. He states that each library must select the method best suited to its own circumstances. He continues that the purpose of allocation is to match available funds with existing need and to provide guidelines for selection personnel.

Sweetman\(^5\) discusses the case for allocation and the problems inherent in creating an allocation profile. He places the problem of allocation within a multiple-criteria decision-making framework. Lynden\(^6\) reviews the literature of budgeting, its formulation and presentation. He also treats the various materials formats as they relate to the budget, inflation as it affects collection development, and the budgetary process. Schad\(^7\) suggests that in the past, allocations were an effective method of control;


\(^7\)Jasper C. Schad, "Allocating Book Funds: Control or Planning?" *College and Research Libraries*, XXXI (May, 1970), 155-159.
however, it now takes planning to have adequate library resources, and librarians are assuming the duties of book selection to insure adequate holdings.

Allocation formulas have been mentioned frequently in the literature. Hanes replied to Bach's article on the allocation of funds. Hanes believes that allocation can be a blend of library staff/faculty control, not exclusively one or the other. Gold presents a cost benefit model of allocation. Kohut and Walker are critical of gold's model, indicating that formulas are the preferred alternative. Kohut looks at allocating the budget between serials and monographs using a formula based upon funding units, and Walch describes budgeting for non-print media in academic libraries. Goyal suggests


an operational method for allocation. He describes a formula by department, but based upon its importance to society, to the university, and the size of the department. McPheron\textsuperscript{103} describes a formula for distributing monograph funds based upon a literature approach, but not in the traditional manner. He also considers need and enrollment as factors in the allocation process. Werking\textsuperscript{104} reiterates the need for a literature size approach to book fund allocation. He presents a case for using \textit{Choice} reviews as a useful means of determining literature size.

**SUMMARY**

The review of the literature emphasizing the five dimensions of collection development considered in the present study yields at least two conclusions. First, the distinction between collection development and acquisitions is not sidely reflected in the literature. Secondly, very little of this literature on collection development represents the formulation of hypotheses and systematic gathering of data to test those hypotheses.


Among the few studies that consider hypotheses are those by Evans, Sloan, Abrams, and Baughman. Evans, in his study of book selection in academic libraries, hypothesized that librarians who had the greatest number of contacts with patrons would select a higher percentage of titles used by those patrons. He found support for this hypothesis.

Sloan visited eleven ARL libraries in the eastern United States for her study of collection development. She tested four hypotheses relating to the organizational theory of collection development.

1. Collection development activity is perceived by library directors to require as much or more coordination with other library units than is required in other activities.

2. The environment in which the collection development activities are performed is related to the type of formal structure of the collection development activities.

3. The task structure of collection development activities is related to the formal structure of the activities.

4. The components of technology used in collection development are related to the type of formal structure of the collection development activity.

Her findings indicated that collection development is a boundary-spanning activity that tends to be done best by public service librarians who believe that coordination with faculty is more important than with other library units. Her findings also indicated a trend toward librarians rather than faculty as selectors.

Abrams, in his study of 111 libraries supporting four year colleges, tested three assumptions about collection evaluation.

1. Collection evaluation techniques are more quantitative than qualitative.

2. Collection evaluation is limited in scope rather than comprehensive.

3. Evaluation studies are not formalized by written reports.

His findings provided support for the last two assumptions.

Baughman and his colleagues assumed that if those groups concerned with educational planning are committed to collection development, the response to it will be a positive one. In surveying four year college faculty, library directors, and administrators, he found disagreement on the use of a collection development librarian and on allocation formulae.
On the question of a collection development librarian, college administrators tended to disagree in greater numbers than expected, while librarians agreed in greater numbers than expected. Concerning budget allocation, Baughman's data suggested that faculty and administrators tend to favor allocation while librarians are not so much in agreement.

Other studies have gathered empirical data to ascertain what exists or what is being done rather than to support any hypotheses. Haro, Dudley, and Reid\textsuperscript{106} surveyed member libraries of the Association of Research Libraries, but for different purposes. Haro looked at their selection practices, Dudley inquired about their use of approval plans, while Reid sought information on the effects of budget adversity on acquisitions procedures. Evans and Argyres\textsuperscript{107} examined approval plans, concluding that there may be a significant difference between the utility of materials received on approval plans and those acquired.


by other means. Hannaford\textsuperscript{108} surveyed ten liberal arts college libraries to determine what, if anything, was occurring in the way of collection development.

Bryant\textsuperscript{109} surveyed medium-sized academic libraries to determine who had formal collection development policies, whether such policies were in progress, and who had responsibility for selection. Osiobe\textsuperscript{110} studied Nigerian libraries to determine how purchase recommendations were distributed between faculty and librarians. Sociologists Cline and Sinnott,\textsuperscript{111} using the case-study method, interviewed some 340 librarians in seven American academic libraries, both public and private and ranging in size from modest to very large. Their work summarized their findings about libraries, librarians, and collection development.

Cline and Sinnott found that the importance of collection development has declined in proportion to


budget decreases in the libraries studied. They believe that blanket orders can effectively supplant collection development librarians in many libraries. The rising cost of materials and declining library budgets present librarians with a real challenge in collection development, but the authors found that librarians are often slow to change, even in the face of these budgetary problems.

Even with a broad definition of research, very few of the studies mentioned previously can be considered research. Instead, most of them are thought and opinion, summaries of "how-we-did-it" accounts, or bibliographic reviews. Furthermore, of those studies using empirical research techniques, only Bryant and Hannaford dealt with the medium-sized academic library. Thus, the medium-sized academic library has received little attention in the literature of collection development.

The study undertaken here is one attempt to remedy this situation in that it deals only with the medium-sized academic library as defined previously. In addition, this study will attempt to ascertain the degree of formalization of the collection development function in the selected libraries, as well as to determine factors related to that formalization. Neither approach to the study of collection development has appeared in the literature for any type of library.
CHAPTER III

METHODOLOGY OF RESEARCH

The development of the research methods to be used in any study is critical to its success, and a discussion of these methods is an important step in understanding the nature of the problem under study. The present chapter will explain the choice of the study group, the design of the survey instrument, and the way in which that instrument was administered. A profile of the study group will also be presented.

SELECTION OF THE STUDY GROUP

The medium-sized academic library was selected for this study because little information on collection development is currently available for this type of library. A medium-sized library was defined by three characteristics: 1) size of collection (250,000-600,000 volumes); 2) need to support graduate instruction, and 3) an annual materials budget of at least $100,000. With these characteristics in mind, the 35th edition (1982) of the American Library Directory was consulted. The total number of libraries meeting the definition was 206. The geographic distribution proved to be acceptable, including libraries from forty-four of the forty-eight contiguous United States.
Since the population of medium-sized libraries, according to the chosen definition, was a manageable number, it was decided to study all of the libraries rather than to select a sample.

DEVELOPMENT OF THE SURVEY INSTRUMENT

The decision to work with 206 libraries that spanned a wide geographic area virtually mandated the use of the questionnaire as the survey instrument. The questionnaire had to be designed to collect quantitative data on the dependent variable and the six independent variables. The first problem to be addressed was the dependent variable, formalization of collection development.

Definitions of collection development in the professional literature vary, but this study required a definition that could be scaled at the ordinal or interval level of measurement. When one works through the definitions cited in the literature, several factors emerge as features of a formalized procedure of collection development: at least one full-time staff member with responsibility for collection development, budgetary monitoring and control, the separation of evaluation from acquisitions, professional staff participation in collection development, and the presence of a written collection development policy statement that addresses collecting levels for each discipline. Therefore, the definition of collection development used in this study contained five dimensions:
1. The presence of a written policy statement defining by subject the various collection levels and how those levels would be applied to that specific collection;

2. The presence of at least one staff position that has responsibility for collection development with the authority to carry out those duties as defined by an organizational chart and/or job description;

3. The presence of an organizational structure that separates this evaluative judgment function from the business operation of purchasing and ordering or the acquisition function;

4. The presence of an organizational structure that includes involvement of the professional staff in a formal way in the materials evaluation and selection process through committees or subject assignments;

5. The presence of collection evaluation that is specified as part of the collection development function.

A rating scale for collection development formalization, using the above five dimensions, was designed, and each library was placed on the scale by examining each of these five dimensions. For each dimension, a list was compiled of possible situations that might exist relative to that dimension. Once all five lists were complete, a numerical value was assigned to each situation within each of the five dimensions. (See Figure I.) The rating scale for the five-dimensional
FIGURE 1

RATING SCALE FOR MEASURING THE DEGREE OF FORMALIZATION
OF COLLECTION DEVELOPMENT

1. Staff member with collection development responsibility
   0—None
   1—Some one designated; position poorly defined
   2—Clear designation, not full-time, no budget control
   3—Same as above but with budget control
   4—Clearly defined full-time position, no budget control
   5—Same as above but with budget control

2. Collection development separate from acquisitions
   0—Not separated
   5—Clear separation

3. Formal involvement of professional staff
   0—Not clear that more than one staff member is involved
   1—All professional staff may participate
   2—Some type of committee (serials, selection, collection
development, etc.) exists with 50% of staff
   3—All professional staff have specific collection develop-
ment duties; responsibilities not clearly defined
   4—Library has full-scale "liaison" system
   5—Library has both 2 and 4 above

4. Written policy statement
   0—No written policy
   1—Some attempt at written policy, not specific and over
   5 years old
   2—Report that process is under way
   3—Some attempt at written policy within the last 5 years
   4—Detailed written policy with collecting levels with
      no indication of review or revision within last 5 years
   5—As above, produced or reviewed within last 5 years

5. Collection evaluation
   0—None in last 5 years
   1—Partial evaluation within last 5 years
   2—Complete evaluation mandated in policy but not yet done
   3—Complete evaluation within last 5 years
   4—Evaluation mandated in written policy, partially or
      completely done in last 5 years
definition of collection development (shown in Figure 1) was used to code those responses on the questionnaire relating to the formalization of the collection development function. The degree of formalization was then determined by the sum of the five dimensions.

The above method of arriving at a composite measure for degree of collection development formalization in each library follows the procedure outlined by Babbie of selecting items to be included in an index on the basis of logical (or face) validity, determining the range of possible responses on these items, deciding the desirable range of scores on each item, and summing the values to obtain a composite score.¹

The second consideration in the development of the survey instrument was to select and gather information on the independent variables, or those factors believed to be associated with the formalization of the collection development procedure. From the literature, personal experience, and discussions with colleagues, a list of factors were developed that might have an identifiable relationship to collection development: available space, financial support, automation, number of graduate degrees and students, number of honors students, use of a standing order plan, proximity to other libraries.

cooperative activities, faculty research, age of the library, number of faculty, institutional emphasis (vocational/technical, liberal arts), number of library staff, and number of undergraduate students. Through a weeding process, the list was finally narrowed to six factors. These six factors or independent variables were operationally defined as follows.

1. The age of the parent institution refers to the length of time the institution of which the library is a part has existed as an educational entity. It was measured in number of years since its founding date.

2. Number of graduate degrees refers to degrees with the following titles: Master of Arts, Master of Science or their equivalents in other disciplines; or the Ph.D or its equivalent. Number of degrees was based upon the parent institution's most recent catalog.

3. Growth potential is defined as the number of years of available growth space in the present building. This was determined by the library director's estimate, based on instructions to consider volumes added during the past ten years with the assumption that a shelf is considered full when two-thirds of its space is occupied with books.

4. The first variable related to library cooperation was a measure of the director's commitment to the philosophy of cooperation, as determined by answers to an attitude survey (see Appendix A, page 5). The second
variable was the **library's participation in cooperative endeavors**. This was measured by a report of the number of the library's memberships in or affiliation with consortia and/or networks.

5. **Change in materials budget** is defined as the amount of monies available to the library for the purchase of materials. It was measured as the percentage of increase or decrease in the materials budgets from 1972 to 1982.

Once these two measurement problems were solved, the development of the survey instrument began. Each of the six independent variables were examined one at a time to formulate preliminary questions that would yield the information required for that variable. A list of such questions for each variable was compiled. The collection development formalization scale was examined and treated in the same manner. When both lists were complete, questions were formulated to yield the institutional data needed for the questionnaire. The questions were then reformatted to be compatible with the Statistical Package for the Social Sciences, which was used to analyze the data.

Once the questions were compatible with the SPSS package, they were put in a logical order, the most important questions appearing first, and a system of coding was worked out. The rating scale (Figure I) for collection development was used to code those portions of
the questionnaire relating to collection development. The degree of formalization was determined by the sum of the five dimensions. The questions relating to the six independent variables were studied on an individual basis and a coding method was devised for them, along with a code for missing information.

The questionnaire was then pre-tested by the directors of six academic libraries meeting the definition used in the study. The pre-test yielded a few suggestions and refinements which were incorporated into the revision. The attitudinal survey was revised and shortened as a result of the pre-test, and a final version of the questionnaire was drafted. (See Appendix A for a copy of the questionnaire.)

The questionnaire was mailed on October 12, 1983, with a requested return date of October 16, 1983. A follow-up was mailed on November 2, 1983. Response rate was 149 or 72.33 per cent, with 128 or 62.13 per cent of the responses being complete and usable. The geographic distribution was very broad, as can be seen in Tables I and II. Table I shows the distribution of questionnaires sent and returned by individual state. Table II shows the distribution of the survey by sections of the country, along with the percentage of the total number of instruments sent and returned. The rate of return did not vary significantly from one part of the country to another. Table III shows
<table>
<thead>
<tr>
<th>States</th>
<th>No. of libraries surveyed</th>
<th>No. of questionnaires returned</th>
<th>Percentage returned</th>
<th>States</th>
<th>No. of libraries surveyed</th>
<th>No. of questionnaires returned</th>
<th>Percentage returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>4</td>
<td>1</td>
<td>25</td>
<td>MT</td>
<td>1</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>AR</td>
<td>2</td>
<td>2</td>
<td>100</td>
<td>NE</td>
<td>2</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>CA</td>
<td>15</td>
<td>12</td>
<td>80</td>
<td>NV</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>CO</td>
<td>3</td>
<td>1</td>
<td>33</td>
<td>NJ</td>
<td>6</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>CT</td>
<td>5</td>
<td>1</td>
<td>20</td>
<td>NM</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>DC</td>
<td>2</td>
<td>1</td>
<td>50</td>
<td>NY</td>
<td>24</td>
<td>16</td>
<td>67</td>
</tr>
<tr>
<td>FL</td>
<td>5</td>
<td>5</td>
<td>100</td>
<td>NC</td>
<td>4</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>GA</td>
<td>3</td>
<td>1</td>
<td>33</td>
<td>ND</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>ID</td>
<td>3</td>
<td>2</td>
<td>66</td>
<td>OH</td>
<td>7</td>
<td>6</td>
<td>86</td>
</tr>
<tr>
<td>IL</td>
<td>8</td>
<td>5</td>
<td>63</td>
<td>OK</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>IN</td>
<td>3</td>
<td>1</td>
<td>33</td>
<td>OR</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>IA</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>PA</td>
<td>17</td>
<td>9</td>
<td>53</td>
</tr>
<tr>
<td>KS</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>RI</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>KY</td>
<td>2</td>
<td>2</td>
<td>100</td>
<td>SC</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>LA</td>
<td>6</td>
<td>4</td>
<td>67</td>
<td>SD</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>ME</td>
<td>2</td>
<td>1</td>
<td>50</td>
<td>TN</td>
<td>5</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>MD</td>
<td>3</td>
<td>2</td>
<td>67</td>
<td>TX</td>
<td>11</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>MA</td>
<td>9</td>
<td>7</td>
<td>78</td>
<td>UT</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>MI</td>
<td>9</td>
<td>6</td>
<td>67</td>
<td>VT</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MN</td>
<td>3</td>
<td>3</td>
<td>100</td>
<td>VA</td>
<td>6</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>MS</td>
<td>2</td>
<td>1</td>
<td>50</td>
<td>WA</td>
<td>4</td>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>MO</td>
<td>6</td>
<td>6</td>
<td>100</td>
<td>WI</td>
<td>7</td>
<td>6</td>
<td>86</td>
</tr>
</tbody>
</table>
TABLE II
REGIONAL DISTRIBUTION OF QUESTIONNAIRE

<table>
<thead>
<tr>
<th>States by Section</th>
<th>No. libs. receiving</th>
<th>Per cent of surveys sent</th>
<th>No. libs. returning survey</th>
<th>Per cent of total surveys returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Engl. ME, RI, VT, CT, MA</td>
<td>18</td>
<td>8.7%</td>
<td>9</td>
<td>6.1%</td>
</tr>
<tr>
<td>Atlantic MD, NJ, NY, PA, WV, D.C.</td>
<td>53</td>
<td>25.7</td>
<td>35</td>
<td>23.6</td>
</tr>
<tr>
<td>Central IL, IA, KS, SD, WI, MN, MO, NE, MT, OH, IN, ND, MI</td>
<td>53</td>
<td>25.7</td>
<td>39</td>
<td>26.5</td>
</tr>
<tr>
<td>South AL, FL, GA, KY, MS, NC, SC, TN, VA</td>
<td>32</td>
<td>15.5</td>
<td>24</td>
<td>16.3</td>
</tr>
<tr>
<td>S'west TX, NM, OK, AR, LA</td>
<td>22</td>
<td>10.7</td>
<td>20</td>
<td>13.6</td>
</tr>
<tr>
<td>Far West CA, ID, CO, OR UT, WY NV</td>
<td>28</td>
<td>13.6</td>
<td>21</td>
<td>14.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>206</td>
<td>100.0%</td>
<td>148</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
### TABLE III

**DISTRIBUTION OF QUESTIONNAIRE BY TYPE OF LIBRARY SUPPORT**

<table>
<thead>
<tr>
<th>States by section</th>
<th>No. sent to public institutions</th>
<th>Number returned</th>
<th>Per cent returned</th>
<th>No. sent to private institutions</th>
<th>Number returned</th>
<th>Per cent returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ME, RI, VT, CT, MA</td>
<td>6</td>
<td>4</td>
<td>69%</td>
<td>12</td>
<td>3</td>
<td>25%</td>
</tr>
<tr>
<td>Atlantic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD, NJ, NY, PA, WV, D.C.</td>
<td>29</td>
<td>21</td>
<td>72%</td>
<td>24</td>
<td>14</td>
<td>58%</td>
</tr>
<tr>
<td>Central</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL, IA, KS, SD, WI, MN, MO, NE, MT, OH, IN, ND, MI</td>
<td>38</td>
<td>29</td>
<td>76%</td>
<td>15</td>
<td>11</td>
<td>73%</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL, FL, GA, KY, MS, NC, SC, TN, VA</td>
<td>27</td>
<td>20</td>
<td>74%</td>
<td>5</td>
<td>4</td>
<td>80%</td>
</tr>
<tr>
<td>S'west</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TX, NM, OK, AR, LA</td>
<td>15</td>
<td>15</td>
<td>100%</td>
<td>7</td>
<td>6</td>
<td>86%</td>
</tr>
<tr>
<td>Far West</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA, ID, CO, OR, UT, WY, NV</td>
<td>20</td>
<td>16</td>
<td>80%</td>
<td>8</td>
<td>6</td>
<td>75%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>135</strong></td>
<td><strong>105</strong></td>
<td><strong>78%</strong></td>
<td><strong>71</strong></td>
<td><strong>44</strong></td>
<td><strong>62%</strong></td>
</tr>
</tbody>
</table>
the distribution of responses from public and private institutions. The rate of return from the private institutions was low. Table IV shows the libraries surveyed by number of volumes held. Well over half the libraries in each category returned their surveys.

Once the questionnaires were received and coded, the data for each library were entered into the computer. First, a set of frequency distributions was run. This revealed a number of errors in data entry; therefore, all data were rechecked for accuracy. With assurance that all data were correct, several series of statistical analyses were run. The following chapter will discuss the results of the statistical analyses.
### TABLE IV
LIBRARIES SURVEYED BY NUMBER OF VOLUMES HELD

<table>
<thead>
<tr>
<th>Vols. held</th>
<th>Instruments sent</th>
<th>Instruments returned</th>
<th>Per cent returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>250,000 to 299,999</td>
<td>44</td>
<td>28</td>
<td>64%</td>
</tr>
<tr>
<td>300,000 to 349,999</td>
<td>40</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td>350,000 to 399,999</td>
<td>38</td>
<td>25</td>
<td>66</td>
</tr>
<tr>
<td>400,000 to 449,999</td>
<td>29</td>
<td>22</td>
<td>76</td>
</tr>
<tr>
<td>450,000 to 499,999</td>
<td>14</td>
<td>10</td>
<td>71</td>
</tr>
<tr>
<td>500,000 to 549,999</td>
<td>14</td>
<td>10</td>
<td>71</td>
</tr>
<tr>
<td>550,000 to 600,000</td>
<td>27</td>
<td>26</td>
<td>96</td>
</tr>
<tr>
<td>TOTAL</td>
<td>206</td>
<td>149</td>
<td>72%</td>
</tr>
</tbody>
</table>
CHAPTER IV

ANALYSIS OF THE FINDINGS

This study investigated, as its dependent variable, the degree of formalization of the collection development function in selected medium-sized academic libraries. The following six factors were selected as the independent variables to be studied: 1) age of the library; 2) number of different graduate degrees offered by the parent institution; 3) estimated years of growth space in the present library building; 4) library director's attitude toward cooperation; 5) number of memberships held by the library in consortia and/or networks; and 6) the percentage of increase in the library materials budget from 1972 to 1982.

FORMALIZATION OF COLLECTION DEVELOPMENT

The dependent variable in this study is degree of formalization of the collection development function. It was measured on a rating scale (discussed in Chapter III) that provided for a possible range of scores from 0 to 24. The actual range of scores achieved by the libraries represented in this study is 0 to 23. The mean is 12.37, the median is 13.67, and the mode is 17. For purposes of data analysis, libraries were placed into five groups on the basis of their formalization scores. Eleven libraries
(10.9 per cent of the total) had very low formalization scores (0-4 points); twenty-six libraries (20.3 per cent) were moderately low in formalization (5-9 points). Middle range formalization scores were achieved by thirty-four libraries (26.6 per cent). On the moderately high end of the scale were forty-eight libraries (37.5 per cent). Only six libraries (4.7 per cent) scored 20 points or higher on the formalization scale.

In the following pages, each independent variable will be discussed in turn, according to the following pattern. First, the distribution of the independent variable will be described, followed by a discussion of its apparent relationship to collection development formalization, the dependent variable. Since none of the independent variables showed a correlation with the dependent variable strong enough to be significant at the .05 level, each independent variable was further analyzed by slightly controlling the other independent variables. Using only the modal groups for each of the five independent variables, correlation coefficients were again calculated for the dependent variable and the independent variable. The discussion of this procedure for each independent variable follows immediately after the primary discussion of the independent variable's relationship to collection development formalization.
AGE OF THE LIBRARY

The 128 libraries participating in the study varied greatly in age, from 11 to 168 years. The average age is 82.9 years and the median age is 84 years. For purposes of analysis, libraries were placed into five age groupings. The largest number of libraries (thirty-seven or 28.9 per cent) fall into the 91-120 years-old range. The next largest group (twenty-nine or 22.7 per cent) includes libraries that have been in existence at least 60 years and not more than 90 years. Twenty-two of the libraries (17.2 per cent) are no older than 30 years of age. Eighteen or 14.1 per cent of the libraries fall into the 31-60 years range, and fifteen or 11.7 per cent are between 120 and 151 years of age. The smallest group (seven libraries or 5.5 per cent of all respondents) is composed of libraries that have been in existence for more than 150 years. Table V shows the relationship of age of the institution and level of formalization of the collection development function, when the libraries are placed into five groups on the basis of formalization score and six age groups.

As Table V indicates, there are no clear trends in the joint distributions. Twenty-eight per cent of the libraries in existence over 150 years scored at the lower end of the formalization scale, but an equal number placed in the moderately high group (15-19 points).
### TABLE V

**DEGREE OF FORMALIZATION BY AGE OF LIBRARY**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Age in years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>91-120</td>
<td>121-150</td>
<td>Over 150</td>
<td>TOTAL</td>
</tr>
<tr>
<td>Low 0-4</td>
<td>13.6%</td>
<td>11.1%</td>
<td>13.8%</td>
<td>2.7%</td>
<td>13.3%</td>
<td>28.6%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Medium 5-9</td>
<td>13.6</td>
<td>22.2</td>
<td>27.6</td>
<td>27.0</td>
<td>6.7</td>
<td>0.0</td>
<td>20.3</td>
</tr>
<tr>
<td>10-14</td>
<td>22.7</td>
<td>16.7</td>
<td>27.6</td>
<td>21.6</td>
<td>45.7</td>
<td>42.9</td>
<td>26.6</td>
</tr>
<tr>
<td>High 15-19</td>
<td>45.5</td>
<td>44.4</td>
<td>27.6</td>
<td>40.5</td>
<td>33.3</td>
<td>28.6</td>
<td>37.5</td>
</tr>
<tr>
<td>20-24</td>
<td>4.5</td>
<td>5.6</td>
<td>3.4</td>
<td>8.1</td>
<td>0.0</td>
<td>0.0</td>
<td>4.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=22)</td>
<td>100% (n=18)</td>
<td>100% (n=29)</td>
<td>100% (n=37)</td>
<td>100% (n=15)</td>
<td>100% (n=7)</td>
<td>100% (n=128)</td>
</tr>
</tbody>
</table>
Forty-two per cent of the oldest libraries were in the middle of the range of formalization scores. Among the younger libraries (0-30 years in existence), the largest portion (45.5 per cent) could be found near the higher end of the formalization scale (15-19 points). A similar pattern was observed for libraries in the 31-60 years age range. However, 40.5 per cent of the libraries in the 91-120 years age group also scored toward the higher end of the scale (15-19 points). (When looking at the distribution of formalization score within each age grouping, it should be remembered that more than sixty per cent of the total group of responding libraries received between 10 and 15 points on the collection development formalization scale).

The hypothesis to be tested here states that the older the library, the less formalized will be its collection development. On the basis of the data gathered in this study, the hypothesis cannot be supported. The relationship between age of the library and degree of formalization of the collection development is not strong. The Pearson product-moment correlation coefficient is -0.0311 \( (p=.3638) \).

Degree of Formalization by Age and Other Variables

The possible relationships between the degree of collection development formalization and combinations of the independent variables are also of interest in this study. When participating libraries are sorted
on the basis of the number of graduate degrees offered by their parent institutions, the modal group is that with 3-5 graduate degrees. Table VI shows the joint distributions of age of libraries and degree of collection development formalization when only the institutions with three to five graduate degrees are analyzed. The patterns here are not significantly different from those observed in the total group of libraries. The correlation coefficient for age and formalization in the group of libraries with three to five graduate degrees is \(-0.0079\) \((p=0.479)\). Analyses for those institutions with six to eight graduate degrees and those with nine to eleven graduate degrees produce similar results. Thus it would appear that, when one controls for number of graduate degrees, there is no relationship between age of library and formalization of the collection development function.

The next independent variable to be used as a control for purposes of analysis is the estimate of the number of years of growth space remaining in a library. Directors of eighty of the participating libraries \((62.5\% \text{ per cent})\) estimated the capacity of their present buildings would be reached in four years or less. Table VII shows the joint distributions of age and formalization for only those libraries. Again, this table does not differ significantly from Table V. In this case, the correlation coefficient for the strength of the rela-
### TABLE VI

DEGREE OF FORMALIZATION BY AGE IN LIBRARIES
WHOSE INSTITUTIONS OFFER 3 to 5
GRADUATE DEGREES

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Age in years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>91-120</td>
<td>121-150</td>
<td>Over 150</td>
<td>TOTAL</td>
</tr>
<tr>
<td>0-4</td>
<td>10.0%</td>
<td>20.0%</td>
<td>25.0%</td>
<td>6.7%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>13.3%</td>
</tr>
<tr>
<td>5-9</td>
<td>20.0</td>
<td>20.0%</td>
<td>37.5%</td>
<td>25.7%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>24.4%</td>
</tr>
<tr>
<td>10-14</td>
<td>20.0</td>
<td>20.0%</td>
<td>12.5%</td>
<td>20.0%</td>
<td>33.3%</td>
<td>50.0%</td>
<td>22.2%</td>
</tr>
<tr>
<td>15-19</td>
<td>50.0</td>
<td>40.0%</td>
<td>12.5%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>25.0%</td>
<td>33.3%</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
<td>0.0%</td>
<td>12.5%</td>
<td>13.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>6.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=10)</td>
<td>100% (n=5)</td>
<td>100% (n=8)</td>
<td>100% (n=15)</td>
<td>100% (n=3)</td>
<td>100% (n=4)</td>
<td>100% (n=45)</td>
</tr>
</tbody>
</table>
### TABLE VII

**DEGREE OF FORMALIZATION BY AGE FOR THOSE LIBRARIES WITH GROWTH SPACE OF FOUR YEARS OF LESS**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Age in years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>91-120</td>
<td>121-150</td>
<td>Over 150</td>
</tr>
<tr>
<td>0-4</td>
<td>12.5%</td>
<td>15.4%</td>
<td>13.6%</td>
<td>5.0%</td>
<td>20.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>5-9</td>
<td>12.5%</td>
<td>30.8%</td>
<td>27.3%</td>
<td>35.0%</td>
<td>20.0%</td>
<td>0.0</td>
</tr>
<tr>
<td>10-14</td>
<td>18.8%</td>
<td>23.1%</td>
<td>27.3%</td>
<td>20.0%</td>
<td>20.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>15-19</td>
<td>50.0%</td>
<td>30.8%</td>
<td>27.3%</td>
<td>35.0%</td>
<td>40.0%</td>
<td>0.0</td>
</tr>
<tr>
<td>20-24</td>
<td>6.3%</td>
<td>0.0</td>
<td>4.5%</td>
<td>5.0%</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=16)</td>
<td>100% (n=13)</td>
<td>100% (n=22)</td>
<td>100% (n=20)</td>
<td>100% (n=5)</td>
<td>100% (n=4)</td>
</tr>
</tbody>
</table>
tion between age and formalization is -0.1000 (p=0.189). Even when remaining space for growth is held constant, there is no significant relationship between age and formalization of collection development.

The library's commitment to cooperation as reflected by the attitude of the director was measured on a scale with a possible range of 0 to 7 (See Chapter III for details). The lowest score recorded by any of the responding directors was 2.5, while the highest score was 6.4. When libraries are placed in four groups (2.5-3.4 points; 3.5-4.4 points; 4.5-5.4 points; and 5.5-6.4 points) on the basis of the scores of their directors, the third range of scores (4.5-5.4) contains the most libraries—seventy-four. Table VIII presents the pattern of the joint distribution for age and degree of formalization when only these seventy-four libraries are considered. The correlation coefficient for this group is 0.0907 (p=0.221). There is no evidence here that controlling for director's attitude toward cooperation uncovers a relationship between age and degree of formalization, nor is there such evidence for any other level of the attitude-toward-cooperation scale.

An examination of the independent variable of library membership in cooperative groups indicates that the modal response was two memberships (given by forty-six library directors.) Table IX plots age the degree of formalization
TABLE VIII

DEGREE OF FORMALIZATION BY AGE FOR THOSE LIBRARIES WITH A SCORE OF 4.5-5.4 ON COOPERATION

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Age in years</th>
<th>0-30</th>
<th>31-60</th>
<th>61-90</th>
<th>91-120</th>
<th>121-150</th>
<th>Over 150</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td></td>
<td>14.3%</td>
<td>0.0%</td>
<td>10.5%</td>
<td>5.3%</td>
<td>18.6%</td>
<td>40.0%</td>
<td>12.2%</td>
</tr>
<tr>
<td>5-9</td>
<td></td>
<td>14.3</td>
<td>20.0%</td>
<td>31.6%</td>
<td>21.1%</td>
<td>14.3%</td>
<td>0.0</td>
<td>20.3</td>
</tr>
<tr>
<td>10-14</td>
<td></td>
<td>35.7</td>
<td>20.0%</td>
<td>21.1%</td>
<td>31.6%</td>
<td>28.6%</td>
<td>40.0%</td>
<td>28.4</td>
</tr>
<tr>
<td>15-19</td>
<td></td>
<td>35.7</td>
<td>50.0%</td>
<td>31.6%</td>
<td>31.6%</td>
<td>28.6%</td>
<td>20.0%</td>
<td>33.8</td>
</tr>
<tr>
<td>20-24</td>
<td></td>
<td>0.0</td>
<td>10.0%</td>
<td>5.3%</td>
<td>10.5%</td>
<td>0.0</td>
<td>0.0</td>
<td>5.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100%</td>
<td>(n=14)</td>
<td>100%</td>
<td>(n=10)</td>
<td>100%</td>
<td>(n=19)</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=19)</td>
<td>(n=19)</td>
<td>(n=19)</td>
<td>(n=7)</td>
<td>(n=5)</td>
<td>(n=74)</td>
<td></td>
</tr>
<tr>
<td>Level of coll. dev. formalization</td>
<td>Age in years</td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>90-120</td>
<td>121-150</td>
<td>Over 150</td>
<td>TOTAL</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>0-4</td>
<td></td>
<td>0.0</td>
<td>14.3</td>
<td>0.0</td>
<td>12.5</td>
<td>0.6</td>
<td>20.0</td>
<td>9.6</td>
</tr>
<tr>
<td>5-9</td>
<td></td>
<td>18.2</td>
<td>14.3</td>
<td>0.0</td>
<td>25.0</td>
<td>0.0</td>
<td>20.0</td>
<td>9.6</td>
</tr>
<tr>
<td>10-14</td>
<td></td>
<td>36.4</td>
<td>0.0</td>
<td>0.0</td>
<td>37.5</td>
<td>36.7</td>
<td>60.0</td>
<td>26.1</td>
</tr>
<tr>
<td>15-19</td>
<td></td>
<td>36.4</td>
<td>0.0</td>
<td>25.0</td>
<td>50.0</td>
<td>0.0</td>
<td>68.7</td>
<td>41.3</td>
</tr>
<tr>
<td>20-24</td>
<td></td>
<td>9.1</td>
<td>0.0</td>
<td>0.0</td>
<td>8.3</td>
<td>0.0</td>
<td>0.0</td>
<td>4.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

*(n=16)*
for that group of libraries. The correlation coefficient between age and formalization here is \(-0.1632\) (p=0.139). No relationship between age and formalization appears, nor does it when one conducts a similar analysis for the group of twenty-four libraries with three memberships in cooperative organizations.

Analysis of the reports on library materials budgets from 1972 to 1982 reveals that eighty-six of the 128 libraries used in the study had a materials budget increase of 9 per cent or less. Table X compares age and degree of formalization for only this group; and, as in previous attempts to control one of the independent variables, no new trends emerge. The eighty-six libraries with budget increases of less than 9 per cent produced a correlation coefficient of \(-0.0874\) (p=0.212) between age and formalization. The comparable table (not shown here) for the thirty-one libraries with a 10 to 19 per cent materials budget increase was similar.

**GRADUATE DEGREES OFFERED BY PARENT INSTITUTIONS**

The number of graduate degrees offered by the parent institutions of the libraries surveyed range from one to fourteen. The average is 7.73 degrees, the median is 5 degrees, and the mode is 5 degrees. Libraries were placed into five groups on the basis of number of graduate degrees, as Table XI shows. Most of the libraries (eighty or 62.5 per cent) serve institutions offering
### TABLE X

**Degree of Formalization by Age for Those Libraries with Materials Budget Increases of 9 Per Cent or Less**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Age in years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>91-120</td>
<td>121-150</td>
<td>Over 156'</td>
</tr>
<tr>
<td>0-4</td>
<td>17.6%</td>
<td>8.3%</td>
<td>10.5%</td>
<td>4.0%</td>
<td>22.2%</td>
<td>25.0%</td>
</tr>
<tr>
<td>5-9</td>
<td>5.9%</td>
<td>16.7%</td>
<td>31.6%</td>
<td>36.0%</td>
<td>11.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>10-14</td>
<td>23.5%</td>
<td>25.0%</td>
<td>26.3%</td>
<td>20.0%</td>
<td>33.3%</td>
<td>50.0%</td>
</tr>
<tr>
<td>15-19</td>
<td>52.9%</td>
<td>41.7%</td>
<td>26.3%</td>
<td>28.0%</td>
<td>33.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0%</td>
<td>8.3%</td>
<td>5.3%</td>
<td>12.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td></td>
<td>(n=17)</td>
<td>(n=12)</td>
<td>(n=19)</td>
<td>(n=25)</td>
<td>(n=9)</td>
<td>(n=4)</td>
</tr>
</tbody>
</table>
# TABLE XI

**DEGREE OF FORMALIZATION BY GRADUATE DEGREES**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>No. of grad. degrees offered by institution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>0-4</td>
<td>12.5%</td>
</tr>
<tr>
<td>5-9</td>
<td>12.5</td>
</tr>
<tr>
<td>10-14</td>
<td>33.3</td>
</tr>
<tr>
<td>15-19</td>
<td>41.7</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

(n=24) (n=45) (n=35) (n=13) (n=11) (n=128)
from three to eight graduate degrees. The next largest group includes the twenty-four libraries (18.8 per cent) at institutions offering two graduate degrees or less. Thirteen institutions (10.1 per cent) represented in the study offer from nine to eleven graduate degrees, and eleven (8.6 per cent) offer twelve to fourteen such degrees.

The hypothesis to be tested here states that the greater the number of graduate degrees offered by the parent institution, the greater the degree of formalization of the collection development function in the library. The data collected in this study do not support this hypothesis. The Pearson product-moment correlation coefficient between the number of graduate degrees offered by the parent institution and the degree of collection development formalization is .0721 (p=.2092).

Degree of Formalization, Graduate Degrees and Other Variables

If one takes only the sixty-six libraries that have been in existence for 61-120 years and compares degree of formalization and the number of graduate degrees, the pattern is shown in Table XII. The correlation coefficient between graduate degrees and formalization for this group of sixty-six libraries is 0.03719 (p=0.3834). Controlling for age does not appear to improve the relationship between number of graduate degrees and formalization.
### TABLE XII

**DEGREE OF FORMALIZATION BY GRADUATE DEGREES**
**FOR LIBRARIES 61-120 YEARS OF AGE**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of graduate degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>0-4</td>
<td>0.0</td>
</tr>
<tr>
<td>5-9</td>
<td>33.3</td>
</tr>
<tr>
<td>10-14</td>
<td>33.3</td>
</tr>
<tr>
<td>15-19</td>
<td>33.3</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
<tr>
<td>(n=9)</td>
<td>(n=23)</td>
</tr>
</tbody>
</table>
Analysis of data for the relationship between number of graduate degrees and formalization of collection development when controlling for estimated growth space in the present library building yields results similar to that in the previous analysis. Table XIII shows the joint distributions of graduate degrees and level of formalization of collection development for the eighty libraries estimated by their directors to have growth space for four years or less. The correlation coefficient between graduate degrees and collection development formalization for this group is 0.0901 (p=0.215). Again, no significant relationship can be detected here, and the same holds true for the twenty-seven libraries estimated by their directors to have from five to nine years of growth space remaining.

An examination of the library director's attitude toward cooperation shows that the seventy-four libraries represented by directors scoring from 4.5 through 5.4 on the attitude scale produce no obvious pattern of relationship between number of graduate degrees and formalization of the collection development function. Table XIV shows the joint distributions of degrees and formalization for that group of libraries. The correlation coefficient is 0.1380 (p=0.122).

Among libraries participating in this study, the mode for number of memberships in cooperative organizations is two. Forty-six libraries fall into this group. Table XV
TABLE XIII

DEGREE OF FORMALIZATION BY GRADUATE DEGREES
FOR THOSE LIBRARIES WITH LESS THAN
FOUR YEARS OF GROWTH SPACE

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of graduate degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>0-4</td>
<td>7.7</td>
</tr>
<tr>
<td>5-9</td>
<td>23.1</td>
</tr>
<tr>
<td>10-14</td>
<td>38.5</td>
</tr>
<tr>
<td>15-19</td>
<td>30.8</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

(n=13) (n=29) (n=24) (n=8) (n=6) (n=80)
TABLE XIV

DEGREE OF FORMALIZATION BY GRADUATE DEGREES
FOR THOSE LIBRARIES WITH A SCORE OF
4.5-5.4 ON COOPERATION

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of graduate degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>0-4</td>
<td>21.4</td>
</tr>
<tr>
<td>5-9</td>
<td>14.3</td>
</tr>
<tr>
<td>10-14</td>
<td>28.6</td>
</tr>
<tr>
<td>15-19</td>
<td>35.7</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=14)</td>
</tr>
</tbody>
</table>
### TABLE XV

DEGREE OF FORMALIZATION BY GRADUATE DEGREES
FOR THOSE LIBRARIES WITH TWO
COOPERATIVE MEMBERSHIPS

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of graduate degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>0-4</td>
<td>11.1</td>
</tr>
<tr>
<td>5-9</td>
<td>11.1</td>
</tr>
<tr>
<td>10-14</td>
<td>44.4</td>
</tr>
<tr>
<td>15-19</td>
<td>33.3</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

(n=9) (n=17) (n=11) (n=4) (n=5) (n=46)
shows the joint distributions of graduate degrees and formalization for these forty-six libraries. The correlation coefficient is 0.0578 (p=0.351). The relationship of number of graduate degrees and degree of collection development formalization is not strengthened when controlling for number of memberships in cooperative organizations.

Eighty-six libraries had a materials budget increase from 1972 to 1982 of 9 per cent or less. Taking these eighty-six libraries and comparing number of graduate degrees and formalization of collection development produces the result shown in Table XVI. The correlation coefficient is 0.1225 (p=0.132).

ESTIMATED SPACE FOR COLLECTION GROWTH

The growth potential of the library collection in terms of the director's estimate of the amount of space left in the present building is the third independent variable to be considered in this study. Responses from participants produced a wide range of estimates, from no growth space remaining to space for at least twenty-five years. The average estimate was 4.9 years; the median was 2.75 years. Table XVII shows the joint distributions of growth space estimates, grouped into six sets of ranges, and degree of collection development formalization, presented in the five categories
<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of graduate degree</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
<td>3-5</td>
<td>6-8</td>
<td>9-11</td>
<td>12-14</td>
</tr>
<tr>
<td>0-4</td>
<td>16.7</td>
<td>13.3</td>
<td>8.7</td>
<td>14.3</td>
<td>0.0</td>
</tr>
<tr>
<td>5-9</td>
<td>16.7</td>
<td>23.3</td>
<td>26.1</td>
<td>0.0</td>
<td>37.5</td>
</tr>
<tr>
<td>10-14</td>
<td>38.9</td>
<td>16.7</td>
<td>30.4</td>
<td>28.6</td>
<td>12.5</td>
</tr>
<tr>
<td>15-19</td>
<td>27.8</td>
<td>36.7</td>
<td>30.4</td>
<td>57.1</td>
<td>37.5</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
<td>10.0</td>
<td>4.3</td>
<td>0.0</td>
<td>12.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>(n=18)</td>
<td>(n=30)</td>
<td>(n=23)</td>
<td>(n=7)</td>
<td>(n=8)</td>
<td>(n=86)</td>
</tr>
</tbody>
</table>

TABLE XVI
DEGREE OF FROMALIZATION BY GRADUATE DEGREES
FOR THOSE LIBRARIES WITH A MATERIALS
BUDGET INCREASE OF 9% OR LESS
TABLE XVII

DEGREE OF FORMALIZATION BY POTENTIAL GROWTH SPACE

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>0-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-19</th>
<th>20-24</th>
<th>25-</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>12.5%</td>
<td>7.4%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>10.9%</td>
</tr>
<tr>
<td>5-9</td>
<td>25.0</td>
<td>14.8</td>
<td>12.5%</td>
<td>0.0%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>20.3%</td>
</tr>
<tr>
<td>10-14</td>
<td>25.0</td>
<td>29.6</td>
<td>37.5%</td>
<td>25.0%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>26.6%</td>
</tr>
<tr>
<td>15-19</td>
<td>33.8</td>
<td>44.4</td>
<td>25.0%</td>
<td>50.0%</td>
<td>33.3%</td>
<td>100.0</td>
<td>37.5%</td>
</tr>
<tr>
<td>20-24</td>
<td>3.8</td>
<td>3.7</td>
<td>25.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>4.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

(n=80) (n=27) (n=8) (n=8) (n=3) (n=2) (n=128)
used in all previous tables. Of the 128 libraries participating in the study, 107 or 83.6 per cent report available growth space for nine years or less, while sixteen or 12.6 per cent report growth space for ten to twenty years. Only five or 3.9 per cent of the directors estimate that present space will allow for collection growth in excess of twenty years.

The hypothesis to be tested here states that the greater the library's growth potential, the lower the degree of formalization of its collection development function. The Pearson product-moment correlation coefficient for these two variables is 0.1362 (p=.0626). Although the correlation coefficient comes very close to being significant at the .05 level, the strength of the relationship is not strong, and this hypothesis will also be rejected. For the participants in this study, the data indicate only a weak relationship between collection growth space and degree of formalization of the collection development function.

**Degree of Formalization, Estimated Growth Space and Other Variables**

For the independent variable represented by the directors' estimates of collection growth space remaining in their present buildings, the pattern of analysis described earlier in this chapter for other independent variables was again conducted. The modal
group for each of the other independent variables was selected and cross tabulations and correlation coefficients were produced for estimated growth space and degree of collection development formalization. Results here were much the same as in all the earlier analyses. For the sixty-six libraries that have been in existence from 61-120 years, the correlation coefficient for estimated growth space and degree of collection development formalization is 0.1874 (p=0.066). Seventy-four libraries in the study had directors who scored from 4.5 to 5.4 on the scale designed to measure attitude toward cooperation. This group of libraries has a correlation coefficient of 0.1133 (p=0.168) for estimated growth space and degree of collection development formalization. Libraries with two memberships in cooperative organizations have a correlation coefficient of 0.1910 (p=0.102) for those variables. The eighty-six libraries with materials budget increases of 9 per cent or less likewise show little relationship between estimated growth space and degree of collection development formalization (correlation coefficient of 0.0808 (p=0.230).

DIRECTOR'S ATTITUDE TOWARD COOPERATION

The library director's attitude toward cooperation, as measured by the short attitude survey described in Chapter III, is the next independent variable to be
considered. The scores on the attitude survey ranged from 2.5 to 6.4 points, out of a possible range of 0.0 to 7.0 points. For the 123 libraries used in the analysis (five had missing data), the average was 5.06 points, and the median was 4.75 points. Table XVIII shows the joint distribution of directors' scores on the attitude survey, condensed into four groups, and the level of their libraries' formalization of the collection development function. Fifty-one per cent of the libraries with directors scoring 5.5 points or higher on the attitude survey had collection development formalization scores of 15 points or higher, while 60.9 per cent of those with directors scoring below 5.5 points also had collection development formalization scores of less than 15 points. These apparent differences, however, are not significant.

The hypothesis to be tested here predicted that the more favorable the director's feeling toward cooperation, as measured by the attitude survey, the higher would be the library's score on the collection development formalization scale. On the basis of data analyzed here, the hypothesis is not supported. The Pearson product-moment correlation coefficient for director's attitude toward cooperation and degree of collection development formalization is 0.0265 (p=.3853).
## TABLE XVIII

**DEGREE OF FORMALIZATION BY COOPERATIVE PHILOSOPHY**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Range of scores on opinion survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5-3.4</td>
</tr>
<tr>
<td>0-4</td>
<td>0.0%</td>
</tr>
<tr>
<td>5-9</td>
<td>33.3</td>
</tr>
<tr>
<td>10-14</td>
<td>33.3</td>
</tr>
<tr>
<td>15-19</td>
<td>33.3</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
<tr>
<td>(n=3)</td>
<td>(n=15)</td>
</tr>
</tbody>
</table>
Degree of Formalization, Attitude Toward Cooperation and Other Variables

Attempts were again made to look at strength of relationship between one independent variable—director's attitude toward cooperation—and the dependent variable of degree of collection development formalization when the other five variables were at least partially controlled. Modal groups for each of the other independent variables were selected and cross tabulations and correlation coefficients produced. For the group of sixty-six libraries that have been in existence from 61-120 years, the correlation coefficient for director's attitude toward cooperation and degree of collection development formalization is 0.2032 (p=0.051). The forty-five libraries at institutions offering three to five graduate degrees produce a correlation coefficient 0.1837 (p=0.114) for the same variables. Eighty libraries in the study were estimated by their directors to have growth space remaining for four years or less. This group of libraries has a correlation coefficient of 0.0937 (p=0.204) for director's attitude toward cooperation and collection development formalization. Libraries with two memberships in cooperative organizations (the modal group, with forty-six members) have a correlation coefficient of 0.0163 (p=0.457) for those two variables. The eighty-six libraries with materials budget increases of 9 per cent or less likewise showed little relationship between estimated
growth space and degree of collection development (correlation coefficient of 0.080 (p=0.230).

MEMBERSHIP IN COOPERATIVE ORGANIZATIONS

While surveying library directors to ascertain their attitudes, as individuals, toward cooperation is one way to get at the library's cooperative stance, looking at actual memberships is another. The memberships in cooperative organizations reported for libraries participating in this study range from none to six. The average is 1.93, the median is 2, and the mode is 2. Table XIX shows the joint distributions of number of cooperative memberships and level of collection development formalization. Thirty-six per cent of those with one membership had collection development formalization scores of 15 points or higher, as did 45 per cent of the libraries with two memberships and 50 per cent of the libraries with three or more memberships.

The hypothesis to be tested here predicts that the greater the number of memberships in cooperative organizations, the higher the level of collection development formalization. With the data collected in this study, the hypothesis receives some support. The Pearson product-moment correlation coefficient for number of memberships and degree of collection development formalization is 0.1694 (p=.0279). The relationship is weak, but significant.
<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>No. of cooperative memberships</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td></td>
<td>30.0%</td>
<td>10.5%</td>
<td>8.7%</td>
<td>4.2%</td>
<td>28.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>10.9%</td>
</tr>
<tr>
<td>5-9</td>
<td></td>
<td>20.0</td>
<td>23.7</td>
<td>19.6</td>
<td>20.8</td>
<td>0.0</td>
<td>100.0</td>
<td>0.0</td>
<td>20.3</td>
</tr>
<tr>
<td>10-14</td>
<td></td>
<td>30.0</td>
<td>28.9</td>
<td>26.1</td>
<td>25.0</td>
<td>28.6</td>
<td>0.0</td>
<td>0.0</td>
<td>26.6</td>
</tr>
<tr>
<td>15-19</td>
<td></td>
<td>20.0</td>
<td>36.8</td>
<td>41.3</td>
<td>33.3</td>
<td>42.9</td>
<td>0.0</td>
<td>100.0</td>
<td>37.5</td>
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<tr>
<td>20-24</td>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>4.3</td>
<td>16.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=10)</td>
<td>(n=38)</td>
<td>(n=46)</td>
<td>(n=24)</td>
<td>(n=7)</td>
<td>(n=1)</td>
<td>(n=2)</td>
<td>(n=128)</td>
</tr>
</tbody>
</table>
Degree of Formalization, Cooperative Memberships and Other Variables

Analysis was again conducted to search for a relationship between the independent variable—in this case, library memberships in cooperative organizations—and the dependent variable of degree of collection development formalization when other independent variables were at least partially controlled. For the sixty-six libraries that have been in existence from 61-120 years, the correlation coefficient for cooperative memberships and collection development formalization is 0.068 (p=0.293). The forty-five libraries at institutions offering from three to five graduate degrees produce a correlation coefficient of 0.2096 (p=0.083) for the same variables. Eighty libraries in the study were estimated by their directors to have growth space remaining for four years or less. This group of libraries has a correlation coefficient of 0.1196 (p=0.145) for number of memberships in cooperative organizations and level of collection development formalization. Seventy-four libraries have directors who scored from 4.5 through 5.4 on the scale designed to measure attitude toward cooperation. They produce a correlation coefficient of -0.0447 (p=0.535). The eighty-six libraries with average materials budget increases of 9 per cent or less, however, showed a small but significant relationship between memberships in cooperative organizations and collection development formalization (correlation coefficient of 0.2183 (p=0.022).
The sixth variable to be examined is the percentage of increase (or decrease) in the library's materials budget from 1972 to 1982. The range of percentages of increase is wide—from a one per cent increase over the ten year period to an increase of 120 per cent. The mean was 9 per cent, and the median was 10.17 per cent. As Table XX shows, eighty-six or 67.2 per cent of the libraries had an increase of 9 per cent or less, while thirty-one or 24.2 per cent had an increase of from 10 to 19 per cent. Only eleven libraries (8.6 per cent) had increases of 20 per cent or more.

The hypothesis to be tested in this instance states that the greater the increase in the materials budget, the lower the degree of collection development formalization. The hypothesis does not appear to be supported, based upon the data in this study. The Pearson product-moment correlation coefficient for the rate of change in the materials budget and the level of formalization of the collection development function is 0.424 (p=0.317).

Degree of Formalization, Budget Increase and Other Variables

If one takes only the sixty-six libraries that have been in existence for 61-120 years and compares rate of materials budget increase and the degree of collection development formalization, the correlation coefficient is 0.0518 (p=0.340). The forty-five libraries at institutions
<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Per cent of materials budget increase</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-9</td>
<td>10-19</td>
</tr>
<tr>
<td>0-4</td>
<td>11.6%</td>
<td>12.9%</td>
</tr>
<tr>
<td>5-9</td>
<td>22.1%</td>
<td>19.4%</td>
</tr>
<tr>
<td>10-14</td>
<td>25.6%</td>
<td>19.4%</td>
</tr>
<tr>
<td>15-19</td>
<td>34.9%</td>
<td>45.2%</td>
</tr>
<tr>
<td>20-24</td>
<td>5.8%</td>
<td>3.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(n=86)</td>
<td>(n=31)</td>
</tr>
</tbody>
</table>

**TABLE XX**

DEGREE OF FORMALIZATION BY RATE OF MATERIALS BUDGET INCREASE
offering from three to five graduate degrees produce a correlation coefficient of -0.713 (p=0.321) for the same variables. Eighty libraries in the study were estimated by their directors to have growth space remaining for four years or less. This group of libraries has a correlation coefficient of 0.0022 (p=0.492) for rate of budget increase and collection development formalization. Seventy-four libraries in the study had directors who scored from 4.5 through 5.4 on the scale designed to measure attitude toward cooperation. These libraries have a correlation coefficient of -0.447 (p=0.484) for the two variables in question. Libraries with two memberships in cooperative organizations (forty-six libraries) have a correlation coefficient of -0.1060 (p=0.242) for the same variables—percentage of materials budget increase and level of collection development formalization.

SIZE OF LIBRARY COLLECTION

The number of bound volumes in the library was not chosen as an independent variable to be used in this study. However, a request for information on collection size was included in the questionnaire and supplied by all but nine of the library directors, so it seems appropriate to examine this variable and its possible relationship to the degree of formalization of the collection development function. The number of bound volumes reported by the libraries in this study ranged from 250,322 to 600,000. The mean is 365,903 volumes, and the median is 373,520 volumes. Table
XXI shows the joint distributions of bound volume holdings, by groups based on 50,000-volume intervals, and the level of collection development formalization. Twenty-one (17.6 per cent) of the libraries surveyed reported a bound volume collection of 250,000 to 299,999. An equal number reported holdings in the 350,000-399,999 volume range. Twenty-seven (22.7 per cent) have collections of 300,000-349,999 bound volumes. Collections between 400,000 and 500,000 volumes are held by thirty-two of the participants (26.9 per cent), and thirty libraries (25.2 per cent) have 500,000 to 600,000 volumes. The Pearson product-moment correlation coefficient between size of collection and degree of formalization of the collection development function is 0.1952 (p=0.0167), thus the relationship is significant.

Collection Size and Other Variables

Since reported holdings of bound volumes varied so much among the libraries participating in this study, it may also be of interest to compare this variation to that of the six selected independent variables.

Table XXII shows the joint distribution of age of the library and collection size. Forty-five per cent of the libraries in existence for ninety-one years or more have collections of at least 400,000 bound volumes. Thirty-nine libraries in existence for ninety years or less (61.9 per cent of that age group) have collections of less
<table>
<thead>
<tr>
<th>Level of coll. dev.</th>
<th>Size of bd. vol. collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250,000-299,999</td>
</tr>
<tr>
<td>0-4</td>
<td>14.3%</td>
</tr>
<tr>
<td>5-9</td>
<td>19.0</td>
</tr>
<tr>
<td>10-14</td>
<td>33.3</td>
</tr>
<tr>
<td>15-19</td>
<td>33.3</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

(n=21) (n=27) (n=21) (n=20) (n=12) (n=9) (n=9) (n=119)
<table>
<thead>
<tr>
<th>No. of bd. volumes</th>
<th>Age in years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>91-120</td>
<td>121-150</td>
<td>151-</td>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250,000-299,999</td>
<td>19.0%</td>
<td>13.3%</td>
<td>14.3%</td>
<td>15.2%</td>
<td>33.3%</td>
<td>14.3%</td>
<td>17.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300,000-349,999</td>
<td>23.8</td>
<td>20.0</td>
<td>28.6</td>
<td>21.2</td>
<td>13.3</td>
<td>26.6</td>
<td>22.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>350,000-399,999</td>
<td>23.8</td>
<td>20.0</td>
<td>17.9</td>
<td>12.1</td>
<td>20.0</td>
<td>14.3</td>
<td>17.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400,000-449,999</td>
<td>19.0</td>
<td>13.3</td>
<td>14.3</td>
<td>18.2</td>
<td>20.0</td>
<td>14.3</td>
<td>16.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450,000-499,999</td>
<td>4.8</td>
<td>13.3</td>
<td>10.7</td>
<td>12.1</td>
<td>13.3</td>
<td>0.0</td>
<td>10.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500,000-549,999</td>
<td>4.8</td>
<td>13.3</td>
<td>7.1</td>
<td>6.1</td>
<td>0.0</td>
<td>28.6</td>
<td>7.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>550,000-600,000</td>
<td>4.8</td>
<td>6.7</td>
<td>7.1</td>
<td>15.2</td>
<td>0.0</td>
<td>0.0</td>
<td>7.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=21)</td>
<td>100% (n=15)</td>
<td>100% (n=28)</td>
<td>100% (n=33)</td>
<td>100% (n=15)</td>
<td>100% (n=7)</td>
<td>100% (n=119)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
than 400,000 volumes. The Pearson product-moment correlation coefficient for age and size of .01401 (p=.4399). Surprisingly, there appears to be no relationship between age and collection size.

Table XXIII presents the joint distributions for number of graduate degrees offered by the parent institution and size of the collection in terms of bound volumes. Here it can be seen that thirty of the libraries at institutions offering six or more graduate degrees (54.5 per cent of that group) have 400,000 volumes or more. Seventy per cent of the libraries (forty-four) at institutions with five graduate degrees or less also have collections of less than 400,000 volumes. The relationship between these two variables is significant. The Pearson product-moment correlation coefficient is .3898 (p=.0000).

The relationship between size of the collection in bound volumes and estimated growth space remaining in the present library building is shown in Table XXIV. Twenty-seven (36.9 per cent) of the libraries whose directors estimated four years or less of growth space have collections of 400,000 volumes or more, but 53.8 per cent (fourteen of twenty-six) of the libraries with five to nine years of estimated growth space also have collections of at least 400,000 volumes. The Pearson product-moment correlation coefficient in this case is .0018 (p=.4921).
### TABLE XXIII

**SIZE OF COLLECTION BY GRADUATE DEGREES**

<table>
<thead>
<tr>
<th>No. of bd. volumes</th>
<th>Graduate degrees offered by institution</th>
<th>0-2</th>
<th>3-5</th>
<th>6-8</th>
<th>9-11</th>
<th>12-14</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>250,000-299,999</td>
<td></td>
<td>41.7%</td>
<td>20.0%</td>
<td>9.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>17.6%</td>
</tr>
<tr>
<td>300,000-349,999</td>
<td></td>
<td>29.2%</td>
<td>22.5%</td>
<td>18.8%</td>
<td>23.1%</td>
<td>20.0%</td>
<td>22.7%</td>
</tr>
<tr>
<td>350,000-399,999</td>
<td></td>
<td>12.5%</td>
<td>17.5%</td>
<td>21.9%</td>
<td>23.1%</td>
<td>10.0%</td>
<td>17.6%</td>
</tr>
<tr>
<td>400,000-449,999</td>
<td></td>
<td>4.2%</td>
<td>22.5%</td>
<td>21.9%</td>
<td>23.1%</td>
<td>0.0%</td>
<td>16.8%</td>
</tr>
<tr>
<td>450,000-499,999</td>
<td></td>
<td>8.3%</td>
<td>5.0%</td>
<td>12.5%</td>
<td>15.4%</td>
<td>20.0%</td>
<td>10.1%</td>
</tr>
<tr>
<td>500,000-549,999</td>
<td></td>
<td>0.0%</td>
<td>5.0%</td>
<td>12.5%</td>
<td>7.7%</td>
<td>20.2%</td>
<td>7.6%</td>
</tr>
<tr>
<td>550,000-600,000</td>
<td></td>
<td>4.2%</td>
<td>7.5%</td>
<td>3.1%</td>
<td>7.7%</td>
<td>30.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100% (n=24)</td>
<td>100% (n=40)</td>
<td>100% (n=32)</td>
<td>100% (n=13)</td>
<td>100% (n=10)</td>
<td>100% (n=119)</td>
</tr>
<tr>
<td>No. of bd. volumes</td>
<td>Growth potential in years</td>
<td>0-4</td>
<td>5-9</td>
<td>10-14</td>
<td>15-19</td>
<td>20-24</td>
<td>25-</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>250,000-299,999</td>
<td></td>
<td>17.8%</td>
<td>23.1%</td>
<td>14.3%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>300,000-349,999</td>
<td></td>
<td>26.0</td>
<td>11.5</td>
<td>0.0</td>
<td>25.0</td>
<td>66.7</td>
<td>50.0</td>
</tr>
<tr>
<td>350,000-399,999</td>
<td></td>
<td>19.2</td>
<td>11.5</td>
<td>14.3</td>
<td>25.0</td>
<td>33.3</td>
<td>0.0</td>
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<td></td>
<td>9.6</td>
<td>38.5</td>
<td>14.3</td>
<td>25.0</td>
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<tr>
<td>450,000-499,999</td>
<td></td>
<td>11.0</td>
<td>3.8</td>
<td>14.3</td>
<td>12.5</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>500,000-549,999</td>
<td></td>
<td>8.2</td>
<td>3.8</td>
<td>28.6</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>550,000-600,000</td>
<td></td>
<td>8.2</td>
<td>7.7</td>
<td>14.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(n=73)</td>
<td>(n=26)</td>
<td>(n=7)</td>
<td>(n=8)</td>
<td>(n=3)</td>
<td>(n=2)</td>
<td>(n=119)</td>
</tr>
</tbody>
</table>

TABLE XXIV
SIZE OF COLLECTION BY GROWTH POTENTIAL
The library director's attitude toward cooperation and the library's size in bound volumes appear to have little relationship, probably because there is a relatively small variation among the directors on their responses to the attitude survey used in this study. Table XXV shows the joint distributions of these two variables--director's attitude toward cooperation and size of the collection. The correlation coefficient is .0064 (p=.4730).

The joint distribution of number of memberships in cooperative organizations and collection size in bound volumes is shown in Table XXVI. Sixty per cent of the libraries reporting three or more cooperative memberships had collections of 400,000 volumes or more, while 64 per cent of the libraries with one or two memberships had less than 400,000 volumes. The Pearson product-moment correlation coefficient between cooperative memberships and collection size is .1297 (p=.0873).

Table XXVII shows the relationship of percentage of materials budget increase and number of bound volumes. Eighteen (58.1 per cent) of the libraries with budget increases in the 10-19 per cent range have collections of less than 400,000 volumes, as does a similar proportion (59.7 per cent) of the libraries with 0-9 per cent budget increases over the 1972-1982 period. The correlation coefficient is .0324 (p=.3669).
<table>
<thead>
<tr>
<th>No. of bound volumes</th>
<th>Range of scores on opinion survey</th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5-3.4</td>
<td>3.5-4.4</td>
<td>4.5-5.4</td>
<td>5.5-6.5</td>
</tr>
<tr>
<td>250,000-299,999</td>
<td>0.0%</td>
<td>14.3%</td>
<td>20.6%</td>
<td>17.2%</td>
</tr>
<tr>
<td>300,000-349,999</td>
<td>0.0%</td>
<td>21.4%</td>
<td>22.1%</td>
<td>20.7%</td>
</tr>
<tr>
<td>350,000-399,999</td>
<td>66.7%</td>
<td>21.4%</td>
<td>14.7%</td>
<td>20.7%</td>
</tr>
<tr>
<td>400,000-449,999</td>
<td>33.3%</td>
<td>21.4%</td>
<td>20.6%</td>
<td>3.4%</td>
</tr>
<tr>
<td>450,000-499,999</td>
<td>0.0%</td>
<td>0.0%</td>
<td>4.4%</td>
<td>31.0%</td>
</tr>
<tr>
<td>500,000-549,999</td>
<td>0.0%</td>
<td>7.1%</td>
<td>10.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>550,000-600,000</td>
<td>0.0%</td>
<td>14.3%</td>
<td>7.4%</td>
<td>6.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(n=3)</td>
<td>(n=14)</td>
<td>(n=68)</td>
<td>(n=29)</td>
</tr>
</tbody>
</table>
### TABLE XXVI
SIZE OF COLLECTION BY COOPERATIVE MEMBERSHIPS

<table>
<thead>
<tr>
<th>No. of bd. volumes</th>
<th>No. of cooperative memberships</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>250,000-299,999</td>
<td>19.4%</td>
<td>21.4%</td>
<td>8.7%</td>
<td>28.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>300,000-349,999</td>
<td>27.8</td>
<td>19.0</td>
<td>30.4</td>
<td>14.3</td>
<td>0.0</td>
<td>0.0</td>
<td>23.4</td>
</tr>
<tr>
<td>350,000-399,999</td>
<td>19.4</td>
<td>21.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>50.0</td>
<td>15.3</td>
</tr>
<tr>
<td>400,000-449,999</td>
<td>13.9</td>
<td>14.3</td>
<td>26.1</td>
<td>14.3</td>
<td>100.0</td>
<td>0.0</td>
<td>17.1</td>
</tr>
<tr>
<td>450,000-499,999</td>
<td>5.6</td>
<td>9.5</td>
<td>8.7</td>
<td>42.9</td>
<td>0.0</td>
<td>50.0</td>
<td>10.8</td>
</tr>
<tr>
<td>500,000-549,999</td>
<td>5.6</td>
<td>9.5</td>
<td>13.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>8.1</td>
</tr>
<tr>
<td>550,000-600,000</td>
<td>8.3</td>
<td>4.8</td>
<td>13.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>7.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(n=36)</td>
<td>(n=42)</td>
<td>(n=23)</td>
<td>(n=7)</td>
<td>(n=1)</td>
<td>(n=2)</td>
<td>(n=111)</td>
</tr>
<tr>
<td>No. of bound volumes</td>
<td>Per cent of materials budget increase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-9</td>
<td>10-19</td>
<td>20-29</td>
<td>30-39</td>
<td>40-49</td>
<td>50-</td>
<td>TOTAL</td>
</tr>
<tr>
<td>250,000-299,999</td>
<td>19.5%</td>
<td>12.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>66.7%</td>
<td>17.6%</td>
</tr>
<tr>
<td>300,000-349,999</td>
<td>23.1%</td>
<td>22.6%</td>
<td>40.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>22.7%</td>
</tr>
<tr>
<td>350,000-399,999</td>
<td>16.9%</td>
<td>22.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>17.6%</td>
</tr>
<tr>
<td>400,000-449,999</td>
<td>13.0%</td>
<td>22.6%</td>
<td>40.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>16.8%</td>
</tr>
<tr>
<td>450,000-499,999</td>
<td>13.0%</td>
<td>3.2%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>10.1%</td>
</tr>
<tr>
<td>500,000-549,999</td>
<td>9.1%</td>
<td>3.2%</td>
<td>20.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>550,000-600,000</td>
<td>5.2%</td>
<td>12.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>33.3%</td>
<td>7.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

(n=77) (n=31) (n=5) (n=2) (n=1) (n=3) (n=119)
RELATIONSHIP OF THE VARIABLES IN
PUBLIC INSTITUTIONS

Of the 128 libraries participating in this study, eighty-seven or 62.5 per cent of them are at publicly-supported institutions. Is the relationship of the degree of formalization of these libraries' collection development functions with the six independent variables similar to that of the group as a whole? Cross tabulations and correlation coefficients were produced for these libraries, using the same groupings of the dependent and independent variables as was used with the total group.

Age of the Library

The largest number of publicly-supported libraries (twenty-eight or 32.2 per cent) fall into the 91-120 years-old range. The next largest group (twenty or 23 per cent) include libraries that are at least sixty years but not more than 90 years of age. Eighteen of the libraries (20.7 per cent) are no older than 30 years of age. Sixteen or 18.4 per cent of the libraries range in age from 31 to 60 years, and four (4.6 per cent) are in the 121-150 years-old range. Only one or 1.1 per cent is over 150 years of age. Table XXVIII shows the relationship of age of the institution and the level of formalization of the collection development function in those libraries at public institutions.

The relationship in this instance follows the same
TABLE XXVIII

DEGREE OF FORMALIZATION BY AGE FOR LIBRARIES IN PUBLIC INSTITUTIONS

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Age in years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-30</td>
<td>31-60</td>
<td>61-90</td>
<td>91-120</td>
<td>120-150</td>
<td>151-</td>
<td>TOTAL</td>
<td></td>
</tr>
<tr>
<td>0-4</td>
<td>16.7</td>
<td>12.5</td>
<td>20.0</td>
<td>3.6</td>
<td>25.0</td>
<td>0.0</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>5-9</td>
<td>5.6</td>
<td>18.8</td>
<td>30.0</td>
<td>32.1</td>
<td>25.0</td>
<td>0.0</td>
<td>23.0</td>
<td></td>
</tr>
<tr>
<td>10-14</td>
<td>27.8</td>
<td>18.8</td>
<td>15.0</td>
<td>21.4</td>
<td>25.0</td>
<td>100.0</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>44.4</td>
<td>43.8</td>
<td>30.0</td>
<td>35.7</td>
<td>25.0</td>
<td>0.0</td>
<td>36.8</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>5.6</td>
<td>6.3</td>
<td>5.0</td>
<td>7.1</td>
<td>0.0</td>
<td>0.0</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=18)</td>
<td>100%  (n=20)</td>
<td>100%  (n=28)</td>
<td>100%  (n=4)</td>
<td>100%  (n=1)</td>
<td>100%  (n=87)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
pattern as does the relationship between age and formalization of the collection development function for the entire group of libraries, differing only in proportion. If the same hypothesis is tested, again data do not demonstrate that the older the library the less formalized will be its collection development function. The Pearson product-moment correlation coefficient is -0.0708 (p=0.2571).

Graduate Degrees Offered by Parent Institution

The same five groupings of graduate degrees offered at the parent institution were used with the eighty-seven libraries at publicly-supported institutions. Most of the libraries (sixty-one or 70.1 per cent) are at institutions offering from three to eight graduate degrees as Table XXIX shows. The next largest group (ten or 11.5 per cent) are at institutions offering from twelve to fourteen graduate degrees. Two sets of eight libraries (19.2 per cent) occur: (1) at institutions offering less than three graduate degrees and (2) at institutions offering from nine to eleven such programs. Libraries at publicly-supported institutions show approximately the same relationship between number of graduate degrees and formalization of the collection development function as the total group studied. The correlation coefficient is 0.0177 (p=0.4352).

Estimated Space for Collection Growth

The growth potential of the library collection in terms
TABLE XXIX

DEGREE OF FORMALIZATION BY NUMBER OF GRADUATE DEGREES
OFFERED BY PARENT INSTITUTION FOR LIBRARIES
IN PUBLIC INSTITUTIONS

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of graduate degrees</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
<td>3-5</td>
<td>6-8</td>
<td>9-11</td>
<td>12-14</td>
<td></td>
</tr>
<tr>
<td>0-4</td>
<td>12.5</td>
<td>13.9</td>
<td>16.0</td>
<td>12.5</td>
<td>0.0</td>
<td>12.6</td>
</tr>
<tr>
<td>5-9</td>
<td>12.5</td>
<td>19.4</td>
<td>28.0</td>
<td>12.5</td>
<td>40.0</td>
<td>23.0</td>
</tr>
<tr>
<td>10-14</td>
<td>37.5</td>
<td>22.2</td>
<td>20.0</td>
<td>12.5</td>
<td>20.0</td>
<td>21.8</td>
</tr>
<tr>
<td>15-19</td>
<td>37.5</td>
<td>36.1</td>
<td>32.0</td>
<td>62.5</td>
<td>30.0</td>
<td>36.8</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
<td>8.3</td>
<td>4.0</td>
<td>0.0</td>
<td>10.0</td>
<td>5.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=8)</td>
<td>100% (n=36)</td>
<td>100% (n=25)</td>
<td>100% (n=8)</td>
<td>100% (n=10)</td>
<td>100% (n=87)</td>
</tr>
</tbody>
</table>
of the director's estimate of the amount of space left in
the present building is the third independent variable to
be considered in the study. Table XXX shows the joint
distributions of growth space estimates, grouped into
the six sets of ranges, and the degree of collection
development formalization, presented in the five categories
used in all previous tables. Of the eighty-seven libraries
at public institutions, seventy-five or 86.2 per cent of
them report available growth space for nine years or less,
while nine or 10.3 per cent report available growth
space for ten to twenty years. Only three (3.4 per cent)
of the directors estimated their available growth space
in excess of twenty years. This pattern is the same for
the group of libraries at public institutions as it is
for the entire group of 128 libraries used in the study.

Data analyzed for potential growth space and
collection development formalization do not support the
hypothesis that the greater the available growth space the
less formalized the collection development function. The
Pearson product-moment correlation coefficient for these
variables in libraries at public institutions is 0.1141
(p=0.1462).

Director's Attitude Toward Cooperation

The next independent variable to be considered is
the library director's attitude toward cooperation as
measured by the short attitude survey (see Chapter III).
TABLE XXX

DEGREE OF FORMALIZATION BY POTENTIAL GROWTH SPACE FOR LIBRARIES
IN PUBLIC INSTITUTIONS

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Potential growth space in years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-4</td>
</tr>
<tr>
<td>0-4</td>
<td>13.6</td>
</tr>
<tr>
<td>5-9</td>
<td>25.4</td>
</tr>
<tr>
<td>10-14</td>
<td>20.3</td>
</tr>
<tr>
<td>15-19</td>
<td>35.6</td>
</tr>
<tr>
<td>20-24</td>
<td>5.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(n=59)</td>
</tr>
</tbody>
</table>
Table XXXI shows the joint distributions of directors' scores on the attitude survey and the level of their libraries' formalization of the collection development function for libraries at the eighty-seven publicly-supported institutions.

The largest number of libraries (fifty-three or 57 per cent) have directors who scored in the 4.5 to 5.4 range on the attitude survey, and 37.8 per cent of these had collection development formalization scores of fifteen points or higher. The directors of twenty-one libraries or 25.3 per cent had scores of 5.5 to 6.4 on the attitude survey with 52.4 per cent of them having collection development formalization scores in excess of fifteen points.

When only libraries in publicly-supported institutions are considered, the hypothesis that the more favorable the director's feeling toward cooperation, as measured by the attitude survey, the higher would be the library's score on the collection development formalization scale is not supported. The Pearson product-moment correlation coefficient for director's attitude toward cooperation and degree of collection development formalization for libraries at public institutions is 0.0489 (p=0.3303).

Memberships in Cooperative Organizations

The number of cooperative groups to which a library belongs is another way to get at the library's attitude
TABLE XXXI

DEGREE OF FORMALIZATION BY COOPERATIVE PHILOSOPHY
FOR THOSE LIBRARIES IN PUBLIC INSTITUTIONS

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Range of scores on opinion survey</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5-3.4</td>
<td>3.5-4.4</td>
</tr>
<tr>
<td>0-4</td>
<td>0.0</td>
<td>12.5</td>
</tr>
<tr>
<td>5-9</td>
<td>100.0</td>
<td>25.0</td>
</tr>
<tr>
<td>10-14</td>
<td>0.0</td>
<td>12.5</td>
</tr>
<tr>
<td>15-19</td>
<td>0.0</td>
<td>37.5</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
<td>12.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(n=1)</td>
<td>(n=8)</td>
</tr>
</tbody>
</table>


toward cooperation. Table XXXII shows the joint distributions for number of cooperative memberships and level of collection development formalization. Thirty-seven per cent of the publicly-supported libraries reporting one cooperative membership had collection development formalization scores above fifteen points, while 54 per cent of those reporting two memberships had scores above fifteen points. Of the libraries reporting three cooperative memberships, 46 per cent had collection development formalization scores of fifteen points or higher.

Data analyzed in this case fail to support the hypothesis that the greater the number of memberships in cooperative organizations, the higher the level of collection development formalization when considering only those eighty-seven libraries at publicly-supported institutions. The Pearson product-moment correlation coefficient for number of memberships and degree of collection development formalization is 0.0464 (p=0.3423).

Rate of Change in Materials Budget

The sixth variable to be examined is the percentage of increase (or decrease) in the library's materials budget from 1972 to 1982. As Table XXXIII shows, sixty-four or 73.6 per cent of the libraries at public institutions had a materials budget increase of nine per cent or less for the ten year period considered in this study.
### TABLE XXXII

**DEGREE OF FORMALIZATION BY NUMBER OF COOPERATIVE MEMBERSHIPS FOR THOSE LIBRARIES IN PUBLIC INSTITUTIONS**

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Number of cooperative memberships</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>12.5</td>
<td>5.9</td>
<td>7.7</td>
<td>33.3</td>
<td>0.0</td>
<td>0.0</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>5-9</td>
<td>29.2</td>
<td>20.6</td>
<td>23.1</td>
<td>0.0</td>
<td>100.0</td>
<td>0.0</td>
<td>22.8</td>
<td></td>
</tr>
<tr>
<td>10-14</td>
<td>20.8</td>
<td>20.6</td>
<td>23.1</td>
<td>33.3</td>
<td>0.0</td>
<td>0.0</td>
<td>21.5</td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>37.5</td>
<td>47.1</td>
<td>23.1</td>
<td>33.3</td>
<td>0.0</td>
<td>100.0</td>
<td>39.2</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
<td>5.9</td>
<td>23.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>(n=79)</strong></td>
</tr>
</tbody>
</table>
**TABLE XXXIII**

DEGREE OF FORMALIZATION BY RATE OF MATERIALS BUDGET INCREASE 
FOR THOSE LIBRARIES IN PUBLIC INSTITUTIONS

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Percentage of materials budget increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-9</td>
</tr>
<tr>
<td>0-4</td>
<td>12.5</td>
</tr>
<tr>
<td>5-9</td>
<td>25.0</td>
</tr>
<tr>
<td>10-14</td>
<td>20.3</td>
</tr>
<tr>
<td>15-19</td>
<td>35.9</td>
</tr>
<tr>
<td>20-24</td>
<td>6.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>
<pre><code>                              | (n=64)| (n=19)| (n=1) | (n=1) | (n=1) | (n=1)| (n=87) |
</code></pre>
Nineteen libraries (21.8 per cent) reported a materials budget increase of from 10 to 19 per cent. Only one library appeared in each of the other ranges of budget increases.

The hypothesis to be tested in this instance states that the greater the increase in the materials budget, the lower the degree of collection development formalization. Based upon the data in this study, the hypothesis does not appear to be supported when only libraries at public institutions are considered. The correlation coefficient for the rate of change in the materials budget and the level of collection development formalization is 0.02388 (p=0.4131).

Size of Library Collection

The final independent variable to be examined is the size of the bound volume collection. Table XXXIV shows the joint distributions of bound volume holdings, by groups based upon 50,000-volume intervals, and the level of collection formalization. Twenty libraries (25.6 per cent) reported bound volume collections of 300,000 to 349,999, while fifteen libraries or 19.2 per cent reported 350,000-399,999 bound volumes in their collections. Eleven libraries (14.1 per cent) reported collections of 400,000 to 499,999, while holdings of 450,000-499,999 were reported by ten libraries. Eight libraries or 10.3 per cent had the smallest volume count, and seven or 9 per cent indicated holding of 500,000-549,999 and 550,000-600,000
TABLE XXXIV

DEGREE OF FORMALIZATION BY SIZE OF COLLECTION FOR THOSE LIBRARIES IN PUBLIC INSTITUTIONS

<table>
<thead>
<tr>
<th>Level of coll. dev.</th>
<th>Size of Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250,000 - 299,999</td>
</tr>
<tr>
<td>0-4</td>
<td>12.5</td>
</tr>
<tr>
<td>5-9</td>
<td>25.0</td>
</tr>
<tr>
<td>10-14</td>
<td>12.5</td>
</tr>
<tr>
<td>15-19</td>
<td>50.0</td>
</tr>
<tr>
<td>20-24</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100% (n=8)</td>
</tr>
</tbody>
</table>
respectively. The Pearson product-moment correlation coefficient for size of collection and degree of collection development formalization in libraries at public institutions is 0.1971 (p=0.0419).

SUMMARY

In this chapter the relationship of the dependent variable (level of formalization of the collection development function) with each of the six independent variables (age of the library, number of graduate degrees offered by the parent institution, director's estimate of the number of years of space remaining for collection growth, director's attitude toward cooperation, number of memberships held by the library in cooperative organizations, and percentage of materials budget increase from 1972 to 1982) was examined. Though not one of the original independent variables, collection size was also examined for its relationship to the level of collection development formalization, since the size of the bound volume collection was requested on the questionnaire. In addition, the modal group of libraries found in each of the independent variables was examined to determine the relationship between the dependent variable and remaining independent variables. The study also examined another set of relationships: That between the dependent and independent variables in the libraries located at publicly-supported institutions.
Significant relationships (p < .05) were found between (1) the director's attitude toward cooperation and degree of collection development formalization (only for the group of sixty-six libraries that have been existence from 61-120 years); (2) the number of cooperative memberships and degree of collection development formalization (total study group); (3) size of collection and degree of collection development formalization (total study group); (4) number of graduate degrees offered by the parent institution and size of collection (total study group); and (5) number of graduate degrees offered by the parent institution and degree of collection development formalization (only for the eighty-seven publicly-supported institutions).

The majority of libraries used in the study tended to fall into one or two groups on each variable. With age, it was the 61-120 years-old group. Most libraries are at institutions offering from three to eight graduate degrees. The majority of library directors indicate only nine years or less of available growth space remaining in the present building, and they scored between 4.5 and 5.4 on the attitude survey. In addition, a majority of the libraries included in the study reported a materials budget increase of 9 per cent or less for the ten years period used in the study.

Though the data examined failed to reveal a high degree of relationship among any of the variables, some
interesting trends did emerge. The concluding chapter will attempt to put these and other facts into some sort of perspective about the degree of formalization of the collection development function in these libraries. It will also address the question of further avenues for research related to the subject under consideration in this study.
CHAPTER V

SUMMARY AND CONCLUSIONS

The foregoing study has examined six variables for their possible relationship to the degree of formalization of the collection development function in selected medium-sized academic libraries. The degree of formalization was assessed by a five-dimensional definition of collection development. Different levels within each of the five dimensions of the definition were assigned a value. The degree of formalization was assessed by the sum of the values of the five dimensions in the definition.

A medium-sized academic library was defined as one whose parent institution offered at least one graduate degree, whose bound volume collection numbered from 250,000 to 600,000, and whose materials budget exceeded $100,000. The selection of libraries to be studied was made from the 35th edition of the American Library Directory (1982). The number of libraries meeting the definition was 206, and all of them were included in the survey.

A questionnaire was developed to gather the information needed on the dependent variable and on the six independent variables. The survey instrument was pre-tested by the directors of six medium-sized academic
libraries as defined above. As a result of the pre-test, refinements were made to the instrument, and it was mailed on October 12, 1983, with a follow-up reminder on November 2, 1983. Response to the survey was 148 or 72.33 per cent, with 128 or 62.13 per cent being complete and useful.

The survey responses were coded, and the data for each were entered into the computer. The Statistical Package for the Social Sciences was used to develop the tables and in the additional analysis of data.

Six hypotheses were tested in this study.

1. The older the library, the less formalized will be its collection development function. The data analyzed failed to support the hypothesis. Rather, it appears that one half of those libraries with the highest degree of formalization fall within the middle age grouping, or from 61-120 years of age. Thirty-seven per cent of them fall within the youngest group; that is, they are less than sixty years of age. When one controls for other variables, the same pattern prevails, regardless of the other variable.

2. The greater the number of graduate degrees offered by the parent institution, the greater the degree of formalization of the collection development function. The data analyzed failed to support this hypothesis for the total group of libraries studied. However, when only libraries at publicly-supported institutions were considered, the hypothesis was supported.
3. The greater the library's growth potential in terms of available shelf space, the less the degree of formalization of the collection development function. Based upon the data analyzed, the hypothesis does not appear to be supported. Though the relationship is very close to being significant at the .05 level, the relationship is not strong. The majority of libraries report available growth space of nine years or less. Little change is noted when controlling for other variables.

4. The greater the desire for cooperation on the part of the library director, the greater the degree of formalization of the collection development function. Based upon the data analyzed, the hypothesis does not appear to be supported. Rather, it appears that there is little variation on the independent variable of cooperative philosophy. The majority of libraries included in the survey scored in the next to highest range (4.5-5.4) on the opinion survey. However, the relationship between the director's attitude toward cooperation and degree of collection development formalization is significant when only the sixty-six libraries that have been in existence from sixty-one to 120 years are considered.

5. The greater the number of memberships in cooperative endeavors, the greater the degree of formali-
zation of the collection development function. The data analyzed do provide some support for this hypothesis. The relationship is weak but significant.

Cooperation among a group of libraries is the basis for consortia and/or networks. It may take a variety of forms: cataloging, storage, or circulation. Cooperative acquisitions also may be a facet of a consortium. As such, it becomes a vital part of collection management. Thus the relationship found in this instance is not unexpected.

6. The greater the percentage of increase in the materials budget, the lower the degree of collection development. Again, the hypothesis does not appear to be supported, based upon the data analyzed.

Even though it was not one of the six independent variables originally selected for this study, the size of the bound volume collection was requested on the questionnaire. Since the information was available, cross tabulations and correlation coefficients were produced for size of collection and level of collection development formalization. The relationship between size of collection and level of collection development is significant at the .01 level. The relationship between size of collection and number of graduate degrees offered by the parent institution is also significant.
In addition to producing correlation coefficients for the dependent variable and each independent variable, the modal group of libraries for each of the independent variables was selected, and correlation coefficients were calculated for the relationship between the other independent variables and level of collection development for each of the modal groups. In only one instance did any significance appear. In those sixty-six libraries that were from 61-120 years of age, the relationship between the director's attitude toward cooperation and the level of collection development formalization was significant at the .05 level.

A final analysis to determine relationships between the independent variables and the dependent variable was made using only the eighty-seven libraries that are located at publicly-supported institutions. In three cases the relationship is greater than it is for the entire group of libraries and in one case—number of graduate degrees offered by the parent institution—the relationship is significant.

In addition to examining selected variables as they relate to formalization of collection development, a secondary interest of this study was to attempt to determine how libraries go about formalizing their collection development function. As librarians commit their libraries to formalized collection devel-
development, do certain dimensions of collection development (as defined in this study) appear more frequently than do others?

Since the rating scale for formalization ranged from 0 to 24, the libraries were sorted into groups based upon their formalization score. The scores of 0, 1, and 2 were omitted, as they formed no sort of pattern due to the small number of libraries with those scores. Eight groups with a range of two were used. The ninth group had a range of five (19-23). The five components of formal collection development (as defined in this study) were plotted for the libraries within each group. Percentages of the libraries in each group were calculated for each of the five components of formal collection development as defined. (See Table XXXV).

As the formalization scores increase, the involvement of the library staff and/or the presence of a collection development librarian show the most dramatic increase, while collection evaluation shows little change until the higher scores are reached. The presence of a collection development librarian also has a varied pattern until the higher ranges of scores are reached. The percentage of libraries having a distinct separation of collection development and acquisitions shows a steady increase as formal collection development scores rise.
TABLE XXXV
PERCENTAGE OF LIBRARIES INDICATING ACTIVITY IN COMPONENTS OF FORMAL COLLECTION DEVELOPMENT

<table>
<thead>
<tr>
<th>Level of coll. dev. formalization</th>
<th>Staff part. and/or C.D. Libn.</th>
<th>Staff participation</th>
<th>Coll. Dev. Librarian</th>
<th>Policy Development</th>
<th>Collection Evaluation</th>
<th>Separation of C.D. and acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4 (N=8)</td>
<td>75%</td>
<td>38%</td>
<td>13%</td>
<td>75%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>5-6 (N=11)</td>
<td>82</td>
<td>64</td>
<td>36</td>
<td>64</td>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td>7-8 (N=10)</td>
<td>50</td>
<td>50</td>
<td>10</td>
<td>70</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>9-10 (N=7)</td>
<td>100</td>
<td>86</td>
<td>71</td>
<td>29</td>
<td>43</td>
<td>71</td>
</tr>
<tr>
<td>11-12 (N=16)</td>
<td>100</td>
<td>81</td>
<td>63</td>
<td>81</td>
<td>50</td>
<td>81</td>
</tr>
<tr>
<td>13-14 (N=16)</td>
<td>100</td>
<td>94</td>
<td>56</td>
<td>94</td>
<td>56</td>
<td>88</td>
</tr>
<tr>
<td>15-16 (N=13)</td>
<td>100</td>
<td>89</td>
<td>95</td>
<td>89</td>
<td>79</td>
<td>95</td>
</tr>
<tr>
<td>17-18 (N=22)</td>
<td>100</td>
<td>86</td>
<td>100</td>
<td>100</td>
<td>77</td>
<td>95</td>
</tr>
<tr>
<td>19-23 (N=13)</td>
<td>100</td>
<td>92</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
If one looks for combinations of components among the libraries with the lower scores (range of 3 to 6), staff involvement and policy development appear the most frequently. The ten libraries scoring from 7 to 8 appear to defy any pattern at all. Those libraries in the middle range of scores (from 9 to 14) show less variation among the components except for collection evaluation. Staff participation is clearly a significant factor in formal collection development for those libraries. The libraries with the highest scores (from 15 to 23) on the formalization scale show a high degree of involvement of staff, as well as the separation of collection development from acquisitions.

Twenty-five or 19.5 per cent of the libraries used in the study indicated that they had no plans for a written collection development policy statement. Reasons for this were not germane to the basic study, so information on this point was not obtained. Of those libraries that have written policies, fifty-three or 41.4 per cent have revised their policies within the past five years. Twenty-nine (22.7 per cent) of the libraries evaluate their collections regularly and sixty-seven (52.3 per cent) do not do so. Eighty-seven (68 per cent) of the libraries surveyed have collection development librarians, and seventeen or 20 per cent of these devote full time to collection development.
Of these eighty-seven libraries, fifty-nine (65.1 per cent) indicated that these collection development librarians exercise control of the materials budgets. Twenty-eight (21.9 per cent) of the libraries used in the study do not involve their professional staffs in the evaluation of materials prior to purchase.

Though all of the previous information provides a better insight into the collection development practices in medium-sized academic libraries, the basic question remains unanswered. Are there certain factors that exert more influence on a library to formalize its collection development function than do others? Obviously, from this study, the factors of age, potential growth space remaining in the present building, commitment to cooperation, and the percentage of increase in the materials budgets from 1972 to 1982 can be eliminated. Number of graduate degrees offered by the parent institution, membership in cooperative organizations, and size of collection deserve further investigation. It may be that these three variables, as well as the others, might produce a stronger relationship to collection development in high quality institutions. Ranking the 128 institutions used in this study by reputation or overall quality might yield a different set of relationships. It may also be possible that all of these variables have a greater effect on collection development in large academic research libraries than in medium-sized
academic libraries. It might be interesting to replicate the study using large academic libraries to determine if the results would be the same.

The amount of research and publication done by the faculty at an institution may be an influencing factor. It might be assumed that libraries at institutions whose faculty is involved in research and publication would provide some support for these activities. However, acquiring data on the extent of faculty research and publication is not an easy task. Since faculty no longer tend to be associated for long periods of time with one particular institution, it is difficult to determine where some of them may have done the work that results in publication.

Another avenue of investigation might be the role of the approval plan or blanket order in the formalization of the collection development function. Does the presence of such a plan influence the degree of formalization, and if so, in what way? Or is the use of approval plans or blanket orders more likely to be a feature of the large academic library?

This study has been an attempt to investigate the level of formalization of the collection development function in selected medium-sized academic libraries. It has also yielded some interesting facts relating to collection development in these libraries. But other questions
remain to be answered. It is hoped that this study may serve as a starting point for further investigation into the rise and development of this aspect of librarianship.
APPENDIX A
COLLECTION DEVELOPMENT QUESTIONNAIRE

The following questionnaire has been designed to gather information about the organization of the collection development function at your library. Please answer the questions by placing a check next to the most appropriate answer.

Please insert the completed questionnaire in the self-addressed envelope provided.

1. Does your library have a written acquisition/selection/collection development statement or plan?
   ( )Yes   ( )No
   If "No", is such a policy in the process of being developed?
   ( )Yes   ( )No
   If "Yes", approximately when was it developed/when was it last reviewed/revised?

2. Have you ever conducted a formal evaluation of the collection to determine the collection density (the extent of the existing collections in a given subject field) in your library?
   ( )Yes, all of the collection has been formally evaluated.
   ( )Yes, part of the collection has been formally evaluated.
   ( )No, the collection has not been formally evaluated.
   If "Yes", when was the most recent such evaluation conducted?

3. Does the library have an organizational structure that separates the evaluation of materials considered for purchase from the business function of ordering materials?
   ( )Yes   ( )No

4. Does your professional staff include at least one person whose primary responsibility is collection development as contrasted to acquisitions?
   ( )Yes   ( )No
   If "Yes", does he/she devote full-time to collection development?
   ( )Yes   ( )No
   Does he/she have a written job description?
   ( )Yes   ( )No
   Does he/she allocate and monitor expenditures from the library materials budget?
   ( )Yes   ( )No
If "No", who does allocate and monitor expenditures from the library materials budget?

5. To whom does the staff member in charge of collection development report?

6. Does the library's professional staff participate in any formal evaluation of materials prior to purchase?

( )Yes  ( )No

If "Yes", are their responsibilities clearly defined?

( )Yes  ( )No

In which of the following ways do they participate?

( )Subject area assignment

( )Through a committee composed only of librarians. Please indicate what per cent of the professional staff participate on such a committee.

% of professional staff

( )Through a committee composed of faculty and librarians.

( )Other; Please specify

7. Do you use an approval or standing order plan for monographs?

( )Yes  ( )No

If "Yes", approximately what per cent of your materials budget was allotted to these in the most recent fiscal year?

% of materials budget

8. Do you have a cooperative program with other libraries in close proximity to your own in any of the following areas:

( )Acquisitions  ( )Circulation

( )Cataloging  ( )Reference

( )Interlibrary loan  ( )Storage

( )No library in close proximity
9. List any network, consortia, or other cooperative organization to which your library belongs and the nature of that cooperation, such as acquisitions, storage, etc.

10. What was your TOTAL volume count as of 8/31/83? (Volume: Any physical unit of printed work in a separate binding or portfolio over which bibliographic control has been established).

Bound volumes

Microform volumes

Non-Print Media (Title, not volumes)

11. What was your annual materials expenditure for each of the following years?

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<tbody>
<tr>
<td>1976/77</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>1975/76</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>1974/75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973/74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972/73</td>
<td></td>
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</tbody>
</table>

12. How many volumes were added to your library's collection during each of the following years?

<table>
<thead>
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<tbody>
<tr>
<td>1976/77</td>
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<tr>
<td>1975/76</td>
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<td>1974/75</td>
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<td>1973/74</td>
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<td></td>
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<tr>
<td>1972/73</td>
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</tbody>
</table>

13. Based upon your present rate of growth as determined by the previous question, and assuming that a library shelf is at capacity when it is two-thirds full, in what year do you anticipate that your building will reach its capacity?
APPENDIX B
October 11, 1983

Dear Colleague:

Few of us in academic libraries today have failed to notice that collection development has become a major concern during the past twenty years. As the costs of materials and buildings continue to rise, there is little doubt that decisions about building and managing our collections will continue to be an important part of our professional responsibilities.

For that reason I have chosen collection development as a topic for my doctoral dissertation at North Texas State University. Under the direction of Dr. Rose Mary Magrill, my study will attempt to determine the degree of formalization of the collection development procedure at selected medium-sized libraries. In addition, it will examine selected factors that may be related to the formalization of the collection development process. The enclosed questionnaire has been designed to elicit information on these topics.

Libraries included in the study were selected from the 35th edition (1982) of the American Library Directory based upon their volume count and their materials budget for the year reported. Questionnaires have been coded to facilitate follow-up and to prevent you from receiving bothersome reminder letters.

As a library director, I realize that your schedule is busy and that your time is valuable. However, I would appreciate it very much if you would take time from your busy schedule to assist me in this endeavor by returning the questionnaire within two weeks. A stamped self-addressed envelope has been enclosed for your convenience. If you have any questions or need another questionnaire, please do not hesitate to write or call collect.

Sincerely

(Mrs.) Melba S. Harvill
Director of Libraries
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