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ABSTRACT This report examines the college of pharmacy library in relation to its historical development, present facilities, services, and user satisfaction, and makes a statistical comparison between the University of Houston College of Pharmacy Library and other accredited pharmacy libraries nationwide. Data were gathered through 28 completed library survey questionnaires returned by pharmacy library directors, and through 194 completed user satisfaction questionnaires returned by users. Statistics are presented for the following: library status, college characteristics, library staff, equipment, hours open, circulation, library collection, library size, growth in acquisitions, budget, technical processing, policy, and services. The user survey data indicate user satisfaction with library staff, services, facilities, and collections. In addition to data analysis, the report contains a literature review, details of the survey methodology, recommendations, and tables. Appendices provide samples of the questionnaires, and a bibliography cites 18 sources. (FM)

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A STUDY OF THE COLLEGE OF PHARMACY LIBRARY  
CONCERNING FACILITIES, SERVICES, AND  
USER SATISFACTION

A SURVEY MADE POSSIBLE THROUGH A GRANT FROM  
THE UNIVERSITY OF HOUSTON, CENTRAL CAMPUS

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TABLE OF CONTENTS

TABLES . . . . . iii

INTRODUCTION . . . . . 1

Chapter

    I. THE PROBLEM . . . . . 2

        The Problem Statement

        Delimitations

        Methodology

    II. THE LITERATURE SEARCH . . . . . 4

        Pharmaceutical Education

        Development of Pharmacy Libraries

        Library Surveys and Statistics

        Standards for Libraries

    III. DATA COLLECTION . . . . . 9

        Approach

        Survey Plan

        Preparation

        Collection Technique

        Analysis of Returns.

    IV. ANALYSIS OF DATA: LIBRARY SURVEY . . . . . 12

        Introduction

        Library Status

        College Characteristic

        Library Staff

        Equipment

        Hours

        Collection

        Budget

        Technical Processing

        Policy

        Services

    V. ANALYSIS OF DATA: USER SURVEY . . . . . 24

        Introduction

        Staff

        Services

        Facilities

        Collection

    VI. CONCLUSION AND RECOMMENDATIONS . . . . . 33

LITERATURE CITED . . . . . 38

APPENDIX A: LIBRARY SURVEY . . . . . 40

APPENDIX B: USER SURVEY . . . . . 44

TABLES

Library Survey

1.	Percent of Libraries Polled Showing Division by Library Type . . . . .	13
2.	Percent of Libraries Polled Showing Division by Characteristic of College . . . . .	14
3.	Percent of Libraries Polled Showing Comparison by Library Type . . . . .	17
4.	Percent of Libraries Polled Showing Characteristic of Library Operations . . . . .	19
5.	Technical Processing Performed by Responding Libraries Showing Division by Library Group . . . . .	21
6.	All Responding Libraries Combined--Rating of User Services . . . . .	23
7.	Separate Branch Library and University of Houston Pharmacy Library--Rating of User Services . . . . .	23

User Survey

8.	All Library Users Combined--User Satisfaction Survey Showing Percent Distribution by Category Rank . . . . .	27
9.	University of Houston Pharmacy Library--User Satisfaction Survey Showing Percent Distribution by Category Rank . . . . .	28
10.	<i>COLORED BAR GRAPH.</i> User Evaluation of Library Staff Showing Division by Responding Groups . . . . .	29
11.	<i>COLORED BAR GRAPH.</i> User Evaluation of Library Services Showing Division by Responding Groups . . . . .	30
12.	<i>COLORED BAR GRAPH.</i> User Evaluation of Library Facilities Showing Division by Responding Groups . . . . .	31
13.	<i>COLORED BAR GRAPH.</i> User Evaluation of Library Collection Showing Division by Responding Groups . . . . .	32

## INTRODUCTION

Seventy-two universities throughout the country support a college of pharmacy program accredited by the American Council of Pharmaceutical Education (ACPE). One of the primary purposes of the ACPE is to stimulate excellence in both instruction and research within the pharmaceutical colleges across the country. The college of pharmacy library has emerged as a vital part of this specialized educational process, in part, through application of more stringent standards.

## CHAPTER 1 THE PROBLEM

### The Problem Statement

The college of pharmacy library fills an active position within many American universities today. This report will examine the college of pharmacy library in relation to its historical development, present facilities and services, and user satisfaction. A statistical comparison will be made between the University of Houston College of Pharmacy Library, and other accredited pharmacy libraries throughout the country. This will be done in an effort to ascertain possible areas of weakness at the University of Houston Pharmacy Library, and to provide a standardized method for evaluating the effectiveness of user services.

### Delimitations

In order to focus clearly on the objectives, the following delimitations have been placed: 1) only pharmacy libraries of colleges accredited by the ACPE were considered, 2) medical libraries were not contacted unless they served directly as the library of an accredited college of pharmacy, 3) in order to better assess the current needs and trends of the pharmacy library, a broader definition that included all health science libraries was used in compiling the literature search.

### Methodology

The methodology included two questionnaires sent to all ACPE accredited colleges of pharmacy libraries within the Continental United States. The first questionnaire ("Library Survey," see Appendix A) surveyed present facilities and user

services. Additional information was solicited concerning the following areas: enrollment, staff, budget, and total number of hours the library was open. An understanding of each library's priorities was vital to the survey; therefore, a portion of the questionnaire provided for self-assessment and a ranking of eleven services.

The second questionnaire ("User Survey," see Appendix B) was addressed to fifteen frequent and typical library users as chosen by each pharmacy librarian. The intention was to survey user satisfaction. A gradient scale of from one through five was assigned to each of the thirty-two categories. Such areas as staff, services, hours, policies, physical facilities, and collection were included.

All usable questionnaires from both surveys were key-punched and submitted through the Statistical Package for the Social Sciences (SPSS) software program at the University of Houston Computing Center. The statistical analysis of frequency distribution and minor cross-tabulation are discussed in Chapters IV and V.

## CHAPTER II THE LITERATURE SEARCH

### Pharmaceutical Education

The development of pharmaceutical education in the United States was similar to many emerging professions--emphasis was placed on apprenticeship rather than on formal, structured classes. During the early part of the 19th Century, the American druggist had little in the way of a certificate of graduation. Not until 1808 did the territory of Louisiana become the first to make a diploma and an examination pre-requisite for practice.<sup>1</sup> Most early schools of pharmacy were operated by pharmacists or physicians, as a business enterprise to stimulate the growth of individual apothecary shops. Recognition of the importance of formal education began in 1905, when New York State required a college degree as pre-requisite for registration of a licensed pharmacist.<sup>2</sup> The founding of the American Conference of Pharmaceutical Faculties in 1900 was one impetus to the rise in educational standards. It was succeeded by the American Association of Colleges of Pharmacy in 1925, which by 1932, had established the American Council of Pharmaceutical Education (ACPE).<sup>3</sup> The ACPE steadily strengthened the educational standards and has since served as the agency of accreditation.

### Development of Pharmacy Libraries

The development of the pharmacy library played a secondary role in the growth of pharmacy education. Foremost in importance were such pressing matters as the establishment of curriculum standards, quality of faculty, teaching techniques, and entrance standards. No doubt library collections were growing



during this early period, but for the most part, libraries remained neglected. Then in 1933, the Executive Committee of the American Association of Colleges of Pharmacy formed a standing committee on libraries.<sup>4</sup> This committee proved to be the stimulating force behind a gradual recognition of the pharmacy library as a vital part of the integral educational process. As a pre-assessment of this newly found role, the executive committee issued the following statement:

The great importance of a good library for undergraduate institutions is recognized in all fields of education, especially in the field of the professions. The absolute necessity of it in graduate work is acknowledged by all. Your Executive Committee believes that pharmacy colleges as a group are weak in library facilities. This is due, in most cases, to lack of funds, but may be due, in some cases, to the lack of appreciation of the importance of a good library and the necessity of requiring undergraduates to use this important educational tool.<sup>5</sup>

A brief history of this committee, along with its accomplishments, was published in a 1953 Bulletin of the Medical Library Association. Under the direction of its first chairman, Dr. C. O. Lee, the committee's achievements were numerous. Perhaps its most extensive work was in publishing lists of selected books and periodicals of special interest to pharmacy librarians. Fifteen such lists were prepared between the years of 1935 and 1952.<sup>6</sup>

An analysis of two surveys initiated by the committee on libraries in 1939 and 1946, revealed the significant weaknesses of pharmacy libraries to have been: 1) inadequate budgets, 2) a lack of trained, qualified, library personnel, 3) and a failure of faculty to acknowledge the professionalism of librarians.<sup>7-8</sup>

The Committee on Libraries, in 1952, was reorganized in name and in membership. The new Joint Committee on Pharmacy College Libraries was established to utilize the combined efforts of individuals from differing areas of pharmaceutical

interest. No longer did it represent only the AACP, but now set aside four of the six committee seats for pharmacy librarians chosen by the Medical Library Association and the Special Libraries Association. In a 1953 report, the committee issued a statement of objectives toward certain troubled areas:<sup>9</sup>

- (1) The need to specify qualifications for library personnel
- (2) The need to establish minimum lists of library holdings
- (3) The need for suggestions to help students develop good library habits.

The Joint Committee has more recently sponsored numerous activities, including the publication Unlisted Drugs, through the Pharmaceutical Section of SLA.

### Library Surveys

As the number of health-care professionals increased during the fifties and early sixties, so did library services. Prior to 1960, there was a general lack of information on the various institutions providing library services for the health sciences. To fill this void, in 1965, the first Committee on Surveys and Statistics (COMSAS) was appointed by the Medical Library Association.<sup>10</sup> In 1969, from data collected on two earlier surveys, a Directory of Health Sciences Libraries in the United States was published. A companion volume, the Statistics Profile, was later issued to analyze the 1969 data. The size, distribution, and composition of the health science library population was defined. Although pharmacy libraries represented less than 6 percent of the total survey population, a significant insight was offered as to their emerging social context, and as to selected events of formative importance in the preceding decade.<sup>11</sup> A second survey was undertaken by COMSAS in 1973, the methodology for which is outlined in the Directory of Health Sciences Libraries, 1973.

The 1973 data showed a decrease of 171 libraries (5.4%) in the years following the 1969 survey. This did not necessarily imply an impairment of services, as many libraries had merged rather than been discontinued. Although the total number of libraries decreased between 1969 and 1973, the combined number of bound volumes increased by 19 percent, and current journal subscriptions by 16 percent. It was also reported that a total of 887 library personnel were added during this five year period.<sup>12</sup>

The nine states with the greatest number of libraries (52% of the total), remained unchanged in both the 1969 and the 1973 surveys. The concentration of libraries correlated closely with the density of user population.<sup>13</sup> Increased user demand during this period precipitated a more effective regional, medical library network, initiated by the National Library of Medicine. This eleven region network currently serves more than eight hundred libraries throughout the United States.<sup>14</sup>

Other statistical surveys have been conducted in recent years, providing a broader spectrum on collection needs and user services in medical libraries;<sup>15-17</sup> however, only one study specifically dealt with the college of pharmacy library.<sup>18</sup> Hall and Nelson surveyed physical facilities and services, and provided a geographical comparison of pharmacy libraries in 1974. Their report included a brief self-assessment of twenty-six librarians, representing twenty-one libraries. The participants rated their library in regard to staff, equipment, computer services, and collection.

### Standards for Libraries

The late 1960's began a shift in public demand from the basic, standardized research approach, towards more effective public services in libraries. Health science librarians, as well as professionals in other fields, became more concerned with user satisfaction. Informational requirements were no

longer totally satisfied through the assistance of standardized library sources. The new information specialist was required to provide a synthesis of information based upon subject expertise and reference experience. This trend in library service has helped to create a need for evaluation of present library facilities, and their effective utilization in assisting the user to obtain success in his library encounter.

As early as 1964, general standards for special libraries had been adopted by the Special Libraries Association regarding library objectives, staff, budget, library collection, and user services.<sup>19</sup> This document provided excellent guidelines to libraries for many years, and in fact, helped frame the standards recently adopted by the American Association of Colleges of Pharmacy. In 1975, the final edition of Standards and Planning Guide for Pharmacy Library Service<sup>20</sup> was published by the AACP. It provided pharmacy librarians with an excellent tool for assessing present library conditions and for planning future library needs and objectives.

CHAPTER III  
DATA COLLECTION

Approach

The University of Houston College of Pharmacy supports a faculty of thirty-nine and a student body of just over five hundred. The amount of both sponsored and non-sponsored research has steadily increased over the past several years. Library facilities in the past have been adequate, though handicapped by the lack of floor space and sufficient funding. In the fall of 1977, the library moved to an expanded facility within the newly built Science and Research II Building. It was just prior to this time, during an assessment concerning the present status of the UH Pharmacy Library, its future, services, and facilities, that this study was proposed. It was decided that a survey be taken of all accredited pharmacy libraries throughout the United States. It was within the following areas that a standard for comparison was sought: library services, physical facilities, and user satisfaction.

Survey Plan

For the gathering of data, two questionnaires were devised, one to solicit information regarding present library facilities and services, and the other, directed to the library user in an attempt to ascertain levels of user satisfaction within the following categories: 1) staffing, 2) services, 3) facilities, and 4) library collection. It was considered necessary in the study to obtain standardization regarding responses of opinion; therefore, a numeric scale was used in such cases. To provide additional background information and obtain primary data regarding certain policies, practices, and services, a personal visit



was made to four college of pharmacy libraries in the states of Indiana, Kansas, Ohio, and Texas. Due to the anonymity expressed within the cover letter of each questionnaire, the only direct reference made to any specific library will be to the University of Houston Pharmacy Library.

### Preparation

A search of the literature was undertaken during the summer and fall of 1977, and then updated during 1978-79, to ascertain pertinent material already in print. The search revealed several general surveys of health science libraries, their facilities, staff, salaries, etc., but little specific information about pharmacy libraries.

After having determined the area to be tested, two preliminary questionnaires were prepared and submitted for evaluation to various staff and faculty members at the University of Houston. Their criticisms proved quite beneficial in preparing the final draft. A meeting with user service personnel at the University of Houston Computing Center provided additional guidelines in phraseology and format so as to be compatible with the SPSS computer program.

### Collection Technique

It was decided to survey all pharmacy libraries presently serving ACPE accredited college of pharmacies within the Continental United States. A listing of colleges was obtained from the current directory issued by the ACPE. Each questionnaire was sent by mail, accompanied by an explanatory cover letter and a self-addressed, stamped envelope. The results of all returned and answered questionnaires were key-punched and processed by the SPSS computer program at the University of Houston.

### Analysis of Returns

Library Survey: There were a total of 72 sent. The number of returned questionnaires totaled 28 (39%). Of the 28, 6 were not completed, leaving 22 (31%) for usable data.

User Survey: There were a total of 1,110 questionnaires sent. The number returned totaled 284 (26%). Ninety came back uncompleted, leaving 194 (17%) for usable data.

CHAPTER IV  
ANALYSIS OF DATA: LIBRARY SURVEY

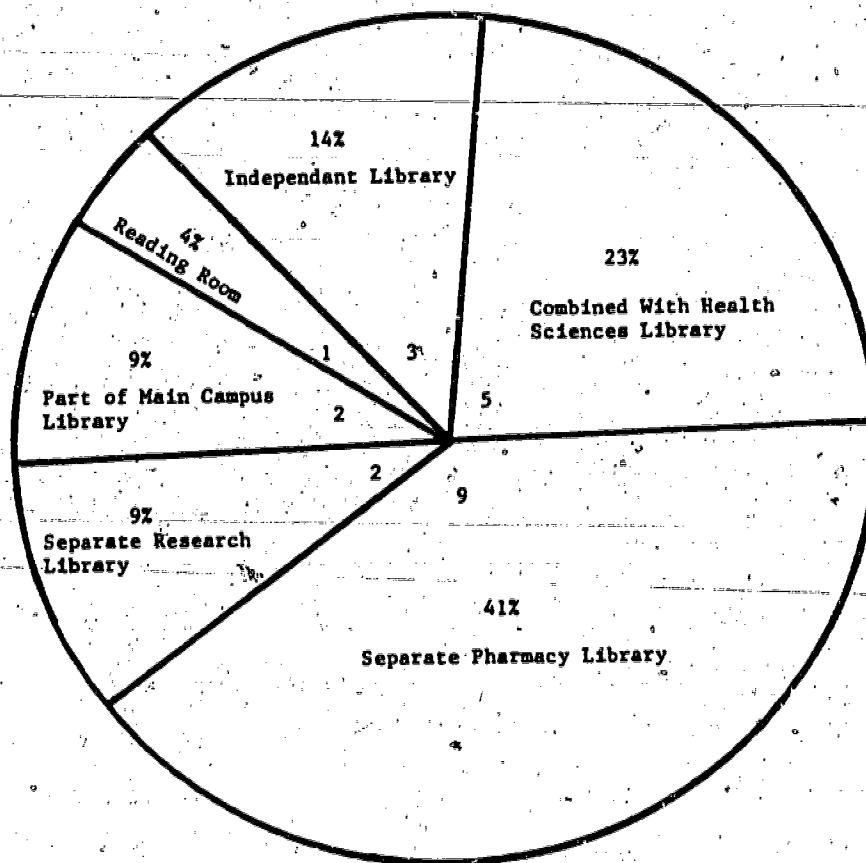
Introduction

Since the primary objective of the survey was directed toward the pharmacy library, a separate category was tabulated for comparison in the presentation of data, Tables 3 thru 7. The responses from each of the individual pharmacy libraries were combined, hereafter referred to as the "separate library group." All returned questionnaires were also considered together as representing another group, hereafter referred to as the "combined library group." In formulating comparisons, the median rather than the mean figure was used whenever applicable, in order to minimize the high numerical influence exhibited by the larger health science libraries. Specific responses from the University of Houston Pharmacy Library were also tabulated and presented in Tables 2 thru 7. A full narrative discussion of the UH Library in comparison to the "separate library group" and the "combined library group" was determined lengthy and unnecessary. Such specific data can be easily obtained directly from the tables.

Library Status

Nine (41%) of the responding libraries were separate branch libraries, located in close proximity to their respective college of pharmacy. Three (14%) responded from independent libraries, with 5 (23%) responding as part of a larger health science library. One respondent (4%) indicated their library to be nothing more than a reading room. Two (9%) indicated theirs to be part of a separate research library, with the remaining two (9%) indicating their library was part of a main campus library. [Table 1.]





Total Number of Libraries = 22

Table 1.--Percent of libraries polled showing division by library type.

### College Characteristics

Questions 2 thru 7 sought information concerning statistical characteristics of the college of pharmacy. It was found that 22.7% had a faculty of over 45, and 18.2% had 20 teachers or less. The mean number of faculty per college calculated at 37.0, the median at 32.5. The mean number of undergraduates per college was 472; the median figured was 455. The enrollments of colleges served by the 22 responding libraries were as follows: 4 enrolled 300 undergraduates or less, 16 had between 301 and 700 students and 1 reported an enrollment of over 700 students.

Seven of the colleges did not offer a Master's program. Of the remaining 15 institutions, the following were enrolled in a Master's program: 2 reported between 1 and 5, 2 reported 6 to 10 students, 6 were in the 11 to 50 range, and 2 indicated an enrollment in excess of 50 students. Nearly 60% of the colleges did not offer a pharm D program. The majority of those that did reported an enrollment of under 25 students. From the total sampling, the mean enrollment of combined graduate programs per college was 46.0 students. The median figure was slightly less at 39.5 students per college. [Table 2.]

Table 2.--Percent of libraries polled showing division by characteristic of college

	<u>SIZE</u>	<u>NUMBER RESPONDING</u>	<u>PERCENT</u>
<u>Pharmacy Faculty</u> .....	1-20	4	18.2
	21-25	3	13.6
	26-30	3	13.6
	31-36	4	18.2
	37-40	2	9.1
	41-45	1	4.5
over 45	5	22.7	
Mean	= 37.0		
Median	= 32.5		
U of H College of Pharmacy	= 39		
<u>Pharmacy Undergraduates</u> ....	1-300	4	19.0
	301-400	3	14.3
	401-500	7	33.3
	501-600	2	9.5
	601-700	4	19.0
	over 700	1	4.8
Mean	= 472		
Median	= 455		
U of H College of Pharmacy	= 486		
<u>Pharmacy Students in Masters Program</u> .....	not offered	7	36.8
	1-5	2	10.5
	6-10	2	10.5
	11-25	3	15.8
	26-40	1	5.3
	41-50	2	10.5
over 50	2	10.5	
U of H College of Pharmacy	= 50		
<u>Pharmacy Students in Pharm D Program</u> .....	not offered	11	57.9
	1-5	1	5.3
	6-10	0	0.0
	11-25	5	26.3
	26-30	1	5.3
	31-35	0	0.0
over 35	1	5.3	
U of H College of Pharmacy	= 0		
<u>Phd Program</u> .....	not offered	7	36.8
	1-5	4	21.1
	6-10	3	15.8
	11-30	0	0.0
	31-35	1	5.3
	over 35	4	21.1
U of H College of Pharmacy	= 6		
<u>Total Students in Graduate Programs</u>			
Mean	= 46.0		
Median	= 39.5		
U of H College of Pharmacy	= 56		

### Library Staff

In the Hall and Nelson 1974 survey<sup>21</sup>, 7 out of 9 responding libraries reported an annual starting salary for pharmacy librarians of \$9,000 or less. Even with inflationary factors considered median starting salaries still tended to be low. The median annual salary for a beginning librarian in the "separate library group" was \$10,000, compared to \$10,030 for a librarian represented in the "combined library group." Salaries for other library personnel tended to fluctuate only slightly between the two responding groups. Beginning clerical help averaged between \$2.73 and \$3 per hour; student help averaged \$2.34 and \$2.43 per hour. The greatest difference was found in the para-professional's salary; \$7,000 for those at the "separate library group," versus \$8,000 for those from the "combined library group." Typically, the "separate library group" was staffed by only one librarian, whereas the "combined library group" averaged nearly 5 librarians; however, the median number figured at just under 2. [Table 3.]

### Equipment

Each responding library was queried in questions 52 thru 63 concerning the use of certain audiovisual and microform equipment. It was found that the "separate library group" averaged 1 photocopier per library and charged just over 6¢ per copy; whereas those from the "combined library group" averaged nearly 2 photocopiers and charged just over 5¢ a copy. Of the nine in the "separate library group," none reported having an automated circulation control system. This similar low percentage also held true for "the combined library group"; out of a total of 20 responses, only 3 had an automated circulation control system. Security control systems at pharmacy libraries were similarly lacking. Only 2 out of 9 in the "separate library group" reported having such a system, while 10 out of 20 in the "combined library group" did. OCLC terminals were reported in only 2 of the 9 "separate libraries," and in 9 of the 22 "combined libraries." [Table 3.]

### Hours

The total number of hours per week varied only slightly between the two groups. The "separate libraries" averaged 70 hours, while those in the "combined group" averaged 71 hours per week. Only 4 out of 9 "separate libraries" remained open on Saturdays, while 13 out of 22 "combined libraries" did. As might be expected, a larger number of libraries were open on Sundays; 17 out of 22 "combined libraries," and 7 out of 9 for "separate libraries." [Table 3.]

### Circulation

Six of the 9 "separate libraries" allowed bound journals to circulate, while 14 out of 22 in the "combined group" did. These figures represent 66% and 64% of the total response for each group respectively. Seven (78%) of the "separate libraries" allowed current journals to circulate, compared to 12 (55%) of the "combined group."

Question 39 sought information concerning the activity of the library's reserve collection in comparison with externally circulated material. "Separate branch libraries" estimated that 86% of the total library circulation was for reserve material used within the library. The "combined group" reported this figure to be an estimated 84%. [Table 3.]

Table 3.--Percent of libraries polled showing comparison by library type

CATEGORY	ALL LIBRARIES COMBINED			SEPARATE PHARMACY LIBRARY			U of H. PHARMACY LIB.
	Total Responding	Mean	Median	Total Responding	Mean	Median	
<b>LIBRARY STAFF</b>							
Number of Librarians (MLS) .....	21	4.6	1.3	9	.7	.8	1
Number of Paraprofessionals .....	21	4.5	1.0	8	.8	.8	1
# of Clerical hours/week .....	18	103.4	40.1	6	44.2	40.0	40
# of Student hours/week .....	18	111.4	46.0	7	50.7	50.0	30
Librarians contract .....	12	PERCENT		6	PERCENT		
9 Month .....	1	8.3		1	16.7		1
12 Month .....	11	91.7		5	83.3		0
Paraprofessional contract .....	11			6			
9 Month .....	1	9.1		1	16.7		0
12 Month .....	10	90.9		5	83.3		1
<b>Salary for Beginning Personnel</b>							
Librarian (12-months) .....	15	\$10,211.00	10,030.00	6	\$9,996.00	10,000.00	\$10,800.00
Paraprofessional (12 months) ..	10	\$7,661.00	\$8,000.00	3	\$7,112.00	\$7,000.00	\$10,691.20
Clerical (per hour) .....	10	\$ 2.99	\$ 3.00	2	2.73	2.73	\$ 3.40
Student (per hour) .....	17	\$ 2.42	\$ 2.34	7	\$ 2.48	\$ 2.43	\$ 2.65
<b>EQUIPMENT</b>							
Number of Photocopiers .....	22	2.5	1.5	9	.9	1.0	1
Charge per copy .....	20	6.5c	5.5c	7	6.4c	6.0c	5c
Number of Microfilm machines .....	22	3.0	1.2	9	.9	.8	2
Number of Microfiche machines .....	22	1.9	1.6	9	1.2	1.1	2
Number of Microform reader/printers .....	22	1.6	1.2	9	.7	.6	1
Charge per copy .....	14	11.8c	9.6c	4	10.0c	10.0c	10c
Number of AV machines .....	20	22.8	7.5	9	7.7	3.0	0
Automated Circulation Control system .....	20	PERCENT		9	PERCENT		
Yes .....	3	15.0		0	0.0		
No .....	17	85.0		9	100.0		No

Table 3.--continued

	ALL LIBRARIES COMBINED			SEPARATE PHARMACY LIBRARY			U of H. PHARMACY LIBRARY
	Total Responding	Mean	Median	Total Responding	Mean	Median	
<b>EQUIPMENT CONT'D.</b>							
Security Control System .....	20	PERCENT		9	PERCENT		
Yes .....	10	50.0		2	11		Yes
No .....	10	50.0		7	78		
If yes, satisfaction .....	7	100.0		1	100.0		Yes
OCLC Terminals. One or more .....	22			9			
Yes .....	9	40.9		2	22.2		
No .....	13	59.1		7	77.8		No
<b>HOURS</b>							
Hours open Mon-Sun .....	22	75	71	9	71	70	70.5
Open on Saturdays? .....	22	PERCENT		9	PERCENT		
Yes .....	13	59.1		4	44.4		
No .....	9	40.9		5	55.6		No
Open on Sundays? .....	22			9			
Yes .....	17	77.7		7	77.7		
No .....	5	22.3		2	22.3		No
<b>CIRCULATION</b>							
Bound journals circulate? .....	22	PERCENT		9	PERCENT		
Yes .....	14	63.6		6	66.7		Yes
No .....	8	36.4		3	33.7		
Current issues circulate? .....	22			9			
Yes .....	12	54.5		7	77.8		
No .....	10	45.5		2	22.2		No
Estimate percent of total weekly circulation represented by in-house reserve check-out .....	11	Mean	Median	Mean	Median		95%
		66	84	81	86		



### Collection

Significant variation in the mean value of collection size was demonstrated between the groups. As might be expected, the larger health science libraries tended to skew the figure upward in the "combined group"; however, when considering the median value, this large variation diminished significantly. The median figure of library holdings were as follows in "separate libraries": "monographs," 6,244; "bound journals," 10,005; "current journals," 171; "microforms," 938; and "audiovisual materials," 13. Respondents in the "combined group" reported median holdings of: "monographs," 9,525; "bound journals," 7,705; "current journals," 348; "microforms," 699; and "audiovisual materials," 90.

Six of the 9 responding "separate libraries" (67%) had the printed edition of Chemical Abstracts. No library in this group had Chemical Abstracts microform edition. Fourteen out of the 21 libraries in the "combined group" (67%) had Chemical Abstracts printed edition. Two of the "combined libraries," or just under 10%, reported having the microform edition of Chemical Abstracts. [Table 4.]

### Size of Library

As might be expected, "combined libraries" had a significantly higher floorspace average than those in the "separate library" group; 18,141 sq ft versus 4,040 sq ft. This difference, however, dropped notably when the median rather than the mean value was considered; 4,086 sq ft for "combined libraries" as opposed to 3,600 sq ft for "separate libraries." The median number of square feet allocated for stack area was comparable between both groups. The "combined libraries" averaged 1,261 sq ft and the "separate libraries" averaged just over 1,000 sq ft. [Table 4.]

## Growth in Acquisitions

Questions 32 and 33 sought information concerning the number of new books and journal subscriptions during the latest 12 month period. The median new-book acquisition rate for the "separate libraries" was 422. "Combined libraries" had a slightly higher acquisitions rate of 469 new books per year. New journal subscriptions averaged 12 per year for "combined libraries" and 8 per year for "separate libraries." [Table 4.]

## Budget

Questions 40 thru 43 dealt with library budgets, both in dollars spent and in administrative responsibility. Among the eight respondents in the "separate library group," the median budget for monographs was \$5,750. "Combined libraries" had a median budget of \$7,800. Seven of the eight "separate libraries" indicated fiscal responsibility by personnel at the main library. The one remaining response indicated the budget was set and maintained by personnel at the pharmacy branch library. [Table 4.]

Table 4.--percent of libraries' polled showing characteristics of library operations

	ALL LIBRARIES COMBINED			SEPARATE PHARMACY LIBRARY			U of H Pharmacy Library
	Total Responding	Mean	Median	Total Responding	Mean	Median	
<b>COLLECTION SIZE</b>							
Monographs .....	17	16,405	9,525	8	7,721	6,244	4,000
Bound journals .....	14	16,929	7,705	6	11,733	10,005	2,300
Current journals .....	17	723	348	8	255	171	160
All microforms .....	9	4,787	699	4	4,548	938	50
All AV materials .....	7	4,468	90	2	13	13	00
Presently subscribe to							
Chemical Abstracts .....	21	PERCENT		9	PERCENT		
Hard Copy .....	14	66.7		6	66.7		Part
Micro-form .....	2	9.5		0	0.0		No
<b>SIZE OF LIBRARY (Sq. Ft.)</b>							
Total area .....	20	18,141	4,086	9	4,040	3,600	3,600
Stack area .....	10	15,595	1,261	5	1,119	1,000	700
<b>GROWTH IN ACQUISITIONS</b>							
Monographs (12 month) .....	6	827	469	8	495	422	216
New journals (12 month) .....	15	18	12	8	9	8	14
<b>CURRENT BUDGET</b>							
For monographs .....	16	\$12,063	\$7,800	8	\$8,827	\$5,750	\$7,000
Budget is set by: .....	18	PERCENT		8	PERCENT		
Main library .....	13	72.2		7	87.5		1
Pharm library .....	2	11.2		1	12.5		0
University Adm. ....	1	5.6		0	0.0		0
Health Sciences .....							
Library Administration ..	2	11.1		0	0.0		0

### Technical Processing

Questions 62 thru 71 listed nine technical services common to most libraries. Respondents were asked to identify those services presently performed at their library. Those representing the "separate library group" responded positive to the following services, with ratios as indicated: "verification," 6 out of 9; "OCLC input," 1 of 8; "original cataloging," 2 of 8; "filing in card catalog," 7 out of 9; "typing of purchase requests," 8 of 9; "typing of invoices," 1 out of 8; "payment of orders," 0 out of 8; "maintain budget ledger," 1 of 9; and "prepare call-number labels," 2 out of 9.

The ratio of positive responses to the nine listed categories for the "combined libraries" were as follows: "verification", 18 of 22; "OCLC input", 8 out of 21; "original cataloging," 13 of 21; "filing in card catalog," 22 out of 22; "typing of purchase requests," 21 of 21; "typing of invoices," 13 out of 21; "payment of orders," 10 of 21; "maintain budget ledger," 13 out of 22; and "preparing call-number labels," 13 out of 21. [Table 5.]

### Policy

Questions 84 thru 86 concerned library policies; whether a written copy was maintained and to whom library policies were applicable. Five out of the 9 "separate libraries" indicated a written copy was maintained. Seventeen out of 21 of the "combined libraries" responded affirmatively. In the "separate libraries," 6 of 9 indicated their policies were uniform in all branch libraries. The positive responses in the "combined libraries" totaled 8 out of 20. It was found that the policies of most libraries were formulated by several individuals. Respondents from "separate libraries" showed library policies to be formulated and approved by individuals in the following positions: "pharmacy faculty," 4 out of 9; "library committee," 7 of 9; "pharmacy librarian," 8 of 9; and the "library director,"



8 out of 9. The responses of "combined libraries" derived the following ratios: "pharmacy faculty," 4 out of 21; "Library committee," 17 of 21; "pharmacy librarian," 10 out of 21; and the "library director," 16 out of 22. [Table 5.]

Table 5.-- Technical processing performed by responding libraries showing division by library group

CATEGORY	ALL LIBRARIES					SEPARATE BRANCH LIBRARY					U of H Pharmacy Library
	Total Responding	YES		NO		Total Responding	YES		NO		
		No.	%	No.	%		No.	%	No.	%	
Verification .....	22	18	81.8	4	18.2	9	6	66.7	3	33.3	Yes
OCLC Input .....	21	8	38.1	13	61.9	8	1	12.5	7	87.5	No
Original Cataloging .....	21	13	61.9	8	38.1	8	2	25.0	6	75.0	No
Filing in Card Catalog .....	22	22	100.0	0	0	9	9	100.0	0	0	Yes
Typing of Purchase Requests .....	22	21	95.5	1	4.5	9	8	88.9	1	11.1	Yes
Typing of Invoices .....	21	13	61.9	8	38.1	8	1	12.5	7	87.5	No
Payment of Orders .....	21	10	47.6	11	52.4	8	0	0	8	100.0	No
Maintain Budget Ledger .....	22	13	59.1	9	40.9	9	1	22.2	7	77.8	No
Prepare & Apply Call # Labels .....	21	13	61.9	8	38.1	8	2	25.0	6	75.0	No
<b>POLICIES</b>											
A Written Copy is Maintained? .....	21	17	77.3	5	22.7	9	5	55.6	4	44.4	No
Uniformly Apply to all Branches .....	20	8	40.0	12	60.0	9	6	66.7	3	33.3	No
Individuals in the following positions help set the library's policy:											
Pharmacy Faculty .....	21	4	19.0	17	81.0	9	4	44.4	5	55.6	Yes
Library Committee .....	21	17	81.0	4	19.0	9	7	77.8	2	22.2	Yes
Pharmacy Librarian .....	21	10	47.6	11	52.4	9	8	88.9	1	11.1	Yes
Library Director .....	22	16	72.7	6	27.3	9	8	88.9	1	11.1	Yes

### Services

Questions 72 thru 83 solicited priority ratings for various library services. Participants were asked to rate thirteen services in relation to the emphasis at their library. The rating scale was placed at "one" through "ten"; "one" being a very high priority, and "ten" indicating a service not offered.

The category, "provide reference assistance," led all services of both groups with a mean rating value of 1.00. One

hundred percent of all respondents gave it top priority in library service. Second and third place ratings for services for "separate branch libraries" rated "telephone reference service" second, with a 3.00 mean value, and "provide inter-library loan service" third, with a value of 3.44. Those same services were listed in reverse order by the "combined library" group, with values of 2.62 and 2.63 respectively. The fourth most important service for both groups was "preparing acquisition lists." The "combined libraries" and the "separate libraries" ranked this service 4.00 and 3.98 respectively.

Although "personalized research assistance" for faculty rated fifth in both groups, "research assistance for graduates" and "research assistance for undergraduates" rated much lower. In the "separate libraries" group, both "graduates" and "undergraduates" rated eighth, with a 6.22 value. The "combined libraries" rated "research assistance for graduates" eighth at 6.23, and "research assistance for undergraduates" twelfth, at 6.77.

The "separate libraries" rated "outreach program services" sixth with a 5.66 value, and "lectures to classes or groups" seventh, with a value of 6.11. Respondents in "combined group" reversed these priorities, with values 4.54 and 5.27 respectively.

The emphasis placed on computerized data base services varied significantly between the groups. "Separate libraries" rated this service as twelfth, with a value of 8.13, while "combined libraries" placed it ninth, with a value of 6.33. Only 37% of the "separate libraries" offered data base services, while more than 47% of "combined libraries" did. "Preparing subject bibliographies" received a low rating; both groups placed it eleventh out of a total of thirteen listed services. Half the respondents in "separate libraries" reported classroom instruction for credit, while only 38% of the "combined libraries" did. [Table 6.] [Table 7.]

Table 6.— All Responding Libraries Combined  
 Rating of user services on a scale one to ten  
 One= very high through Ten= do not offer

RANKING CATEGORIES SHOWING PERCENTAGE RESPONSE

SERVICES	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	NINE	TEN	MEAN	RANK	TOTAL RESPONDING
PREPARE SUBJECT BIBLIOGRAPHIES .....	14.3	4.5	9.5	19.5	4.8	4.8	0	4.8	11.3	26.9	6.3	11	21
PERSONALIZED RESEARCH ASSISTANCE													
UNDERGRADUATES .....	22.7	4.5	0	0	9.1	4.5	4.5	0	4.5	50.0	6.77	12	22
GRADUATES .....	27.3	9.1	0	0	4.5	4.5	4.5	0	4.5	45.5	6.23	8	22
FACULTY .....	45.5	9.1	0	0	4.5	9.1	4.5	0	4.5	22.7	4.41	5	22
LECTURES TO CLASSES OR GROUPS .....	31.8	18.2	4.5	0	13.6	0	0	4.5	4.5	22.7	4.54	6	22
PREPARE ACQUISITION LISTS .....	45.5	9.1	13.6	0	0	0	0	9.1	4.5	18.2	4.00	4	22
PREPARE LIBRARY NEWSLETTER .....	31.8	0	4.5	4.5	0	0	0	0	4.5	54.5	6.50	10	22
OUTREACH INSTRUCTIONAL PROGRAMS													
BOTH PRINTED AND AUDIO-VISUAL .....	31.8	9.1	4.5	0	9.1	0	0	13.6	9.1	22.7	5.27	7	22
PROVIDE INTER-LIBRARY LOAN SERVICE .....	66.7	9.5	4.8	0	0	0	0	0	0	14.3	2.62	2	21
PROVIDE PERSONAL ASSISTANCE .....	100.0	0	0	0	0	0	0	0	0	0	1.0	1	22
PROVIDE TELEPHONE REFERENCE													
ASSISTANCE TO QUALIFIED USER .....	63.6	4.5	9.1	0	4.5	4.5	0	9.1	4.5	0	2.63	3	22
TEACH CLASSES FOR CREDIT .....	23.8	0	0	4.8	0	0	0	4.8	4.8	61.9	7.43	13	21
PROVIDE COMPUTERIZED LITERATURE													
SEARCHES .....	28.6	9.5	0	0	4.8	0	0	4.8	0	52.4	6.33	9	21

Table 7.— Separate Branch Library and U. of H. Pharmacy Library  
 Rating of user services on a scale one to ten  
 One= very high through ten= do not offer

RANKING CATEGORIES SHOWING PERCENTAGE RESPONSE

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	NINE	TEN	MEAN	RANK	TOTAL NUMBER	U. of H. PHARM. LIB.	
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	NUMBER	VALUE	RANK
PREPARE SUBJECT BIBLIOGRAPHIES .....	12.5	0	0	0	12.5	0	0	12.5	12.5	50.0	7.94	11	9	5	2
PERSONALIZED RESEARCH ASSISTANCE															
UNDERGRADUATES .....	22.2	11.1	0	0	11.1	0	11.1	0	0	44.4	6.22	8	9	5	2
GRADUATES .....	22.2	11.1	0	0	11.1	0	11.1	0	0	44.4	6.22	8	9	5	2
FACULTY .....	33.3	11.1	0	0	0	11.1	11.1	0	0	33.3	5.33	5	9	6	3
LECTURES TO CLASSES OR GROUPS .....	11.1	11.1	11.1	0	22.2	0	0	0	11.1	33.3	6.11	7	9	5	2
PREPARE ACQUISITION LISTS .....	55.6	11.1	0	0	0	0	0	11.1	0	22.2	3.98	4	9	1	1
PREPARE LIBRARY NEWSLETTER .....	11.1	0	0	0	0	0	0	0	0	88.9	9.00	13	9	10	4
OUTREACH INSTRUCTIONAL PROGRAMS															
BOTH PRINTED AND AUDIO-VISUAL .....	33.3	0	0	0	22.2	0	0	11.1	0	33.3	5.66	6	9	5	2
PROVIDE INTER-LIBRARY LOAN SERVICE .....	55.6	11.1	0	11.1	0	0	0	0	0	22.3	3.74	3	9	1	1
PROVIDE PERSONAL ASSISTANCE .....	100.0	0	0	0	0	0	0	0	0	0	1.00	1	9	1	1
PROVIDE TELEPHONE REFERENCE															
ASSISTANCE TO QUALIFIED USER .....	55.6	0	11.1	11.1	11.1	11.1	0	11.1	0	0	3.00	2	9	5	2
TEACH CLASSES FOR CREDIT .....	12.5	0	0	12.15	0	0	0	12.5	12.5	50.0	7.85	10	8	10	4
PROVIDE COMPUTERIZED LITERATURE															
SEARCHES .....	0	12.5	0	0	12.5	0	0	12.5	0	62.5	8.13	12	8	10	4

CHAPTER V  
ANALYSIS OF DATA: USER SURVEY

Introduction

The "User Survey" questionnaire was designed exclusively for the frequent and knowledgeable pharmacy library user. Fifteen questionnaires were distributed to each of the seventy-two accredited college of pharmacy libraries, in an attempt to ascertain present levels of user satisfaction in a variety of areas. Twenty questionnaires were administered to users at the University of Houston, Pharmacy Library. Mean values were determined from a standardized rating scale from "one" to "five." A mean value of 1.33 would indicate that the response fell one-third the distance between "very pleased" and "adequate," or "excellent" and "above average," according to the appropriate scale used (see Appendix B).

All returned questionnaires were tallied together as a single group. The statistical analysis is presented as Table 8, and shall hereafter be referred to as the "combined group."

It was pertinent to the study to also obtain a separate analysis of data, specific to the University of Houston, College of Pharmacy Library. The statistical analysis is presented for comparative purposes in Table 9.

Hereafter, this second group shall be referred to as the "Houston Pharmacy Library." Tables 10 thru 13 can be easily scanned for a comparison of the groups; the graphs have been color-keyed for quick reference.

Staff

Most avid library users would be the first to admit that the degree of user success in libraries is largely dependent on the quality and accessibility of the staff. Questions 1 thru 5



presented an opportunity for the user to evaluate library staff, both full and part-time, in the following five areas: "willingness to help," "knowledge of subject," "attitude," "accessibility," and "dependability." The mean value in four of five categories for both groups was in the "above average" to "excellent" range. The only remaining category, "subject knowledge" of part-time personnel, was rated as "average" to "above average" for the "combined group," with a mean of 2.40. Permanent staff received higher ratings than part-time personnel in all five categories for both groups. Respondents in the "Houston Pharmacy Library" ranked UH library personnel significantly higher than comparable categories in the "combined group." "Willingness to help" of permanent personnel in the "Houston Pharmacy Library" led all ratings with a perfect 1.0 mark; the same category received a value of 1.33 from the "all combined group." [Tables 8. 9. 10.]

#### Services

In questions 6 thru 8 the participants were able to appraise current services in regard to "library hours," "loan periods," and "photocopying services." The only area of obvious dissatisfaction was weekend hours at the "UH Pharmacy Library." Respondents in this group assigned a "Saturday" rating of 2.63 and a "Sunday" rating of 3.01. The "all combined group" gave a mean value of 2.37 for "Saturday" and 2.41 for "Sunday" library hours.

"Evening" hours received a fairly respectable rating in both groups; the "all combined group" gave a 1.82 and the "Houston Pharmacy Library" a 1.75. In general, respondents felt "length of loan period" and "photocopying services" were quite adequate. The only exception concerned the "machine dependability" of photocopiers--the mean from all responses figured at 2.23. [Tables 8. 9. 11.]

## Facilities

Questions 9 thru 12 presented an opportunity for the user to evaluate the physical facilities of the library with regards to "study area," "lounge area," "reference area," and "micro-reading area." Respondents rated the UH Pharmacy Library between "adequate" and "very pleased" for all six categories. The highest was 1.65 for the "quiet study area," and the lowest was at 1.95 for the "size of study area."

The "Houston Pharmacy Library" group rated the remaining facilities as follows: "lounge area," 1.85; "reference area," 1.50; "micro-reading area," 1.80; and "number of micro machines," 1.80. Respondents in the "combined group" rated "lounge area," "micro reading area," and "number of micro machines" as less than adequate with a mean value of 2.14, 2.13 and 2.17 respectively. The "combined group" rated the remaining three categories as follows: "quiet study area," 1.85; "size of study area," 1.94; and "reference area" 1.89. [Tables 8. 9. 12.]

## Collection

The remaining portion of the questionnaire evaluated the library's collection, regarding both print and non-print material. Answers were based on how adequately the collection size fulfilled the needs of the user. Respondents at the University of Houston consistently rated their Pharmacy Library higher than did respondents at the other pharmacy libraries. Mean rankings reflected a higher rating for the UH library in all eight categories.

In general, library users perceived the print material collection as more adequate than the non-print collection. "The combined libraries" assigned "books," "journal titles," and "total journal volumes" at 1.97, 1.97, and 2.00 respectively; while the "Houston Pharmacy Library" recorded 1.55, 1.47 and 1.60 for the same. "Reference materials" also received a fairly satisfactory rating of 1.47 at the University of Houston, and

1.90 for the "combined group." The University of Houston" and the "combined group" library users determined the mean ratings for "non-print materials" to be respectively: "slides," 2.28 and 1.89; "filmstrips," 2.29 and 1.72; "cassettes," 2.24 and 1.77; "microforms," 2.23 and 1.88. [Tables 9. 12.]

Table 8.--User satisfaction survey. All Library Users  
Showing percent distribution by category rank

	TOTAL #	ONE		TWO		THREE		FOUR		FIVE		Mean
		Excellent No.	%	Above Average No.	%	Average No.	%	Below Average No.	%	Very Poor No.	%	
<b>STAFF</b>												
<b>Permanent</b>												
Willingness to Help	192	142	74.0	39	20.3	9	4.7	1	0.5	1	0.5	1.33
Knowledge of Subject	190	103	54.2	52	27.4	31	16.3	4	2.1	0	0	1.67
Attitude	192	115	59.9	59	30.7	14	7.3	4	2.1	0	0	1.52
Accessibility	191	110	57.6	54	28.3	25	13.1	2	1.0	0	0	1.58
Dependability	188	119	63.3	47	25.0	16	8.2	5	2.7	1	0.5	1.52
<b>Part-time</b>												
Willingness to Help	139	65	46.8	45	32.4	25	18.8	3	2.2	1	0.7	1.77
Knowledge of Subject	136	34	25.0	38	27.9	44	32.4	15	11.0	5	3.7	2.40
Attitude	138	53	38.4	51	37.0	30	21.7	5	2.9	0	0	1.89
Accessibility	136	61	44.9	45	33.1	27	19.9	2	1.5	0	0	1.80
Dependability	134	49	36.6	48	35.8	33	24.6	4	3.0	0	0	1.94

Table 8.--continued

	TOTAL #	ONE		TWO		THREE		FOUR		Mean
		Very Pleased No.	%	Adequate No.	%	Not Adequate No.	%	Very Displeased No.	%	
<b>SERVICES</b>										
<b>Hours library is Open</b>										
Evenings	188	72	38.3	80	42.6	34	18.1	2	1.1	1.82
Saturdays	182	36	19.8	69	37.9	52	28.6	25	13.7	2.37
Sundays	180	37	20.6	57	31.7	63	35.0	23	12.8	2.41
<b>Length of Loan Period</b>										
General Collection	186	85	45.7	85	45.7	13	7.0	3	1.6	1.65
Bound Periodicals	181	59	32.6	95	52.5	18	9.9	8	4.4	1.88
Current Periodicals	180	58	32.2	89	49.4	25	13.9	8	4.5	1.91
<b>Photocopying Services</b>										
Staff Dependability	183	89	48.6	63	34.4	25	12.7	6	3.3	1.72
Machine Dependability	185	46	24.9	77	41.6	36	19.5	26	14.1	2.23
<b>FACILITIES</b>										
<b>Study Area</b>										
Quiet	192	72	37.5	86	44.8	25	13.0	9	4.7	1.85
Size of Area	190	60	31.6	90	47.4	31	16.3	9	4.7	1.94
Lounge Area	180	49	27.2	71	39.4	46	25.6	14	7.8	2.14
Reference Area	188	58	30.9	96	51.1	30	16.0	4	2.1	1.89
<b>Micro Reading Room</b>										
Size of Area	166	40	24.1	72	37.1	46	23.7	8	4.8	2.13
No. of Machines	165	33	20.0	80	48.5	43	26.1	9	5.5	2.17
<b>COLLECTION</b>										
Number of Books	190	51	26.8	101	53.2	31	16.3	7	3.7	1.97
Number of Journal Titles	189	57	30.2	88	46.6	36	19.0	8	4.2	1.97
Number of Journal Vols.	188	53	27.3	89	47.3	39	20.7	7	3.7	2.00
Number of Slides	155	23	14.8	80	51.6	40	25.8	12	7.7	2.28
Number of Filmstrips	150	20	13.3	78	52.0	41	27.3	11	7.4	2.29
Number of Cassettes	157	22	14.0	85	54.1	41	26.1	9	5.7	2.24
Number of Microforms	154	22	14.3	86	55.8	35	22.7	11	7.1	2.23
Number of Ref. Material	184	64	34.8	83	45.1	29	15.8	8	4.3	1.90

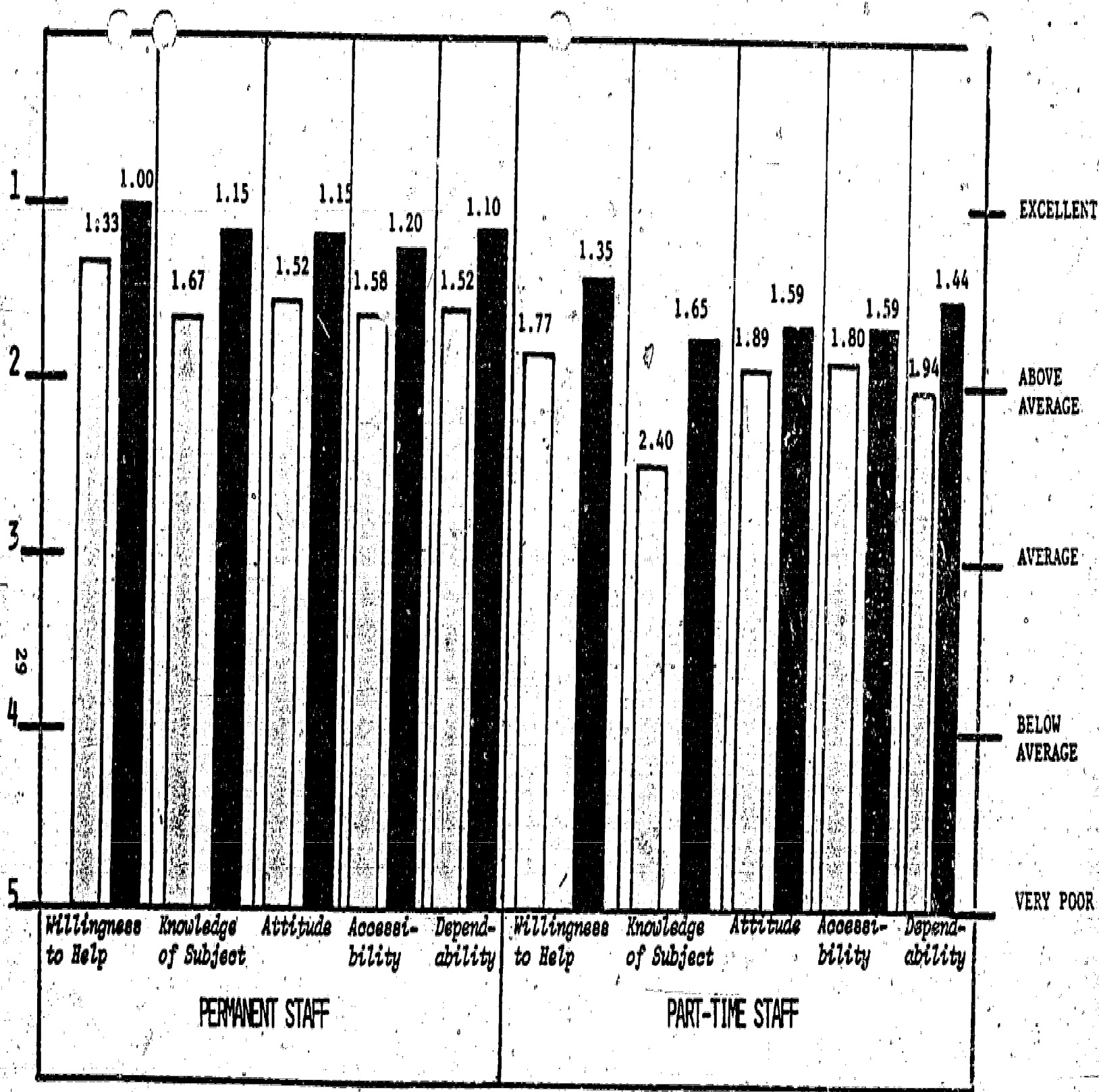
Table 9.--User satisfaction survey. University of Houston College of Pharmacy Library users. Showing percent distribution by category rank

	TOTAL #	ONE		TWO		THREE		FOUR		FIVE		Mean
		Excellent No.	%	Abvve Average No.	%	Average No.	%	Below Average No.	%	Very Poor No.	%	
<b>STAFF</b>												
<b>Permanent</b>												
Willingness to Help...	20	20	100.0	0	0	0	0	0	0	0	0	1.00
Knowledge of Subject .	20	17	85.0	3	15.0	0	0	0	0	0	0	1.15
Attitude .....	20	17	85.0	3	15.0	0	0	0	0	0	0	1.15
Accessibility .....	20	16	80.0	4	20.0	0	0	0	0	0	0	1.20
Dependability .....	20	18	90.0	2	10.0	0	0	0	0	0	0	1.10
<b>Part-time</b>												
Willingness to Help ..	17	12	70.6	4	23.5	1	5.9	0	0	0	0	1.35
Knowledge of Subject .	17	9	52.9	5	29.4	3	17.6	0	0	0	0	1.65
Attitude .....	17	10	58.8	4	23.5	3	17.6	0	0	0	0	1.59
Accessibility .....	17	10	58.8	4	23.5	3	17.6	0	0	0	0	1.59
Dependability .....	16	11	68.8	3	18.8	2	12.5	0	0	0	0	1.44

Table 9.--continued

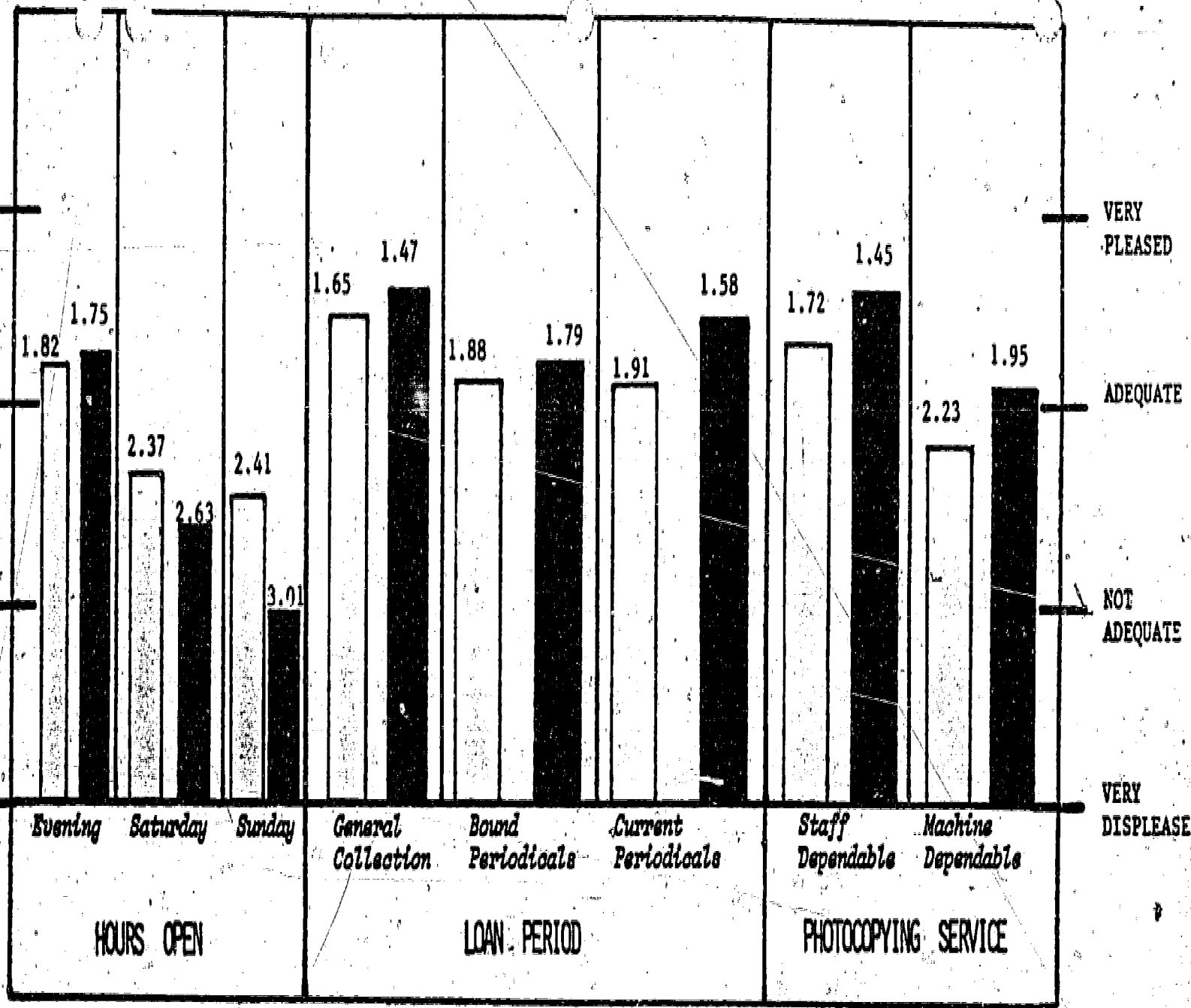
	Total #	ONE		TWO		THREE		FOUR		Mean
		Very Pleased No.	%	Adequate No.	%	Not Adequate No.	%	Very Displeased No.	#	
<b>SERVICES</b>										
<b>Hours library is Open</b>										
Evenings .....	20	8	40.0	9	45.0	3	15.0	0	0.0	1.75
Saturdays .....	16	1	6.3	4	25.0	3	31.3	6	37.5	2.63
Sundays .....	15	1	6.7	3	20.0	5	33.3	6	40.0	3.01
<b>Length of Loan Period</b>										
General Collection .....	19	10	52.6	9	47.4	0	0	0	0	1.47
Bound Periodicals .....	19	7	36.8	10	52.6	1	5.3	1	5.3	1.79
Current Periodicals .....	19	8	42.1	11	57.9	0	0	0	0	1.58
<b>Photocopying Services</b>										
Staff Dependability .....	20	11	55.0	9	45.0	0	0	0	0	1.45
Machine Dependability .....	20	5	25.0	12	60.0	2	10.0	1	5.0	1.95
<b>FACILITIES</b>										
<b>Study Area</b>										
Quiet .....	20	8	40.0	11	55.0	1	5.0	0	0	1.65
Size of Area .....	20	6	30.0	9	45.0	5	25.0	0	0	1.95
Lounge Area .....	20	5	25.0	13	65.0	2	10.0	0	0	1.85
Reference Area .....	20	10	50.0	10	50.0	0	0	0	0	1.50
<b>Micro Reading Room</b>										
Size of Area .....	20	7	35.0	10	50.0	3	15.0	0	0	1.80
No. of Machines .....	20	7	35.0	10	50.0	3	15.0	0	0	1.80
<b>COLLECTION</b>										
Number of Books .....	20	10	50.0	9	45.0	1	5.0	0	0	1.55
Number of Journal Titles ...	19	11	57.9	7	36.8	1	5.3	0	0	1.47
Number of Journal Vols. ....	20	10	50.0	8	40.0	2	10.0	0	0	1.60
Number of Slides .....	18	4	22.2	12	66.7	2	11.1	0	0	1.89
Number of Filmstrips .....	18	6	33.3	11	61.6	1	5.6	0	0	1.72
Number of Cassettes .....	17	6	35.3	9	52.9	2	11.8	0	0	1.77
Number of Microforms .....	17	4	23.5	11	64.7	2	11.8	0	0	1.88
Number of Ref. Material ....	19	11	57.9	7	36.8	1	5.3	0	0	1.47



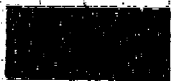


ALL RESPONSES COMBINED (Group one)  
 UNIVERSITY OF HOUSTON, PHARMACY LIBRARY (Group Two)

Table 10.--User evaluation of library staff showing division by respondent groups

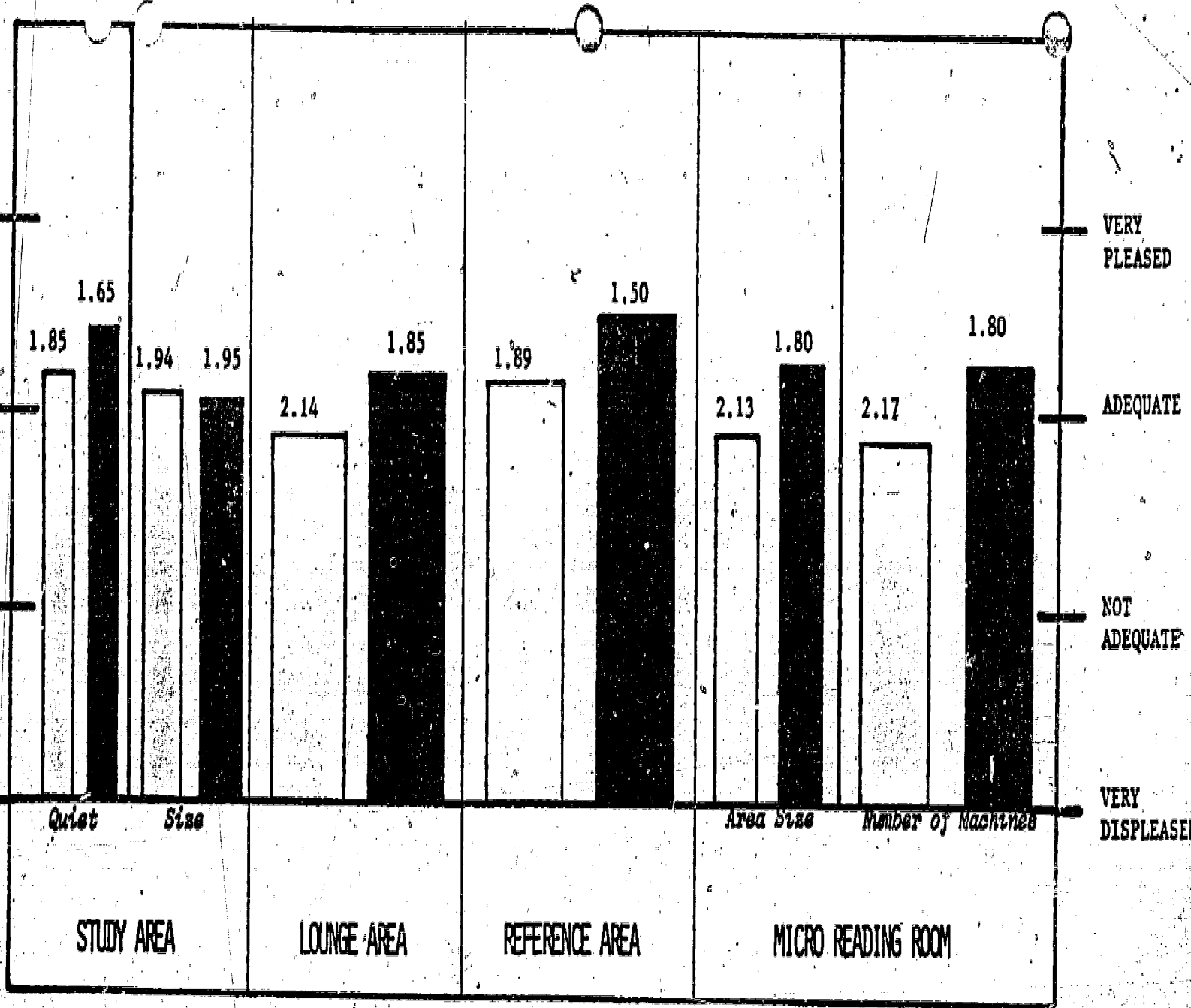


ALL RESPONSES COMBINED (Group One)



UNIVERSITY OF HOUSTON, PHARMACY LIBRARY (Group Two)

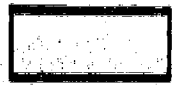
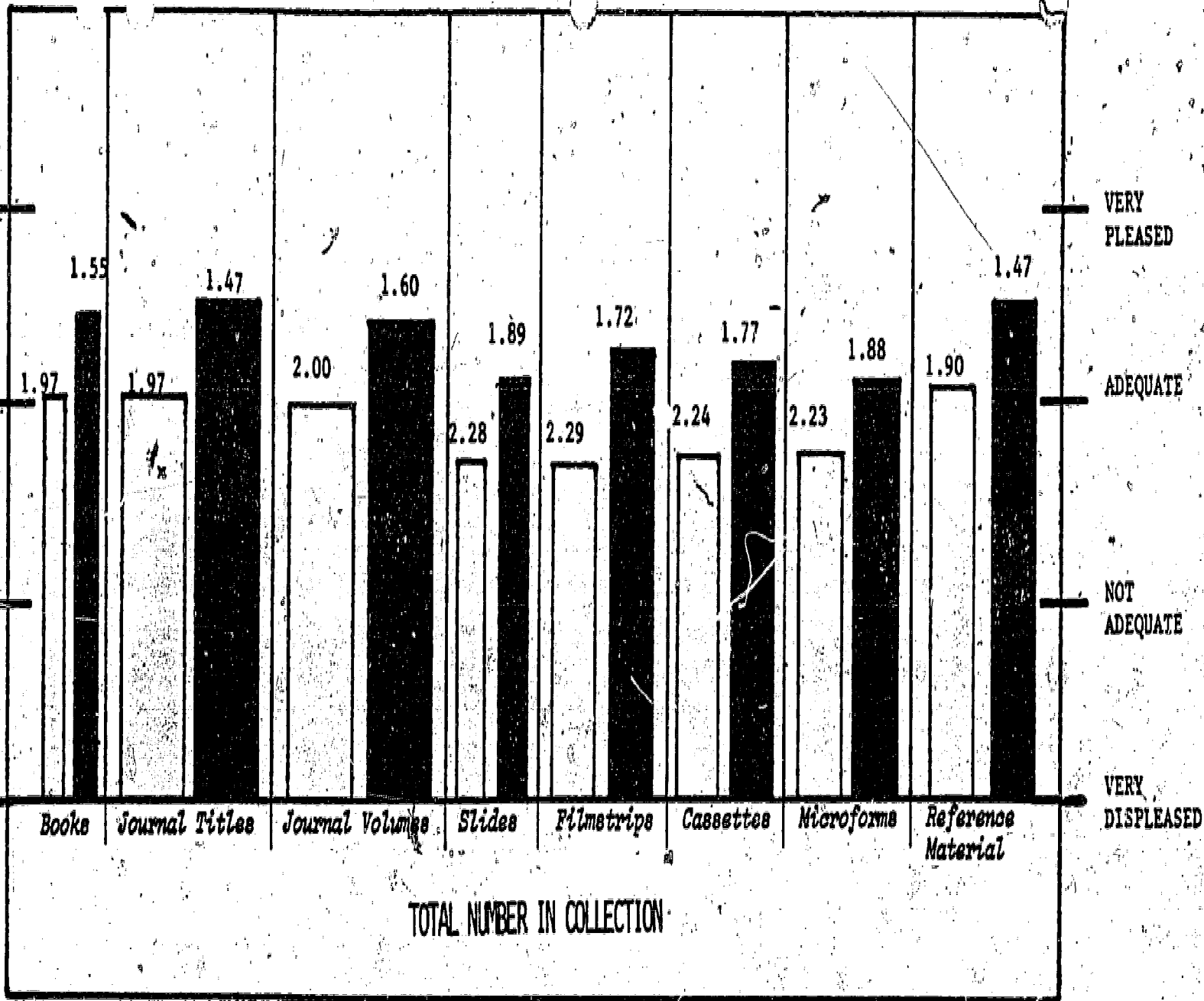
Table 11.--User evaluation of library services showing division by respondent groups



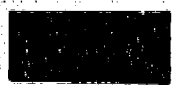
ALL RESPONSES COMBINED. (Group One)

UNIVERSITY OF HOUSTON, PHARMACY LIBRARY (Group Two)

Table-12.--User evaluation of library facilities showing division by respondent groups



ALL RESPONSES COMBINED (Group One)



UNIVERSITY OF HOUSTON, PHARMACY LIBRARY (Group Two)

Table 13.--User evaluation of library collection showing division by respondent groups

## CHAPTER VI CONCLUSION AND RECOMMENDATIONS

This report has sought to identify the present status of pharmacy libraries in general, with particular emphasis on the University of Houston Pharmacy Library, as viewed by both the pharmacy librarian and the typical library user. A library's optimum effectiveness is dependent upon the physical facilities, the collection, the services, and the library skills of its patrons. It was this premise that gave impetus to the methodological approach of this study.

The data collected in the "library survey" clearly indicates that the UH Pharmacy Library is strong in most areas surveyed when compared with the norm of other responding libraries. UH Pharmacy Library reported a higher response value in many categories for both questionnaires.

### Physical Facilities

The physical facilities at the UH Pharmacy Library proved adequate in most areas. Of the nine reporting libraries, the UH Library was one of the two reporting an automated book detection security system. The five micro-machines at UH library proved more than adequate when considering the low number micro-material presently in the collection. The UH Pharmacy Library has recently moved into a newly expanded facility that provides a substantial increase in overall area. This new facility, as indicated in the survey, proved adequate but not optimum when compared to other responding libraries. Fifty percent of the libraries surveyed reported a facility with larger overall area than the 3,600 sq ft reported by the UH Pharmacy Library.



It was especially disconcerting to find the size of the stack area at UH in the lower thirtieth percentile. A recent projection at UH indicated an adequate area for collection expansion for the next six to eight years, with an option after that time for adding additional stacks. A partial answer to this dilemma is reflected in UH Library's low annual book acquisition rate.

### Collection

The UH Pharmacy Library's response to the "Library Survey" indicated its annual book acquisitions rate to be 216, while the median figure for all libraries was 422. Though the latter figure nearly doubled the UH library total, it is not felt the collection at the UH library has been neglected, only that extreme care has been exhibited in the expenditure of book funds. An appreciable portion of each year's budget goes for purchase of reference materials and the first year's subscription cost of all newly acquired journals. The total amount available at the UH library for its monographic collection did not appear to be significantly different from the median amount figured for all responding libraries. For the year reported, the UH pharmacy library acquired new journal subscriptions at a much higher rate than the norm at the other responding libraries; 14 versus the overall median of 8.

It might be noted, that due to severe budgetary restraints of the main UH campus library, a serial review committee was established in the fall of 1978 to monitor all new journal requests. As a result, this past year has seen a drastic reduction of new journal purchases at the UH Pharmacy Library. In order to maintain full integrity of the collection in fulfilling the research needs of the faculty, a more unrestrictive approach to the acquisition of new journals should be found.

### Operations & Services

Most libraries responding to the survey perceived themselves as emphasizing user service and personal assistance, the UH Pharmacy Library being no exception. Personnel at the UH Pharmacy Library take pride in their keen awareness to the needs of the library user. The responses of the UH Library in this portion of the survey largely paralleled those given by a significant number of other participating libraries. Most, including the UH Library, considered top priorities to be: "provide personal assistance," "provide telephone reference assistance," and "provide interlibrary loan service." The UH Pharmacy Library also indicated a very high interest in "providing research assistance to faculty and students," while a large number of the remaining group rated this service as a fairly low area of concern.

### User Satisfaction

Concerning that portion of the survey dealing with user satisfaction, it was surprising to find such a significant difference between the overall rating of pharmacy libraries in general, and those ratings specific to the UH Pharmacy Library. The UH Pharmacy Library was rated higher in all but three categories, indicating a very high user success rate. It was made obvious by this survey, that users at the UH Library saw their library as successful in fulfilling the needs of the user. Two of the most criticized policies at the UH Library were the lack of study hours on Saturday and Sunday; presently the library is closed on both days. In the past, based on input from faculty and students, projected use of the library during these times did not seem to justify the additional staff needed to keep it open. However, in light of this recent trend, the possibility of extending library hours should be examined further.

The third area in which the UH Library rating fell below the norm of other responding libraries concerned the space allocated for personal study. In light of a future need to

further reduce study area in lieu of collection expansion, a thorough examination of possible ramifications should be undertaken.

### Library Policy

It was surprising to find nearly one-half of all responding libraries without a written policy manual. At the time of the survey, UH Library was also included within this group; however, in recent months an extended effort has been made to formulate both a library policy manual and a library procedure manual.

### Summary

The purpose of this report was to survey present facilities, services, and user satisfaction of pharmacy libraries throughout the country, in order to better assess the effectiveness and user success at the University of Houston, College of Pharmacy Library. This study, although mainly intended as a statistical analysis of survey data, has sought also to uncover and assess certain strengths and weaknesses exhibited at the UH Pharmacy Library. This report did not accomplish all of its goals, nor was it uniformly successful in those it did attain; yet, the author hopes he has presented a significant insight into the present status of pharmacy libraries and their relationship with the library user, utilizing adequate statistical justification. Much of the data merely confirmed that which was already assumed, but in so doing, provided a framework for a further comprehensive evaluation within specific areas of concern.

The author has a direct investment in the UH Pharmacy Library and feels a commitment to its continued success along with the faculty and the students. The College of Pharmacy has given total support to the library and should certainly be commended again for its provision of an additional full time staff position. Excellence in both research and teaching continue as a high



priority of the College. Dean Buckley's pioneer research on hypertension has brought him National acclaim. The faculty are actively involved in research in a variety of areas. Success in federal funding has never been better, including state and local funds for research. It has been the goal of the Pharmacy Library for several years to match the excellence of the college with an excellence of library services and collection expansion. Continued strength and growth at all levels of library functions can only be guaranteed through a recommitment of library staff and the continued increase of financial support.

## LITERATURE CITED

1. Glen Sonnedecker, Kremers and Urdang's History of Pharmacy (4th ed.; Philadelphia: Lippincott, 1976), p. 182.
2. Laurence D. Lockie, From Potions to Pills to Penicillin (Ann Arbor: Laurence Dagenias Lockie, 1954), p. 98.
3. Sonnedecker, p. 250.
4. Philip Rosenstein, "Changing Objectives of the Pharmacy College Library," American Journal of Pharmaceutical Education, 27: 250, September 1963.
5. Rosenstein, p. 250.
6. Isabelle T. Anderson and George E. Osborne, "The History of the Committee on Libraries of the American Association of Colleges of Pharmacy," Medical Library Association Bulletin, 41: 414, January-October, 1953.
7. C.O. Lee, "The Report of the Committee on Libraries," American Journal of Pharmaceutical Education, 10(4): 525-536, October, 1946.
8. C.O. Lee, "The Report of the Committee on Libraries," American Journal of Pharmaceutical Education, 3: 538-545, October, 1939.
9. R.A. Deno, "Report of the Committee on Libraries," American Journal of Pharmaceutical Education, 17(4): 597, October, 1953.
10. Medical Library Association. Committee on Surveys and Statistics, "Library Statistics of Schools in the Health Sciences: Part I," Medical Library Association Bulletin, 54: 206, January-October, 1966.
11. Susan Crawford, "Health Sciences Libraries in the 1960's: An Overview," Medical Library Association Bulletin, 60: 4, April, 1972.
12. Susan Crawford and Gary Dandurand, "Health Sciences Libraries in the United States: A Five Year Perspective," Medical Library Association Bulletin, 63: 7-13, January, 1975.
13. Susan Crawford, et al, "Health Sciences Libraries in the United States: A Five Year Perspective," pg. 9.
14. "Regional Medical Libraries," Index Medicus, 20(4): ix, April, 1979.

15. Theodore Samore and others, "Libraries Serving Educational Programs in the Allied Health Professions and Occupations," Medical Library Association Bulletin, 60(2): 29-37, April, 1972.

16. Richard H. Orr and others, "User Services Offered by Medical School Libraries in 1968," Medical Library Association Bulletin, 58(4): 455-473, October, 1970.

17. Robert W. Burns and Ronald W. Hasty, "A Survey of User Attitudes Toward Selected Services Offered by the Colorado State University Libraries," University of Illinois Graduate School of Library Science Occasional Papers, No. 121, November 1975.

18. Virginia B. Hall and Helaine Q. Nelson, "Pharmacy Libraries," American Journal of Pharmaceutical Education 38: 603-610.

19. "Objectives and Standards for Special Libraries," Special Libraries, 55: 672, December, 1964.

20. Martha J. Zachert, ed., Standards and Planning Guide for Pharmacy Library Service (Maryland: American Association of Colleges of Pharmacy, 1975).

21. Hall, p. 604.

APPENDIX A  
QUESTIONNAIRE

The College of Pharmacy Library

Library Status (Please indicate your library's classification by checking one of the following categories).

1. A branch library of the main campus library, located in close proximity to the College of Pharmacy. Please check if located in the same building \_\_\_\_\_
2. A division, floor, room, etc. of the main campus library.
3. An independent library.
4. Other. Please explain. \_\_\_\_\_

College of Pharmacy (Please fill in the appropriate number).

5. Total number of faculty.
6. Total number of present undergraduates.
7. Total number of present graduates. In Masters program \_\_\_\_\_ In Pharm D program \_\_\_\_\_ In Phd program \_\_\_\_\_ Other \_\_\_\_\_

Persomnel (Please fill in the appropriate numbers).

8. Professional Librarian (MLS).
9. Paraprofessional (BS, BA plus some administrative responsibilities).
10. Clerical (Total clerical hours per week).
11. Student (Total student hours per week).
12. Other (Please specify). \_\_\_\_\_

Salaries (Please fill in the appropriate figures for beginning persomnel)

CLASSIFICATION

9 Mo. CONTRACT    12 Mo. CONTRACT

13. Professional Librarian (Check one)
14. Paraprofessional (Check one)
15. Clerical (Per hour).
16. Students (Per hour).
17. Other. (Specify) \_\_\_\_\_


Collection (Please fill in the appropriate numbers).

18. Present number of monographs.
19. Present number of bound journals.
20. Present number of current periodical subscriptions.
21. Present number of microforms. Fiche \_\_\_\_\_ Film \_\_\_\_\_
22. Present number of audio-visual materials. Slides \_\_\_\_\_ Filmstrips \_\_\_\_\_  
Other. \_\_\_\_\_ (Specify) \_\_\_\_\_



Collection Cont.

23. Presently subscribe to *CHEMICAL ABSTRACTS*.  
Hard copy? Yes  No   
Microfilm edition? Yes  No

24. Presently subscribe to *DEHAEN DRUG INFORMATION SYSTEM*.  
In part? Yes  No  Which parts? \_\_\_\_\_  
Full subscription to all parts? Yes  No

Size (Please fill in the approximate figures in sq/ft).

25. Total area of library. \_\_\_\_\_

26. Stack area. \_\_\_\_\_

27. Lounge area. \_\_\_\_\_

28. Staff work area. \_\_\_\_\_

29. Reference area. \_\_\_\_\_

30. Microform reading area. \_\_\_\_\_

31. Other. (Specify) \_\_\_\_\_

Rate of Growth (Please fill in the appropriate numbers).

32. New monographs. (Total number for current 12 month period). \_\_\_\_\_

33. New periodical subscriptions. (Total number for current 12 month period). \_\_\_\_\_

34. New microforms. (Total number for current 12 month period).  
Fiche \_\_\_\_\_ Film \_\_\_\_\_

35. New audio-visual materials. Slides \_\_\_\_\_ Filmstrips \_\_\_\_\_ Cassettes \_\_\_\_\_

Circulation (Please fill in the following section as so directed).

Yes  No  36. Do bound journals circulate? If yes, then how long and to whom?  
\_\_\_\_\_

Yes  No  37. Do current issues of periodicals circulate? If yes, how long, and to whom?  
\_\_\_\_\_

38. Length of loan period for general collection.

University faculty \_\_\_\_\_ Pharmacy faculty \_\_\_\_\_

University undergraduates \_\_\_\_\_ Pharmacy graduates \_\_\_\_\_

Pharmacy undergraduates \_\_\_\_\_ University graduates \_\_\_\_\_

% 39. Approximately what percentage of the total library circulation does the in-house circulated material represent? e.g. number of in-house circulated material vs outside circulated material.

Budget (Please fill in the appropriate figures out of your current budget).

40. Money for new monographs. \_\_\_\_\_

41. Money for additional periodical subscriptions. \_\_\_\_\_

42. Money for equipment. Upkeep \_\_\_\_\_ New Equipment \_\_\_\_\_

43. The library budget is set by: Main campus library \_\_\_\_\_

Pharmacy Dept. \_\_\_\_\_ Other. (Specify) \_\_\_\_\_



Hours (Please fill in the hours that your library is open during a regular semester, excluding holidays, intersessions, and summer sessions.)

44. Monday through Sunday--Total number of hours open. \_\_\_\_\_
45. Monday \_\_\_\_\_ A.M. To \_\_\_\_\_ P.M.
46. Tuesday \_\_\_\_\_ A.M. To \_\_\_\_\_ P.M.
47. Wednesday \_\_\_\_\_ A.M. To \_\_\_\_\_ P.M.
48. Thursday \_\_\_\_\_ A.M. To \_\_\_\_\_ P.M.
49. Friday \_\_\_\_\_ A.M. To \_\_\_\_\_ P.M.
50. Saturday \_\_\_\_\_ To \_\_\_\_\_
51. Sunday \_\_\_\_\_ To \_\_\_\_\_

Equipment (Please fill in with appropriate numbers)

52. Photocopiers. Charge per copy \$ \_\_\_\_\_
53. Microfilm reading machines. \_\_\_\_\_
54. Microfiche reading machines. \_\_\_\_\_
55. Microform reader-printers. Fiche \_\_\_\_\_ Film \_\_\_\_\_ Charge per copy \$ \_\_\_\_\_
56. Microfiche duplicator machines. Charge per copy \$ \_\_\_\_\_
57. Audio-visual machines. Cassette players \_\_\_\_\_ Slide projectors \_\_\_\_\_  
Filmstrip projectors \_\_\_\_\_ Other. (Specify) \_\_\_\_\_
58. OCLC terminals. If comparable machine please specify. \_\_\_\_\_
59. Circulation control system. (Specify) CLSI etc. \_\_\_\_\_
60. If yes to question 59 please answer. Length of time on system \_\_\_\_\_  
Are you pleased with the system? Yes \_\_\_ No \_\_\_
61. Security control system. (Specify) Checkpoint etc. \_\_\_\_\_
62. If yes to question 61 please answer. Length of time on system. \_\_\_\_\_  
Are you pleased with the system? Yes \_\_\_ No \_\_\_

Technical Processing Our library provides its own technical processing as indicated below.

62. Verification. Acquisitions \_\_\_\_\_ Inter-library loans \_\_\_\_\_
63. OCLC input and the producing of card sets. \_\_\_\_\_
64. Original cataloging when necessary. \_\_\_\_\_
65. Filing in card catalog. \_\_\_\_\_
66. Typing of purchase requests \_\_\_\_\_
67. Typing of invoices. \_\_\_\_\_
68. Payment of orders. \_\_\_\_\_
69. Maintain budget ledger. \_\_\_\_\_
70. Prepare and apply call number labels. \_\_\_\_\_
71. Other. (Specify) \_\_\_\_\_



User Services Our library offers those services that are indicated below. A priority ranking has been given each service according to the following one to ten scale:

- ONE = VERY HIGH PRIORITY IN OUR LIBRARY
- TWO THROUGH NINE = DECREASING PRIORITY
- TEN = WE DO NOT OFFER THIS SERVICE AT OUR LIBRARY

- 72. Prepare subject bibliographies.
- 73. Do personalized reference research for: Undergraduates \_\_\_\_\_  
Graduates \_\_\_\_\_ Faculty \_\_\_\_\_ Other. (Specify) \_\_\_\_\_
- 74. Offer lectures to classes or groups.
- 75. Prepare acquisitions list for distribution at regular intervals.
- 76. Prepare library newsletter for distribution at regular intervals.
- 77. Prepare out-reach or instructional programs for the benefit of the library user. Printed \_\_\_\_\_ Audio \_\_\_\_\_ Visual \_\_\_\_\_
- 78. Provide inter-library loan service to: Faculty \_\_\_\_\_ Graduates \_\_\_\_\_  
Undergraduates \_\_\_\_\_ Other. (Specify) \_\_\_\_\_
- 79. Provide personal assistance (as conditions permit) to the library user.
- 80. Provide telephone reference service to qualified callers.
- 81. Teach classes that are offered for credit.
- 82. Provide computerized literature searches. Do you charge all users? Yes \_\_\_ No \_\_\_  
If no, whom do you not charge? \_\_\_\_\_
- 83. Other. (Please specify and provide ranking) \_\_\_\_\_

Policies (Please check (✓) wherever appropriate).

- 84. A written copy of library policies is maintained. Yes \_\_\_ No \_\_\_
- 85. Our library policies: a) \_\_\_ Uniformly apply to all campus branch libraries.  
b) \_\_\_ Are autonomous from other branch libraries. c) \_\_\_ Other (Specify) \_\_\_\_\_
- 86. Our library policies are set by individuals in the following offices:  
(Please check (✓) all that are appropriate). College of Pharmacy faculty \_\_\_\_\_  
Library committee \_\_\_\_\_ Pharmacy Librarian \_\_\_\_\_ Library Director \_\_\_\_\_  
Other. (Specify) \_\_\_\_\_

Miscellaneous (Please comment on what you thought of this questionnaire, or any other thoughts).

APPENDIX B

PHARMACY LIBRARY USER SURVEY

Dear Library User,

You have been selected to participate in a nationwide survey concerning user satisfaction at college o pharmacy libraries. This brief questionnaire is one of fifteen sent to each pharmacy library throughout the United States. If, for any reason, you cannot fill it out, please return it so that it can be given to another user. Remain anonymous by withholding your name or any other identification.

This survey is made possible by a grant from the University of Houston, and is being conducted by the Pharmacy Librarian at the same institution.

WHEN YOU HAVE COMPLETED THE QUESTIONNAIRE, PLEASE FOLD IT AS YOU WOULD A LETTER, STAPLE IT CLOSED, AND RETURN IT TO YOUR LIBRARIAN.

Thank You For Taking The Time

QUESTIONNAIRE

Please rate your library's effectiveness in the following areas. In each blank, print the appropriate letter. A rating should be given each item, even though your library may not offer the service/facility etc.

SCALE # ONE

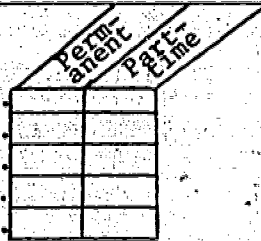
- A = EXCELLENT
- B = ABOVE AVERAGE
- C = AVERAGE
- D = BELOW AVERAGE
- E = VERY POOR

SCALE # TWO

- A = VERY PLEASED
- B = ADEQUATE
- C = INADEQUATE
- D = VERY DISPLEASED

STAFF (USE SCALE # ONE)

- 1. Willingness to help...
- 2. Knowledge of subject...
- 3. Attitude.....
- 4. Accessibility.....
- 5. Dependability.....



FACILITIES (USE SCALE # TWO)

- 9. Study area
  - Quiet.....
  - Number of tables, etc.....
- 10. Lounge area.....
- 11. Reference area.....
- 12. Microform reading area
  - Enough area.....
  - Number of machines.....

SERVICES (USE SCALE # TWO)

- 6. Hours library is open
  - Evening.....
  - Saturday.....
  - Sunday.....
- 7. Length of loan period
  - General collection....
  - Bound periodicals....
  - Periodical issues.....
- 8. Photocopying Service
  - Staff dependability...
  - Machine dependability..

COLLECTION (USE SCALE # TWO)

- 13. Number of books.....
- 14. Number of journal titles.....
- 15. Number of journal backfiles....
- 16. Number of slides.....
- 17. Number of filmstrips.....
- 18. Number of cassettes.....
- 19. Number of microforms.....
- 20. Number of reference material...

I FEEL THAT THE LIBRARY COULD MORE EFFECTIVELY SERVE THE USER BY: \_\_\_\_\_