A STUDY OF STUDENT AWARENESS, USE LEVEL, AND

OPINIONS REGARDING RESOURCES AND SERVICES

OF THE EDMON LOW LIBRARY

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CHAPTER I

INTRODUCTION

The Problem

Libraries are universally considered essential for the academic
needs of every university. Full utilization of library resources is
desirable from both academic and administrative points of view. The
complex and diverse nature of essential library resources in these days
caused by the vast amount of information produced and disseminated
makes proper utilization of libraries difficult. Skill in library use
and proper communication between users and librarians cannot be easily
assured when the users are primarily young students, as in the case on
a university campus. Recent studies revealed that students are often
not able to use library facilities efficiently and they lose time and
energy, developing a sense of frustration. The exact nature of under-
graduate and graduate student problems may vary from campus to campus
but the published studies indicate that the source of problems could
often be classified broadly as (a) student lack of knowledge concerning
the availability of many services, and (b) their difficulties in obtain-
ing services they expected. Erroneous ideas, lack of knowledge, and a
communication gap between students and library staff are regarded as
the sources of many potential problems related to library services.

The Oklahoma State University Library consists of the Edmon Low
Library, the Architectural Library and the Veterinary Medicine Library.

The Edmon Low Library is the main learning resource center of the O.S.U., and this survey is concerned with this library only. There are more than 1,200,000 volumes of printed material, over 750,000 items in microform and 100,000 maps in the central library system. The Edmon Low Library collection is housed in a five story building with a basement and over five acres of total floor space. Among the 35 librarians, 20 are public service librarians who are available to help the university's 20,000 plus student body on the main campus at Stillwater. The O.S.U. Library is reputed to be one of the better academic libraries in the region.

A search in the student newspaper, The Daily O'Collegian, reveals few, if any, indications of student dissatisfaction regarding the library resources and services. However, absence of outspoken complaints does not necessarily imply that students are fully utilizing the library or that there is no room for improvement. The librarians at Oklahoma State University are themselves asking questions. Is full utilization being made of the multi-million dollar Edmon Low Library and how can the student library skills be improved? These were the main questions broached in a paper presented by Heather Lloyd, Reference Librarian, at the Educational Improvement Institute (1978). For answers to these questions and plans for future development, one may require information on the O.S.U. student awareness of library services, their utilization of available library services, and their opinions and attitudes regarding the various aspects of the O.S.U. Library. It is believed that the accumulation of such data will prove valuable in the planning of O.S.U. library services to meet student needs.

Objectives

The specific objective of this study was to survey a random sample of Oklahoma State University students to obtain information concerning their:

1) awareness of resources and services available at the Edmon Low Library,

2) level of utilization of Edmon Low Library resources and services, and

3) opinions regarding extent and quality of resources and services at the Edmon Low Library.

CHAPTER II

LITERATURE REVIEW

A search was made in various periodicals concerned with libraries and librarianship to obtain informations relevant to the present study. Publications earlier to 1960 were not reviewed as the older studies were not considered especially relevant to the current needs of surveying university students regarding their use of libraries.

Maurice Line (1963) reported a survey of student attitude concerning the Southampton University library. In this survey students preferred subject catalogs and shelf searches rather than author catalogs. Male students were found more reluctant to search the card catalog and to prefer shelf search as compared to female students. Only 31% of the students ever sought staff help. About 44% of the first year students and 33% of the third year students were reluctant to put any questions to the library staff, either because they thought the questions might sound foolish or they thought the library staff to be too busy.

Communication difficulties between public services library staff and library users have been described by Mount (1966) from a librarian's point of view. He also found that the users are often (a) unaware of the reference tools and services available, (b) unsure about their own specific needs, (c) ambiguous or misleading in asking questions, (d) uncomfortable in expressing their ignorance and seeking help, and (e) lacking confidence in the library staff.

A well stocked library managed by a trained staff does not automatically assure full utilization of the library by its users, as a study conducted by Bunge (1967) indicated. He found that in spite of professional training in library schools, some of the library staff were unable to help users adequately because they lacked on-the-job experience. This staff lack of experience may contribute to user inefficiency.

Some common behavioral patterns related to physical environment reduce student effective use of library resources, according to a review of several library use studies made by Gardiner (1969). These physical environmental features include shelf locations and density of shelving. People tend to scan, primarily, documents which are shelved at convenient eye level and to ignore those above or below. Also, some people have visual perception problems and may overlook materials they really want. In the realm of library services, Gardiner found that the biggest barrier against any improvement in reference services is the lack of adequate feedback from library users regarding their successes, failures, and problems in reference searches.

Exchange of information between librarians and library users is essential for successful utilization of library resources and services. Possible psychological barriers which hamper the librarian-user relationship in general and the information exchange process in particular as well as some related factors was discussed by Crum (1969). While university libraries or student problems were not included in the study, it did provide some understanding of the reluctance shown by many library users in asking questions.

A study by Swope and Katzer (1962) on student reluctance in asking questions indicated that 65% of the students surveyed were not willing to ask any questions, while only 41% of the students "had some question in mind". This study did not elaborate on the student concepts as regards "having a question" in mind, and made it difficult to draw conclusions. Moreover, the sampling used by Swope and Katzer only included students who were found on the library premises during the survey period. Students not on the library premises might have had more problems regarding library use. A similar study at the University of Chicago reported by Sandock (1972) gave results of telephone interviews of a cross section of students. About 18% of the students did not know where the reference desk was located; 34% never sought help from the reference desk and 50% were not sure whether the reference section could help them. About 41% of the students were uncertain about the inter-library loan system, while graduate students complained about difficulties in locating government documents. Students, however, are not the only library users who may experience difficulties.

A survey of faculty awareness and attitudes toward academic library reference service by Nelson (1973) provided some insight into basic problems. It was found that 50% of the available reference services were unknown to a majority of the faculty surveyed. The overall awareness of the faculty regarding library services varied widely among the campuses studied, but the causes of variations were not reported.

Some studies have investigated both faculty and student perceptions. Detailed surveys of student and faculty needs and opinions were conducted at the University of Texas at Austin (1977), with a view toward formulating a comprehension user education program for the general libraries of that university. Printed questionnaires were distributed

to students in order to obtain data on the respondent background, frequency of library use, library skill, library use pattern, exposure to user education and interest in user education. The results revealed that while the students became more aware of the library resources as they advanced academically, the success of their library use fell short of the expectations of their instructors. Student attitudes toward library user education programs were found positive, and their opinions regarding the library were generally high. This survey further indicated that pre-college library instruction was of little help in adapting to a university library, and that a comprehensive user education program was required to help increase the student skills in library use.

The published literature on student use of university libraries generally indicates that a significant proportion of students lack skills in using libraries effectively and that negative attitudes regarding libraries do exist among some students. Patterns of library use by students, problems cited by them and the lack of awareness of library services varied from campus to campus. The result of a survey on one campus was not necessarily valid for others since all university libraries and their student users have unique features. The only reliable way to ascertain the use level of the library at O.S.U. and to find the level of student interest, skill and success in library use, for future guidance, appears to be through conducting an appropriate survey involving the O.S.U. student body.

CHAPTER III

INSTRUMENT AND METHODS

Choice and Development of the Instrument

Among instruments used for conducting opinion surveys, the most commonly employed are written questionnaires and personal or telephone interviews. A written questionnaire can be mailed to a large sample of the population, but an adequate response is often difficult to obtain. Personal or telephone interviews require a considerable amount of time and a large number of interviewers to reach an adequate sampling of the population. Moreover, bias may be introduced due to differences in personal interactions between the interviewers and the subjects of a survey.

The population to be surveyed for the present study, the O.S.U. student body, is a well identified group to whom the functions of the O.S.U. Library could not conceivably be completely unknown. It was expected that a survey relating to the O.S.U. Library would generate adequate interest among many students and assure their cooperation in filling out questionnaires. Such questionnaires should be relatively simple and unambiguous. Open-ended questions could be confusing to many and it was therefore decided that multiple answers would be provided for most of the questions. This decision regarding the format of the instrument was based on (a) information gathered from published studies, (b) discussion with informed and experienced persons on the

O.S.U. campus, and (c) realization of the nature of the population to be surveyed.

The contents of the questionnaire were broadly grouped into the categories of: (1) background information concerning the respondent, (2) library use frequency and pattern, (3) awareness of library services and facilities and (4) opinion on desirability of user education courses relating to library skill. Informal discussions were held with several librarians in order to learn of their experiences regarding student skills in library use. Similar informal discussions were held with instructors and students to assess the potential of questions which could yield useful data. A tentative list of questions was made. Comparison of this list with available published information revealed that it had many features in common with a questionnaire used by the University of Texas (1977) at Austin. The content and style of this questionnaire were determined to be generally suitable for O.S.U., requiring minimal alterations, additions, and deletions. Permission to use this instrument was obtained and the necessary adaptions were made.

The use of an instrument which had been found reliable and valid in recent applications offered obvious advantages. One major advantage was that results obtained from surveys conducted with similar instruments provided a common basis of comparison which could be useful. The instrument used in this survey is included in Appendix A.

Sampling Technique

The population to be surveyed was composed of students at O.S.U. enrolled on the Stillwater, Oklahoma, campus. A complete alphabetic

listing of students was available in the O.S.U. Students-Faculty-Staff Directory, and statistics showed that a total of 20,220 students were enrolled in the 1979 Spring semester. A selection of 5% of the population, totaling 1,011 students, was considered to be an adequate sample for the present survey. The main factor which was expected to have an effect upon library skills and use pattern, as revealed in the literature, was student classification. Other factors, such as field of study, living on or off campus and the sex of the student also could have some effect on the library use pattern. Due to the multiplicity of such variable factors, a stratified sample-taking would not be convenient for the present survey. Therefore, it was decided that complete randomization would be maintained for selection of the 1,011 subjects from among the 20,220 students of O.S.U.

The names, addresses and telephone numbers of students are alphabetically arranged in the O.S.U. Student-Faculty-Staff Directory. To assign consecutive serial numbers to all 20,220 students for the purpose of choosing random samples following a random number table was considered too inconvenient. Random sampling of an equal number of student names from each page of the directory seemed a feasible alternative. Since students names are entered in the directory in a strictly alphabetic order, no bias regarding their classification, major subject, sex, and so forth could possibly enter into random samples chosen from each page of the directory. Each of the 78 pages of the student section of the directory contained approximately 270 entrees. A table of random numbers was used to select 13 three-digit numbers in the range of 001 to 270 for each page, following the technique described by Gay (1976). Student names corresponding to the

randomly selected numbers for each page of the directory were found

by counting the names of entries, starting from the top of the left

column on each page.

Survey Procedure

The questionnaire was printed with a brief introductory para-

graph explaining the purpose of the survey and with a request to com-

plete and return the questionnaire. A self-addressed campus mailing

envelope was enclosed with each questionnaire. The campus mailing

service was utilized for distributing the questionnaire to all dormi-

tories and other campus addresses. Regular postal service was used

for most of the off campus addresses, while personal deliveries were

also made to some addresses in the O.S.U. Married Student Housing.

The campus mailing envelopes containing completed questionnaires could

be dropped by the respondents into any of the several campus mail

drops available in the dormitories, academic departments and the campus

post office. Questionnaires returned through campus mail were collected

from the return address, 208 Gunderson Hall, O.S.U., from time to time.

Data Computation

Data contained in the questionnaires received were in the form of

check marks on the multiple choice questions and a few written sugges-

tions, complaints and so forth. Because this form was not convenient

for classification and computing, the information was then keypunched

into standard computer cards. One computer card was used for each

questionnaire received and single column input was used for each

question. The response obtained for each question was given a letter

code, A for the first among the multiple choices, B for the second choice, and so forth. The absence of a response for any particular question was coded by the letter N. Where written responses were expected, the letter A indicated presence of a written response, and either B or N stood for absence of response.

Each question was treated as an alpha-numeric variable for which the letter codes indicated data value. The IBM Statistical Analysis System (SAS) program package was used for counting the data responses, frequency tabulation and cross-tabulation of the various responses in order to find the student awareness and use level.

CHAPTER IV

RESULTS AND DISCUSSION

Response Level and Respondent Categories

Out of a total of 1,011 survey questionnaires mailed, 332 responses were obtained, and 12 questionnaires were returned undelivered. Response level for the 999 delivered questionnaires was 33.2%. This level of response was considered adequate for the present survey. It was higher than returns expected in view of the fact that the questionnaires reached the students only two weeks before the spring semester final examination period. The adjusted value of sample size was 4.95%, and the 332 respondents constituted 1.64% of the total population.

The largest number of respondents were enrolled in the College of Arts and Sciences (N=85) with the second largest number in the College of Engineering (N=82). Freshman students made up the largest classification group (N=93), junior students (N=63) and seniors (N=60) were the next largest groups. Of the total respondents 204 were male (61.4%) and 127 female (38.3%). A detailed enumeration of surveyed characteristics of the respondents is shown in Table I while Table II compares the respondent characteristics to those of the total population being surveyed. Responses to question number 4 showed that for the most part the student respondents lived in dormitories (54.2%) with 33.3% living off-campus and the remainder (12.3%) in fraternity or sorority houses.

TABLE I

CROSS TABULATION OF THE CATEGORIES
OF RESPONDENTS

	Freshman			Sophomore			Junior			Senior			Graduate			Special & Others			Row Total		
	Fem	Male	Tot	Fem	Male	Tot	Fem	Male	Tot	Fem	Male	Tot	Fem	Male	Tot	Fem	Male	Tot	Fem	Male	Tot
Agriculture	0	20	20	1	8	9	1	6	7	4	7	11	3	4	7	0	6	6	9	51	60
Arts and Science	7	15	22	8	3	11	9	8	17	7	7	14	5	11	16	0	4	5*	36	48	85*
Business	12	4	16	3	2	5	4	5	9	2	3	5	0	1	1	0	1	1	21	16	37
Education	5	1	6	4	0	4	10	2	12	5	1	6	4	4	8	0	4	4	28	12	40
Engineering	6	15	21	3	12	15	0	12	12	2	14	16	1	16	17	0	1	1	12	70	82
Home Economics	4	1	5	3	0	3	4	1	5	6	0	6	1	0	1	0	0	0	18	2	20
Vet. Medicine	1	2	3	1	0	1	1	0	1	0	2	2	0	0	0	0	1	1	3	5	8
Column Total	35	58	93	23	25	48	29	34	63	26	34	60	14	36	50	0	17	18	127	204	332

*Discrepancy of the figures in these row and columns are due to failure of a respondent to indicate appropriate sex category.

TABLE II

COMPARISON OF STUDENT CHARACTERISTICS
AMONG TOTAL POPULATION AND
AMONG RESPONDENTS

Characteristics	Percentage Among Population	Percentage Among Resondents
College:		
Arts and Sciences	31.1	25.6
Engineering	18.9	24.7
Education	7.4	12.1
Agriculture	10.8	18.1
Veterinary Science	1.5	2.4
Business	23.6	11.1
Home Economics	6.7	6.0
Classifications:		
Freshman	23.5	28.0
Sophomore	20.8	14.4
Junior	20.0	19.0
Senior	19.2	18.0
Graduate	15.3	15.1
Special & Others	1.2	5.4
Sex:		
Female	41.3	38.3
Male	58.7	61.4
Not Indicated	0.0	0.3
Living Location:		
Dormitory	33.7	54.2
Fraternity or Sorority	9.9	12.3
Off Campus	56.4	33.3

The relative percentages of the college of study categories within the total population of O.S.U. students matched the percentages among the respondents in the cases of Arts and Science, Home Economics, and Veterinary Medicine. Engineering and Agriculture majors held, respectively, the third and fourth places in total population percentage but among respondents they were, respectively, second and third. The second largest college among the total population, the College of Business, ranked fifth among the percent of respondents. Student classification ranks within the total population matched the percentage of respondents except in the case of sophomores who were relatively poorly represented among the respondents.

The deviations of respondent ranks from the total population ranks were not unexpected since no random sampling technique could assure exact representation of all categories of the population. The maximum differences were 12.5% in the college of study category of business, 6.4% in the classification category of sophomres, and 3.0% in females. Similar differences between population and responses were also reported in the University of Texas at Austin library survey (1977).

Course Needs and Use Levels

Student needs for library skills in connection with their studies and the frequency of their use of the Edmon Low Library were covered in questions numbered 5 through 8 and 11 in the questionnaire. The results are given in Table III. It is evident that a sizable group, 42.8%, of the respondents made little use of the library for their lower division courses. The "not applicable" or no response prevailed for graduate courses as the majority of the student respondents were in

TABLE III

COURSE NEEDS FOR LIBRARY USE

Course Level	Levels of Use, %			
	Much	Some	Little or None	Not Applicable Or No Response
Lower Division Courses	12.0	33.4	42.8	11.7
Upper Division Course	12.3	39.8	11.1	36.8
Graduate Courses	22.0	14.5	4.2	59.3
For Paper or Project	17.5	30.7	46.4	5.4

the lower division category. A breakdown of the course needs for the library according to classification of students showed that 38.3% of the seniors and 66.0% of the graduate students felt that their successes as students were "much" influenced by their abilities to use the library, while 30.0% of the seniors and 24.0% of the graduate students indicated "some" influence of their library use abilities on their academic successes.

Regrading the overall student use of the Edmon Low Library, it was found that the seniors and graduates use the library most as indicated by Table IV. The first two columns of this table show the percentages of students who use the library four or more times per week and one or two times per week. The summation of figures in these two columns, indicative of the percentage of the respondents who use the library at least once a week, showed that 48% of the freshmen, 50.4% of the

TABLE IV

LIBRARY USE LEVELS

Student Class	Frequency of Library Use			
	4 or More Per Week	1 or 2 Per Week	1 or 2 Per Month	Seldom or Never
Freshman	17.2%	31.2%	32.3%	19.3%
Sophomore	25.0	35.4	31.3	8.3
Junior	7.9	58.7	28.6	4.8
Senior	11.7	60.0	21.7	6.6
Graduate	40.0	48.0	12.0	0.0
Others	27.8	22.2	27.8	22.2
All Respondents	19.6	44.3	26.2	9.9

sophomores, 66.6% of the juniors, 71.7% of the seniors, 88.0% of the graduates, and 63.9% of all respondents use the library at least once every week. A higher incident of overall library use by graduate students over undergraduate students was expected, and similar patterns were reported by the University of Texas library survey (1977). High frequency of library use, four or more times per week, was indicated by more freshmen and sophomores than by juniors and seniors though the total use, as evidenced by the figures indicated for "seldom or never", in Table IV increased with classification level. No satisfactory explanation could be found for the claim of frequent library use by some freshmen and sophomores.

Library Use Patterns

Student library use patterns were indicated by responses to questions 10, 12 and 13. The summary of results are shown in Table V.

The major motivations for the use of the Edmon Low Library use was indicated as class or course related needs as well as the desire to read newspapers and magazines. Browsing was indicated by only 5.1% resondents as the most frequent reason, while 26.8% indicated that they sometimes use the library for browsing. Of all the respondents, 66.3% indicated that they rarely used the library for socializing or relaxing. Reading newspapers and magazines motivated 15.4% of the respondents to use the library frequently and 52.4% to use it sometimes.

The survey results showed that the majority of the students consult the main card catalog to find items they need, with 42.2% respondents indicating frequent use and 43.4% indicating occasional use. Students ask librarians for help only occassionally, as 64.8% of the respondents indicated. Periodical indexes are apparently well used as 42.5% indicated frequent use and an identical proportion of students indicated that they use them occasionally. The Library of Congress list of subject headings is apparently not well known to students, as 65.7% of the respondents indicated that they rarely, if ever, consult this reference source. As for determining whether the library has a particular periodical or journal, the revolving files and the library serials list were indicated as the most popular reference items.

Library Facilities and Resources

Student opinions regarding the quality and quantity of the

TABLE V

MOTIVATION AND PROCEDURE FOR LIBRARY USE

Motivation or Procedure	Frequency of Use			
	Frequent %	Sometimes %	Rarely %	No Response %
Motivation:				
Class related use	20.2	55.8	17.4	6.6
Non class related use	10.5	49.4	33.1	6.9
For magazine, news-paper, etc.	15.4	52.4	25.3	6.9
For browsing	5.1	26.8	59.9	8.1
For socializing or relaxing	3.9	21.3	66.3	8.5
Other purposes	(22%	responded	"yes")	77.7
Paper or Project Related Searches:				
Ask instructor's recommendation of materials	17.8	58.4	17.2	6.6
Ask library staff's help	18.1	64.8	11.4	5.7
Do background reading in encyclopedias, general works, etc.	41.6	31.0	20.5	6.9
Go directly to main card catalog	42.2	43.4	8.7	5.7
Use Lib. of Congress list to find subject headings	9.0	19.0	65.7	6.3
Browse to find item	5.4	41.3	46.1	6.6
Use periodical indexes	42.5	42.5	7.5	7.5
Other methods	(3.3%	responded	"yes")	96.7
Magazine & Journal Search:				
Ask library staff	13.3	32.5	45.5	8.7
Go to shelves	11.7	49.1	29.8	9.3
Look in card catalog	28.3	44.9	18.7	8.1
Use per. revolving file	59.6	18.4	11.7	10.2
Use serial list (print-out)	41.3	20.8	27.4	10.5

facilities and resources of the Edmon Low Library were discernible from their responses to questions numbered 9, 14, and 15.

Of the respondents, 56.3% thought the resources to be adequate and 33.7%, or slightly over one third, considered them to be excellent. Only 4.8% of the students found the resources inadequate for their needs, and 4.8% of them indicated that they had no opinion on this topic. Opinions on other major facilities, services, and resources are shown in Table VI. More than half of the students found the collections in their major field of study to be very good, but more than half of the students found seating, lighting and shelving arrangements as well as the book checkout policy to be only fair. The percentage of respondents who ranked the areas poor in their opinion was less than 6% in all cases. Other salient information found in these responses was that about half of the students did not express any opinion regarding the non-book (microform, audio and video, etc.) resources. It can be surmised that they are not fully aware of these resources in the Edmon Low Library.

An important piece of information came out of the students' responses to question 15, in which 40.7% expressed their opinion that the Edmon Low Library lacked some materials or facilities. Thirty-nine and eight tenths percent of these indicated specific resources, services or facilities which they thought to be inadequate or absent. The specific items mentioned can be categorized into four groups: (1) scarcity of newspapers, (14.2%), (2) absence of some auxiliary facilities like a coffee room and vending machines (12.3%)*, (3) difficulty in finding needed government

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* There may be room for discussion as to whether vending machines are a proper part of library facilities or not, however students did suggest a need in this area, in an open ended question.

TABLE VI

STUDENT OPINION ON FACILITIES,
SERVICES AND RESOURCES

Item	Opinion, % of Response			
	Very Good	Fair	Poor	No Opinion
Seating, lighting, & shelving	34.3	56.0	3.9	5.7
Book checkout policy	35.8	50.9	4.5	8.7
Non-book facility	21.4	24.1	5.1	49.4
Library staff's help- fulness	39.5	47.3	4.5	8.7
Library resources in major fields	52.4	28.0	5.7	13.9

documents (8.1%) and (4) other miscellaneous items like the lack of

mechanical indicators to replace the physical search of library user's

briefcases, bags, etc. at the exit of the library building and frequent

breakdown of duplicating machines (5.1%). It was learned in a conver-

sation with the unversity librarian that for budgeting reasons the

library has recently cancelled subscriptions to most foreign and a num-

ber of U.S. newspapers. Most of the existing newspapers have been

removed from the open shelves and can be checked out by users. Vending

machines, food, and snacks or drinks (except water) are not allowed on

library premises, and the library users usually go to other nearby

buildings for such facilities. Respondents who specified needs or dif-

ficulties in the area of the government document section did not elabo-

rate on the subject, and the reason behind their difficulties could not

be determined.

Education in Library Skill

Responses to question 16 through 18 covered student past experience and present interest in education in library skills. Of the respondents, 76.2% had some training in library skills at the pre-college level. Only 27.4% took a library course (LIBSC 1011) at O.S.U., but 59.0% took part in a guided tour or slide-tape presentation at the Edmon Low Library. In general, more than 50% of the respondents did not have any special training by faculty or teaching assistants or exposure to classroom presentations by librarians to enhance their library use skill. Willingness to take a library science course to improve library research skill was shown by 41.0% of the respondents, 83.4% of whom were not sure whether such a course should be computer assisted or not. The conclusion may be drawn that though three-fourths of the respondents had some pre-university training in library use, they did not believe such training was adequate for their skillful use of the Edmon Low Library at O.S.U.

Overall Opinions and Suggestions

Student use techniques and opinions, as reported by questions 12, 14 and 15 and suggestion as expressed in response to question 19, indicate that in general students have good opinions and comparatively few suggestions regarding improvement of the O.S.U. Edmon Low Library. More than 80% students indicated that they had no specific suggestion for improving the services of the library. While 11.4% indicated that they had suggestions, less than 1% of the respondents specified any

suggestion. These responses contradicted the suggestions of 39.8% of the respondents who listed specific needs they perceived regarding facilities and resources of the Edmon Low Library.

The last question of the survey addressed the matter of whether students can distinguish which library staff members are professional librarians. It may be noted here that the majority of the persons working in the library are either clerical staff or students, not professional librarians. Answering the question as to whether they could recognize which library staff members are professional librarians, 38.0% responded that they had not thought about trying to do so, 35.8% indicated that they could not, and only 21.7% reported in the affirmative. This means that over 75% of the survey respondents either are unaware of the need to distinguish professional librarians or else are unable to do so.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Analysis of the results of the survey suggested the following
major conclusions:

1. Course assignments and research related needs provide primary
   motivation for Edmon Low Library use while reading magazines
   and newspapers and socializing and relaxing are other, if
   less frequent, purposes for using the library.

2. Overall frequency of library use increases with the seniority
   level of students. Approximately 88% of the responding
   graduate students use the library at least once a week, whereas
   only 48% of the responding freshmen use the library with the
   same frequency level.

3. When courses require students to use the library for papers or
   research projects, more than half of the students rely on
   their instructors or librarians to recommend materials.

4. Card catalogs and periodical indexes are the most frequently
   used means of accessing the Edmon Low Library collections;
   these are used by 42% of the respondents when doing library
   research.

5. Students are apparently not well acquainted with non-book

library resources such as microforms and audio tapes.

6. More than 76% of the respondents had some library use training in high schools while about 27% had taken a Library Science course at O.S.U. However, more than 50% of the students did not take any course, training, or special exposure to improve library use skills at college or university levels.

7. More than 40% of the respondents indicated that they would take an advanced course in library science research skills, if it were available.

8. A majority of the respondents consider the lighting, seating, and shelf arrangements in the Edmon Low Library to be either very good (34.3%) or fair (56%).

9. Approximately 90% of the respondents consider the available library resources and services to be excellent (34%) or adequate (56%).

10. Approximately 40% of the respondents think that the library lacks some needed materials or facilities. Specified by students are: (a) additional newspapers (14.2%), (b) vending machines and other facilities for beverages and snacks in the library building (12.3%) and (c) improved access to government documents (8.1%).

11. Over 75% of the respondents are either unaware of the need to distinguish professional librarians from the other members of the library staff or are unable to do so.

Recommendations

Replication of this study may be repeated after some interval in

order to check the reliability of the responses, and also to build a data base for future library services. It would facilitiate tabulation of such a replication survey if entries in the questionnaire were given one consecutive serial number for all questions so that the questions do not need to be re-numbered for key-punching and computer aided tabulation.

The timing of such a student survey should not be too close to final examinations so that maximum response is assured. Any question about probable change of student attitude toward the library due to the proximity of final examinations, and the overall reliability of the instrument used, can be answered only if the survey is repeated after a suitable gap of time. Moreover, a comprehensive data base for library planning can be acquired if statewide similar surveys on academic libraries are conducted.

Student interest show the Edmon Low Library's affairs by a 33.2% response during a very busy time of the year is encouraging. However, the O.S.U. Library authorities may want to evaluate the dissatisfaction expressed by many students regarding newspaper, governemtn documents and some other materials and facilities the resolution of which, though not directly related to library services, may enhance the convenience of library users.

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APPENDIX A

THE SURVEY INSTRUMENT SHOWING

RESPONSE PERCENTAGES FOR

EACH QUESTION

OKLAHOMA STATE UNIVERSITY
SURVEY OF STUDENTS' OPINION AND USAGE OF THE EDMON LOW LIBRARY

You have been selected as one of only 1000 students to give input regarding the collection, use, and services provided in the OSU main library, the Edmon Low Library. Your responses are important and will be sincerely appreciated. This survey is being conducted by the Library Science area of the CIED Department in connection with a graduate research project. **Please fill out and return in the self-addressed campus mailing envelope.**

For the following items please respond by placing an "X" in the space preceding your answer.

1. Your college: 25.6 (1) Arts & Science. 24.7 (2) Engineering. 12.0 (3) Education. 18.1 (4) Agriculture. 2.4 (5) Vet Science. 11.1 (6) Business. 6.0 (7) Home Economics.

2. Your classification: 28.0 (1) Freshman. 14.5 (2) Sophomore. 18.9 (3) Junior. 18.1 (4) Senior. 15.1 (5) Graduate. 5.4 (6) Other (Specify). _____

3. Your Sex: 38.3 (1) Female. 61.4 (2) Male.

4. Where you live: 54.2 (1) Dormitory. 12.3 (2) Fraternity or Sorority. 33.3 (3) Off Campus.

5. In your courses at OSU, to what extent do you feel that your ability to use the library has had any influence on your success as a student in:

   a) Lower Division Courses: 12.0 (1) Much. 33.4 (2) Some. 38.3 (3) Little. 4.5 (4) None. 3.3 (5) Not Applicable.

   b) Upper Division Courses: 12.3 (1) Much. 39.8 (2) Some. 8.7 (3) Little. 2.4 (4) None. 15.4 (5) Not Applicable.

   c) Graduate Courses: 22.0 (1) Much. 14.5 (2) Some. 2.7 (3) Little. 1.5 (4) None. 36.1 (5) Not Applicable.

6. How often do your assignments in courses involve using library resources other than materials placed on reserve by your professor? 16.0 (1) Frequently. 58.1 (2) Sometimes. 19.6 (3) Rarely. 4.2 (4) Never.

7. How often do you use the OSU main (Edmon Low) library? 19.6 (1) Four or more times per week. 44.3 (2) One or two times per week. 26.2 (3) Once or twice per month. 9.9 (4) Seldom or never.

8. If your answer to No. 7 is "seldom or never", please check the major reason(s) you do not use the library. 9.3 (1) My courses do not require library use. 10.5 (2) I do not know enough about using the library. 1.2 (3) The OSU Library is inadequate for my needs. 0.9 (4) I use a branch of the OSU library most of the time (indicate branch): 0.6 (5) Vet. Med. 0.0 (6) Architecture

9. My general opinion of the OSU Main Library's resources and services: 33.7 (1) Excellent. 56.3 (2) Adequate. 4.8 (3) Inadequate. 4.8 (4) No Opinion.
IF YOU NEVER USE THE OSU LIBRARY, SKIP QUESTIONS 10-15 AND GO TO QUESTION 16.

10. For what purposes do you use the library:

    a) To study for courses (using library materials incidentally) 21.7 (1) Frequently. 58.1 (2) Sometimes. 13.9 (3) Rarely or never.

    b) To use reserve materials for courses 10.8 (1) Frequently. 60.5 (2) Sometimes. 22.6 (3) Rarely or never.

    c) To obtain information for assignments or research. 28.0 (1) Frequently. 48.2 (2) Sometimes. 15.7 (3) Rarely or never.

    d) For non-class related reading 10.5 (1) Frequently. 49.4 (2) Sometimes. 33.1 (3) Rarely or never.

    e) For magazines, journals, newspapers, etc. 15.4 (1) Frequently. 52.4 (2) Sometimes. 25.3 (3) Rarely or never.

    f) To browse 5.1 (1) Frequently. 26.8 (2) Sometimes. 59.9 (3) Rarely or never.

    g) To socialize or relax 3.9 (1) Frequently. 21.4 (2) Sometimes. 66.3 (3) Rarely or never.

    h) Other purposes (Please indicate). 21.7 _____

11. In general, have your courses required paper or research projects involving use of the library: 17.5 (1) Frequently. 30.7 (2) Sometimes. 38.3 (3) Rarely. 8.1 (4) Never.

12. If or when your courses require you to use the library for papers or research projects, would you probably

    a) Ask your instructor to recommend materials? 17.8 (1) Frequently. 58.4 (2) Sometimes. 17.2 (3) Rarely or never.

    b) Ask a library staff member to help you? 18.1 (1) Frequently. 64.8 (2) Sometimes. 11.4 (3) Rarely or never.

    c) Do background reading in encyclopedias and/or general works on the topic? 41.6 (1) Frequently. 31.0 (2) Sometimes. 20.5 (3) Rarely or never.

    d) Go directly to the main card catalog and look under what you think the topic will be? 42.2 (1) Frequently. 43.4 (2) Sometimes. 8.7 (3) Rarely or never.

e) Check the Library or Congress List of Subject Headings for possible subject heading? __9.0__ (1) Frequently. __19.0__ (2) Sometimes. __65.7__ (3) Rarely or never.

f) Browse through library books and periodicals until you find your topic? __5.4__ (1) Frequently. __41.3__ (2) Sometimes. __46.7__ (3) Rarely or never.

g) Use periodical indexes (like Reader's Guide)? __42.5__ (1) Frequently. __42.5__ (2) Sometimes. __7.5__ (3) Rarely or never.

h) Others (Please indicate)? __3.3__

13. How do you find out if the library has a particular periodical (magazine or journal)?

a) Ask a library staff member __13.2__ (1) Frequently. __32.5__ (2) Sometimes. __45.5__ (3) Rarely or never.

b) Go to the shelves __11.7__ (1) Frequently. __42.1__ (2) Sometimes. __29.8__ (3) Rarely or never.

c) Look in the card catalogs __28.3__ (1) Frequently. __44.9__ (2) Sometimes. __18.7__ (3) Rarely or never.

d) Use the periodical file, revolving or card __52.6__ (1) Frequently. __18.4__ (2) Sometimes. __11.7__ (3) Rarely or never.

e) Use serial list (printout) __41.3__ (1) Frequently. __20.8__ (2) Sometimes. __27.4__ (3) Rarely or never.

f) Others (Please indicate). __1.5__

14. As a library user, what are your opinions on the following aspects of the OSU Library:

a) Seating, lighting, & shelving __34.3__ (1) Very good. __56.0__ (2) Fair. __3.9__ (3) Poor. __0.3__ (4) No opinion.

b) Book checkout policy __35.8__ (1) Very good. __50.9__ (2) Fair. __4.5__ (3) Poor. __2.4__ (4) No opinion.

c) Non-book (microfilms, tapes, etc.) facility __21.4__ (1) Very good. __24.1__ (2) Fair. __5.1__ (3) Poor. __40.7__ (4) No opinion.

d) Library staff's helpfulness __39.5__ (1) Very good. __47.3__ (2) Fair. __4.5__ (3) Poor. __2.1__ (4) No opinion.

e) Library resources in your major field of study, etc. __52.4__ (1) Very good. __28.0__ (2) Fair. __5.7__ (3) Poor. __5.7__ (4) No opinion.

15. Do you think the OSU Library lacks some needed materials or facilities? __39.7__ (1) No. __40.7__ (2) Yes. If you responded yes, please specify the needs __39.8 Specified__

16. Before you became a student at OSU, were you taught how to use:

a) Your high school library? __76.2__ (1) Yes. __17.4__ (2) No. __5.4__ (3) Not applicable.

b) A public library? __48.2__ (1) Yes. __44.6__ (2) No. __6.0__ (3) Not applicable.

c) A two year or community college library? __17.5__ (1) Yes. __34.9__ (2) No. __45.2__ (3) Not applicable.

d) Another college or university library? __25.6__ (1) Yes. __32.8__ (2) No. __39.5__ (3) Not applicable.

17. Since enrolling at OSU, have you received any of the following types of instruction in the use of library?

a) An elective course designed to develop library knowledge, like LIBSC 1011? __27.4__ (1) Yes. __70.8__ (2) No.

b) Guided tour, lecture or slide-tape presentation at the library? __59.0__ (1) Yes. __39.5__ (2) No.

c) Classroom presentation by librarians on library resources and skill? __32.2__ (1) Yes. __66.3__ (2) No.

d) Instruction from a faculty member or teaching assistant in one of your classes? __36.7__ (1) Yes. __60.8__ (2) No.

e) Self guided tour of the library using printed guide? __52.4__ (1) Yes. __46.7__ (2) No.

f) Library handbooks and bibliographies? __24.7__ (1) Yes. __72.0__ (2) No.

18. a) If an advanced Library Science course to help you develop library research skill was available would you take it? __41.0__ (1) Yes. __55.7__ (2) No.

b) If "yes", should this course be computer assisted? __11.1__ (1) Yes. __5.4__ (2) No. __35.2__ (3) Not sure.

19. a) Do you have any more suggestions on ways the OSU main library (Edmon Low Library) could improve services for students? __11.4__ (1) Yes. __81.3__ (2) No. If you responded "yes", please write your suggestions here __0.6 suggested__

b) If your suggestion(s) were carried out, would you use the OSU main library more often? __Yes = 19.0__

20. Are you able to distinguish which library staff members are professional librarians? __21.7__ (1) Yes. __35.8__ (2) No. __38.5__ (3) Hadn't thought about it. If "yes", how do you distinguish the professional librarians from staff members? __0.0__

APPENDIX B

MISCELLANEOUS DATA TABLES

TABLE VII

CROSS TABULATION OF STUDENT ENROLLMENT AT
O.S.U. FOR THE SPRING 1979 SEMESTER*

College or Division	Total College			Freshman		Sophomore		Junior		Senior		Special and Unclassified	
	Total	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Agriculture	1846	1442	404	332	98	300	104	367	107	435	90	8	5
Arts and Sciences	5326	2548	2778	731	954	566	699	601	550	613	536	37	39
Business	4043	2260	1783	608	546	587	538	586	421	458	252	21	26
Education	1267	350	917	56	195	59	235	67	229	114	240	54	18
Engineering	3237	2946	291	775	103	727	79	677	59	737	48	30	2
Home Economics	1156	173	983	38	242	40	207	51	268	44	256	0	10
Veterinery Medicine	256	197	59	51	18	43	16	51	13	52	12	0	0
Graduate	3089	1953	1136										
Total Resident Students	20220	11869	8351	2951	2156	2322	1878	2400	1647	2453	1434	150	100

*Information obtained from the Office of the Registrar, Whitehurst Hall, O.S.U.

TABLE VIII

RENUMBERING OF QUESTIONS FOR COMPUTER INPUT

Question Number	Variable Name	Question Number	Variable Name	Question Number	Variable Name
1	Q1	11	Q22	14d	Q43
2	Q2	12	Q23	14e	Q44
3	Q3	12a	Q24	15	Q45
4	Q4	12b	Q25	16	Q46
5	Q5	12c	Q26	16a	Q47
5a	Q6	12d	Q27	16b	Q48
5b	Q7	12e	Q28	16c	Q49
5c	Q8	12f	Q29	16d	Q50
6	Q9	12g	Q30	17	Q51
7	Q10	12h	Q31	17a	Q52
8	Q11	13	Q32	17b	Q53
9	Q12	13a	Q33	17c	Q54
10	Q13	13b	Q34	17d	Q55
10a	Q14	13c	Q35	17e	Q56
10b	Q15	13d	Q36	17f	Q57
10c	Q16	13e	Q37	18a	Q58
10d	Q17	13f	Q38	18b	Q59
10e	Q18	14	Q39	19a	Q60
10f	Q19	14a	Q40	19b	Q61
10g	Q20	14b	Q41	20	Q62
10h	Q21	14c	Q42		

TABLE IX

SURVEY DATA*

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0         0000000000000000000000000000000000000000000000000000000000000
B 000CC0000000111111111111122222222223333333333444444444445555555555666
S 123456789012345678901234567890123456789012345678901234567890123456789012

 1 G B A A   C B B B B N B   B B B B B C C N C   B B A B C B B N   C B B A A N   B B O B A B   A B C C   A A B B A B A C B N C
 2 C E B A   N N A A C N A   A A A B B C C N A   C C B A C C B N   C C B A B N   B B B A B A   B B B B   A A A A A A B N A A A A
 3 A E B A   E E C A B C C   A B A A A B C A A   C B B A B C A A   C C C C B A   B B D A C B   A A C A   B A A A B A B N B A A A
 4 A A B A   C E E C D A A   C C B B B B C N B   C A B A C C A N   B C A A C N   A A A A C A   A A B B   B A A A B A B N B N B
 5 A A B A   C B N B B B B   B C C B A B B N C   B B C C C A B N   B B C A B N   A A A A A B   A A B B   B B A B B B B N B N A
 6 B B B A   B E E C B N A   A C C A B B C N D   C B B A C C A N   C C C A B N   B A A B D A   A A A B   B B B B B B B N B N A
 7 B B B A   B E E B A N B   B B C C C C N C   C B B C C C B N   C B C C A N   B A B B B A   A A A A   B A B A B B B N B N B
 8 F A A A   B N N C C N A   C C A B C B C N B   A C B A C B A N   N N A N N N   A A D D A A   C C C C   B A B A B B B N B N B
 9 B E B A   D C A B B N N   B B B A A B C N A   C B C A A C B N   B C A B B N   A A A B B   B B A B   B B B N B B A A B N C
10 G B A A   A O D A A D B   B A B B B C C N B   B C B B B C C N   B A B C A N   A A D A A A   A N N N   B B B A B B A B B N A
11 B D B A   C B N C B N B   B C B A A A C N B   C B C A B C A N   B B A B A N   B B B B A B   A A C C   A A B B B B B N B N B
12 A D A A   C B B B N B   A B B B B C C N C   B B A B C B B N   C B B A A N   B B D B A B   A A C C   A A B B A B A C B N C
13 C D B A   C B A B D N B   B B B B B C C A C   B B A B C B A N   C B B A A N   B B D B A B   A A C C   A A B B A B A C B N C
14 D D B A   D B B C D A B   C C C C C C C A C   A C A B B C C N   C B C B C N   C B D C D N   A A A B   B B B B B B A A B N B
15 E B A A   B A B B D N B   B C B C A C C N B   B C C A C C B N   B C A A B N   A A C A B B   A A B C   A B A A B B B B N B N
16 D B B A   A A A B C N A   B A A B C C C N B   B B B A A C B N   B B A B A A   A A A B A A   A A A A   B B B B A A B N B N B
17 O B B A   B B B B B N A   B B B B B B B N C   B A B B C C A N   N N N A N N   A A A A A A   A A C A   B A A A A A B N B N C
18 O A B A   C N N C D A D   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N V N   A A C C   B B A B B B N B N B
19 A F B C   C C B B C A B   B B N B B C C N B   A A B A A A B N   A B C A C N   B B B A B A   B B B B   B B B A B A A A N N B
20 C F B B   N N A A A N B   A A A B B C C N B   B B B A B C B N   B C A B A N   A A B A B B   B B B B   B B B B A A A A N N B
21 B A B A   B B B B B N B   B B B B B A B A B   B C A A A C A A   C C A A A N   B B B C B A   B B B B   B B B B A A A A A A A
22 B A B A   A N N B B N A   B N B C C C B N B   B B A B B C A N   C C C A A N   B A B A B A   A A C C   B A A A A B B N B N A
23 B E B C   B C A B B C B   B B C B B C C N C   C B C A A C B N   B A C C C N   B A C A C A   B A B A   B A B B A B A A A A A A
24 A A B A C   B C E B B N A   B C B C C C C N B   B A B A B C A N   B C C A C N   B B D A A B   A A B B   B A B A B B A B A A A A
25 D D B A   B C N C D A D   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A A B   B B B B B B A C B N C
26 C A A A   B E E A B B B   B B C C B C C A C   A A B A C A A A   B B C C C N   A A A A A A   A A B B   B A B A B B C B A B
27 F A B A   B B B C D A A   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A C C   B B B B B B B N B N B
28 B A B A   B N N B C N B   B B C C B C C N B   B A C A C C B N   A A B A B N   B A O B A A   A A C C   B A B A B B B C N N C
29 B B B A   B D N B C N A   A B C C B C C N B   C B A B B C A N   B B C A C N   A A A B A A   A A C C   B B B A B B B N B N A
30 F A A A   D N N D B N B   B B B C B B B N B   B B C B C B B N   B B B B C N   A A A A A N   A B B B   B B B A B B N N B N A
31 F B A A   C E E C D A B   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A A C   B B B A B B B N B N C
32 B A B C   C A A A C N A   A A A B A C B A B   A A B A B C A B   A C A A C N   A A B A A B   C C A C   B B B A A A A A A B N B
33 B A B A   A O D B C N A   A B B B B B A C N B   C B B A A A A N   C C A A B N   A A A A A A   A A B A   B B A A B A B N B N B
34 F A A A   B D E C D A A   C B B C B C C N C   B B A A A C A N   C B A A A N   A A A A A A   A A B B   B B B A A A A B A B
35 B A B B   D E E D U A D   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A C C C   B B B B B B A A B N B
36 B B B A   B N N C C N A   A C B C C C B N B   C A B B B C A N   C C C A C N   B B A A D A   A A C A   B B A A A B B N B N B
37 B B B A   A E E C N B   N N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A A A   B A A A A A B N B N B
38 B A B A   B E E C D A A   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A B B   B A B A A A B N B N B
39 C E A A   E E A A B N B   A B B B B B B N B   B B B B C A N   B B B A B N   A A A A A A   A B B B   B A A B B A A B N B N A
40 C A A C   A N N A B N A   C C A C C C C N A   C C C A C C C N   C C C A C N   A A A A A A   A B B B   B A B A B B B N B N A
41 A A A C   C N N D C N B   C C C C C C C N C   C B B B B C C N   B N N N N N   B B B N N N   A A N N   B A A B N B N N N N
42 A A A C   C N N B O A A   B C C C C B B N B   C C C B V B B N   N N B B B N   A A A A A N   C C C C   N A A A B C N N N N
43 C E B A   B C E C B N A   B B C C A A A N B   A A A A C A N   N N B B B N   A A A A B A   A A N A   B A A A A A B N N N C
44 F A B A   A E E B A N B   B B B B B C C N B   C C B A A C B N   C C C A C N   A A A A B A   C A C A   B B B A B B A C B N C
45 A A A A   B N N B C N C   B B B C B C C N B   B B B B C B B N   B N N N N N   C B D B B B   B A C C   B A A A A B N B N B
46 A A A A   A A N A B N B   C B A B N N N   B B A A A C A N   C C A A A N   A A D A B A   A A B B   B B A B A B N B N C
47 A A B A   C B E C C N B   B B B B C C C N A   B B C A C C B N   C C B A A N   A A D A B A   A A C C   B A A A A A B N B N B
48 C A A A   B E E B B V B   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A B A   B A B A A B B N B N A
49 A A B A   B E E N B N B   B C A C B B C N A   B B B B C C A N   B B B B B N   A A C B B N   A A C B   B B A A B B N B B N N
50 C A B A   O D O C D A A   A B C C C C B N B   B B C C C C B N   B B B A A N   C C B A B A   B B B B   B A A A A A B N B N B
51 O A B B   B E E B B N B   A B B C C C B N B   B B C A C C B N   B C A B C N   B A D B B A   A A C C   B A A A B B B N B N B
52 F A A A   A E E B C N B   C B A C B C C N A   N N N N N N N N   N N N N N N   N N N N N N   A A B A   B B A B B B B N B N B
```

35

TABLE IX (Continued)

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        0         QJJ~~~::::3CC:23333J:JGQ0CQ00C3~~::.:.:3JC:CCC~GJJ0000
        8 QQ0CC30Q000.1:::.:1:::12222 22222233333333334~~4~:4~4~4555555556606
        S 1234567893:23~567390123~567090123456785012345678901:3455789012

53 B A B A   6 N N B . N 6   3 C 8 C 8 C C ~ 0   8 A 8 ~ C C 5 ~   A C 8 8 C N   B 6 5 ~ : 5   ~ ~ C ~   B ~ ~ ~ B 8 ~ C 5 ~ A
54 B A B A   8 N N B C ~ N 6   3 C A C C C C ~ ~   C C C 8 C 8 3 ~   C C C 8 3 N   5 6 C : ~ C ~   ~ ~ 8 8   5 ~ ~ ~ ~ B ~ B N N ~ 8
55 F 8 8 A   3 E E 9 . N 0   J 3 A C C 8 C N ~   C 8 ~ ~ 8 8 ~ N   C B A A C N   ~ C ~ : ~ :   ~ ~ C ~   3 ~ 8 : : ~ 8 ~ 6 ~ C
56 F ~ ~ A   C ~ ~ ~ 3 ~ 3   3 C ~ C C 3 C ~ ~   3 ~ 8 ~ C 8 C ~ ~   C C C ~ B N   8 : ~ ~ 0 ~   ~ C 3 5   ~ 6 ~ ~ ~ 8 ~ C 8 N A
57 F A B ~   5 E E 8 C ~ 6   5 5 C ~ C 8 C C ~ 8   8 ~ 6 9 C 8 ~ N   B 8 9 B C ~   5 6 8 ~ 5 ~   ~ A ~ 9 3   8 ~ ~ 8 ~ ~ C 8 N A
58 0 ~ 8 B   8 8 8 ~ ~ N 0   A 3 C C 5 C C ~ A   A A 8 A C 8 9 N   8 8 8 A 8 N   8 8 0 5 3 ~   ~ A C 8   5 A 8 ~ ~ 8 8 N 8 N A
59 A A 8 A   8 N N C 0 N 0   ~ ~ 5 C C 8 C ~ C   8 8 C 8 C 8 ~ N   8 8 8 8 8 N   ~ ~ 8 ~ ~ ~   ~ 8 8 5   8 A ~ ~ 8 ~ 8 N N ~ A
60 F A ~ A   C N N B C N 8   5 0 8 C 8 C C N 8   8 C C A C C A N   C C A A B ~   A A 8 5 ~ ~   ~ A C C   5 6 8 8 8 ~ B C A A B
61 A ~ B B   8 E E A 8 N 8   5 0 ~ C 5 C C N 8   8 B ~ A 8 C 8 N   8 8 8 8 N ~   3 8 8 A 8 ~   ~ A C C   ~ 8 A ~ ~ ~ 8 N N N 8
62 C E 8 C   N N ~ A 8 N C   C ~ A ~ ~ B C N ~   C C 8 8 8 C A ~   ~ N N A A   ~ ~ C A 5 8   8 8 C C   8 8 A ~ ~ ~ 8 N A A 8
63 A 0 8 C   0 C 8 C 3 ~ A   C 8 A C C C C N ~   C 8 8 ~ C C A N   C C C 8 ~ ~   ~ ~ ~ ~ 3 8   ~ A ~ ~   8 8 ~ ~ ~ 8 6 8 N 8 N ~
64 A E A C   E E 8 A A N 8   C 8 A C C C C N ~   ~ 8 8 ~ C 8 ~ A   C N A A B N   ~ ~ ~ ~ 3 8   ~ A A ~   8 8 ~ ~ 8 ~ 8 C A A A
65 F A ~ A   8 ~ E 8 C N 8   5 0 8 8 A C C N 8   A C 8 8 8 C A N   C C A A C N   8 6 0 ~ ~ 8   ~ ~ C C   8 ~ 8 6 8 8 ~ C 8 A A
66 A E 8 C   N N 8 8 A N 0   8 ~ A C C C C C ~ C   8 5 8 8 8 C 8 8 N   8 C 8 C 8 N   8 8 0 0 8 ~   A 8 ~ ~ 8   8 6 8 5 9 8 ~ B 8 A B
67 A 8 A C   8 C E C 8 A 6   ~ 8 5 C C C 8 N 8   8 8 C A C C A N   8 C A A C N   A A C A ~ ~   ~ A 8 8   6 ~ ~ ~ 8 8 8 ~ B N C
68 B 8 A C   8 8 E C C N A   8 8 8 C 8 8 A ~ 0   8 8 8 A C C A N   8 C A A C N   A ~ ~ A A A   ~ ~ 8 8   8 8 5 8 5 9 8 8 N B N C
69 ~ 0 A 8   8 8 E 8 A N A   A 8 8 C C 8 ~ ~ 8   C 8 8 A C C C N   8 C A 8 A N   A 5 A A A A   A ~ C 8   N A 8 N 8 8 8 N A A A
70 A B A C   C A E 8 8 8 N A   0 C 8 A C ~ 8 ~ C   8 8 A A C 8 A N   8 8 8 A 8 N   A A 0 8 ~ ~   ~ A C A   8 A 6 6 B A 8 N 8 N A
71 A 8 8 A   C C E C 0 A 8   ~ N ~ N ~ N N N N   N N N N N N N N   N N N N N N   N N N N ~ ~   8 8 8 8   8 N ~ A ~ 8 A A 8 N 8
72 A C 8 B   8 8 E C C N 8   C C 8 C C C C C ~ 8   A A C 8 C C 8 N   8 C 8 C C N   C 8 C 8 0 5   A A C A   8 A 8 8 ~ A 8 N 8 N A
73 A E 8 C   8 E A A 0 ~ 8   C 8 ~ 8 ~ 8 C N A   C 8 C A A C A N   C 8 C C A N   A ~ 5 ~ 8 8   A C C 8   8 8 9 A A 8 N A A A
74 A F N N   E A A A 8 ~ A   A A A C C C C N A   C C 8 ~ 8 C A A   C C C A A N   C 0 ~ ~ 8 ~   C A A ~   A A B 8 A ~ ~ ~ 8 N 8
75 8 8 8 A   8 E E 8 ~ N 8   8 C 8 C 8 C C N 8   8 8 C A C C A N   8 8 A A A N   A 0 0 8 3 ~   A A C C   8 B A A 8 6 8 N 8 N C
76 C A A C   8 E E 8 8 ~ A   C 8 A C C 8 C N 8   C C C A C C A N   C C A A C N   A A A 8 A ~   A A 8 8   8 8 A A 8 8 8 N 8 N A
77 0 A 8 A   8 E E C C N A   C C 8 C C 8 C N 8   8 8 8 A 8 8 A N   8 A A A C N   A A 8 A 0 8   A 8 8 8   8 A A ~ 8 8 8 N 8 N A
78 A A 8 A   C E E C 0 A 8   C 0 8 C C C C N 8   8 8 C 8 C 8 8 N   8 C 8 A 8 N   8 8 C C 5 ~   A A 8 8   8 A ~ A A 8 8 N 8 N 8
79 F A A 8   8 N ~ 8 0 A 8   N N 8 N N N N N 8   A A C ~ C 8 A N   A ~ C 8 C N   8 8 A 9 8 N   A A C C   8 A 8 A 8 8 8 N 8 N 8
80 8 A N N   8 N N 8 8 N 8   3 C 8 C 8 8 C N 8   8 8 C A C 8 8 N   8 C A A C N   A 8 0 3 0 A   C C C A   8 A A A 8 8 8 ~ C 8 A C
81 0 A 8 A   A N N 8 C N A   0 8 8 8 6 8 8 N 8   8 8 A A C 8 0 N   C C 8 8 8 N   A A A A ~ ~   A A 8 8   8 A 8 A 8 8 8 N 8 N C
82 B A A A   8 N N A A N 8   A 8 8 C 8 8 8 A A   ~ 8 A 8 C 8 A N   C C 8 A A N   A A 0 A 0 N   A A 8 8   8 8 8 8 A 8 8 N N N 8
83 F A A A   C N N 0 A N A   0 C 8 C 8 8 A A 8   A A 8 A C C 8 N   8 C C A 8 N   A A A A A ~   A A C C   8 A 8 8 8 A 8 N 8 N 8
84 F A A A   8 N N 8 A N 8   A 8 8 C 8 C 8 N 8   A 8 C A C C A N   C C A A 8 N   8 A 8 C 8 N   A A 8 8   8 A A ~ 8 A 8 N 8 N A
85 A A 8 8   A N N 8 A N 8   A C A 8 8 8 8 N A   A A 8 A C C A N   N N N A N N   8 8 0 8 8 A   A A C C   8 A 8 A A 8 8 N 8 N C
86 A A 8 8   8 E E 8 8 N A   A 8 8 C 8 C C A A   A A 8 A 8 C A N   8 C 8 8 A N   A 8 A 8 0 A   A A C C   8 A A A 8 8 A C 8 N 8
87 8 A A A   C E E C C N 8   0 C 8 C C C C A 8   8 C 8 8 C C C ~   C C C . C C N   8 8 8 0 0 8   A A C 8   8 A 8 8 8 6 8 N 8 N C
88 8 A 8 A   8 N N 8 C N 8   0 C 8 C C C C A 8   A C 8 8 C C A N   C C C A C N   0 0 C 0 8 A   A A A C   8 8 8 8 A 8 A A A A C
89 A 0 8 C   C 8 E 8 8 N A   3 8 8 C C 8 C A 8   C 8 A A C 8 8 N   8 8 8 8 C N   A A A A A A   A A 8 8   8 A 8 A 8 8 A C 8 8 C
90 A 8 A C   C E E 0 C A A   N N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A 8 C C   8 A A A 8 A 8 N 8 N 8
91 8 8 8 C   0 0 E 8 C N 6   0 0 C C 8 C 8 N C   8 8 8 B C C N   8 8 8 A C N   A A A A A A   A A 8 8   8 8 A A 8 8 8 N 8 N C
92 A E A C   N N A 8 8 N 0   0 C 8 A A 8 8 N A   8 8 8 A 8 8 8 N   8 C A N A N   8 A N 8 A A   A A A A   8 8 8 8 8 8 8 N N N C
93 A F 8 C   N N A A A N 8   A 8 A 8 8 8 C N 8   8 8 8 A 8 C A N   8 N N 8 A N   8 A 8 A A 8   A 8 C C   A N N N N A A A A A
94 A C A C   C 8 0 C 0 8 8   8 8 8 N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   C 8 N N   N N N N N N N N N N
95 A F 8 A   N N C C 0 N 8   8 C C C N N N N   N C N A N N N N   C C 8 C N N   8 8 C C 8 A   8 8 N N   8 8 8 8 8 8 A A N N C
96 A E 8 C   E E A A A N 0   A 8 A 8 8 8 C N 8   8 8 C A 8 C A N   C 8 A A 8 N   8 8 0 8 A 8   8 8 8 8   8 8 8 A A A C A 8 C
97 A F 8 A   N N 8 8 8 N 8   A 8 A 8 8 C C N 8   A 8 C A C 8 A N   C C A A A N   8 A 0 A 8 8   A A A A   A A A A 8 8 N 8 A 8
98 A E 8 C   8 A A A 8 N A   A 8 8 8 8 C C N 8   C C C 8 C C C N   C C A A C N   8 8 C A   8 8 8 A 8 8 8 N 8 N C
99 A E A A   N N A A 8 N 8   0 0 A 8 8 C C N A   8 C C A A N A N   C A A A N N   A A N N 8 N   ~ N A A   8 8 8 8 8 8 N 8 N A
100 A E 8 A   N N A A A N 8   A 8 A 8 8 C C N A   8 8 8 8 C C 8 N   8 A A A 8 C N   8 8 8 8 8 A   C C C C   8 8 8 8 8 8 N 8 N A
101 A E 8 C   E F 8 8 A N 8   0 C C 8 C C 8 N 0   C 8 8 C C N A N   8 A A A 8 8 N   8 C C 8 C A   A 8 C A   8 8 A 8 A 8 8 N 8 N 8
102 A A 8 A   8 E E A A N A   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A 8 8   8 8 A A 8 A 8 N 8 N A
103 8 A A A   0 N N 8 A 0   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   A A 8 8   8 8 8 8 A A 8 N 8 N 8
104 8 A 8 A   8 C N C C N A   C C C 8 8 8 8 8 N 0   A 8 8 A 8 C A N   A C A A A N   A A A C A A   A A C C   8 A 8 8 8 8 8 A C 8 N 8
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TABLE IX (Continued)

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C        0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0   0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 6 6 6
    1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2

105  B B B A   B B E B L N A   B B A C B A B N B   B C B A C C A N   C B C A B N   A A B B B A   A B C C   B A A A A B B N B N B
106  A A B A   B N N B C N A   B C A C C C C N B   C B B A C C B N   C C A A A N   A A D A A A   A A B A   B A A A B A B B B N N
107  C B B C   B E E B B A B   N N N N N N N N N   N N N N N N N N   N N N N N N   C C N C B N   A A A A   B B D B B N B N A A C
108  O C B C   B C N B A N C   B B C A A B C A A   B B C A C C B N   B E B B B N   C C N C B N   A A A A   B B D B N B N B A A C
109  O A B B   C B A C C N B   B B C B B C C N B   B C B B B C A N   C B B B B N   B B B B B A   A A B C   B B B B B B B N B N B
110  O A B A   A N N B B N A   B B C C B C C N B   B B B B B C C N   C C C B B N   A A A B A A   A A B B   B A A A A A B N B A A
111  C A E A   A E F B B N A   B B A C C C C N A   A B A A B C A N   B C B A B N   C B B B A B   A A B A   B A B A A B B N B N B
112  O B B A   B B N B C N A   C B B B B C C A B   C C B A C C B A   C C C A C A   A A A D A N   A A A A   B A A A A B B N B A C
113  C A B A   B N N C B A A   C C B C C B C N C   B B B A C C A N   B B B C B N   A A A B A B   A A C C   B B B B B B B N B N N
114  C B B C   A N N B D N A   B C B A A A B A B   B B B A C C A A N   B B B D A A A   A B B B   B A A A A A B N B N C
115  O A B A   C N N B B A B   N N N N N N N N N   N N N N N N N   N N N N N N   N N N N N N   B B B N   B B B B B A A C B N B
116  O B B A   B A A C B N A   B B A B B A B N B   B A A A B A A N   B B B A B N   B B B A A A   A B B B   B A A A A B B N B A B
117  O A B B   B E E B B B B   N N N N N N N N   N N N N N N N N   N N N N N N   N N N N N N   B B C C   B B B B B B B N A A C
118  O D B C   B B E B C N A   B B C B C B B A C   B B B A B C C N   C C C A C N   A A A A A A   B B B B   A A B A B A B N B N B
119  O A B C   C A B B B N A   B B N C C B C N B   B A N A B B C N   A N N N N N   A B D A A A   A N A A   B A B A A B B N B N B
120  O A B C   B N N C A N A   A B B C C C B N C   A B B C C C B N   C A C C C N   A A D A C A   A A C C   B B A B B B B C B N B
121  O A B C   A E E A A N A   B C A B B B C N A   C B C B C B B N   B A B B C N   A A D A A A   B B B B   B A A A B A B N B N B
122  C E A C   N N A A A N B   A B A B A B C N A   B A B A B B A N   B A A A A N   B A B B A A   A A A A   A A A A A A A A B A A
123  O E B C   E A A A A N A   A A A B A B B N A   B B A A A C B N   B B A A A N   B A B A A A   A A C C   A A A A B A A B A N A
124  O O B C   B A E C B A A   N N N N N N N N N   N N N N N N N   N N N N N N   N N N N N N   A A C C   B A B B B B B N B N B
125  A C A C   C A N B A N A   A A A B B C B N B   A A A A C C A N   A C A A C N   B A D A A B   A A B B   A A B A A A A C B N A
126  B B B A   B C E C B N B   B B B B B C C N C   B B A B A C A N   C C A A B N   B B B A B N   A A B B   B A B B B B B N A N C
127  O A B C   C N N B C N A   B A C C B A C A C   A A B B A C A N   A C C C N N   A A D A A A   B B B B   B B B B A B B N B N N
128  O A B C   B N N C C N A   B C C C C C B N C   B A C B B C A N   B C A B C N   A A A A A A   B A C C   B B B B B B B N B N B
129  O A B A   B N N B B N A   B C B A C C C N B   A C C A C C A N   C C A A C N   A A A B D A   B A C C   B B B B B B B N B A B
130  A E A C   B B B B C N B   B C B C B C C C N B   C C C B C B C N   B B B B B N   B C A B B A   B B A B   B B B B B B B N B N C
131  A A A C   B E E A B N B   A B A B B B C C N B   C A B B B C A N   B C A A C A   A A A A D A   A A B B   B A A A A B N B N A
132  F A B A   C N N C B A C   B C B C C C C N B   C B C B B B B N   B B C B B N   C C C C B A   A A B B   B B A A B A A B N N B
133  B A B A   B N N C O N B   C C C C C C C A C   B B C B C C A N   B C C B C N   A D D A D A   A A B B   B A A A B B A C B N B
134  B B B C   A N N A A N B   B C C B B C A B   B A A A C B A N   B B B A C N   B B A A B B   A A B B   B A A A B B A C B N B
135  A A A A   C N N B A N C   A A A N A A B A B   A A C A C A A N   A A B A C N   A A A A B B   A A A A   B A A A A B C B A A
136  B C B C   C C E C B N A   C C C C B B A A C   B B B A C C A N   C B B A B N   A A B N A A   A A A N   B B B B A A A A B N B
137  B E B C   C B A B A N C   B B A A A C B N C   C B B A C A C N   B C A A B N   B A D A B B   A B C A   B B A B B B B N A A B
138  O A B C   C E E C B A A   A B N B A B B N O   B N C C A C B N   B B B B B N   A A B A A A   A A A A   B B A A B B A C B N A
139  B C B A   B B E C A N B   B B C C B B B A B   A B B B C C C N   C C B B A N   B B B B C A   A A B A   B A B A B A B N A A A
140  C C A B   B B N B O N B   B A B B C C C N B   B B B B B B B N   B B B N B N   B B B B B N   A A B B   B A A A A A B B A N A
141  F C B C   C C N C D A B   C C C C C C C N C   C B B A C B A N   A A A B B N   B B C A B A   A A C C   B B A B B B C B N B A
142  B E B C   C C A B B N B   C A A A B C C N A   B A C A C C B A   A A C C C N   A A A A A B   C C C A   B B B B B A A C N A A
143  B B B B   C E E C B N B   B C C C C C N D   B B B A C C A N   C C C A C N   B B A B B A   A A B B   B B B B B B B N A A B
144  O E B C   C C B B B C C   B B A B C C C N A   B B A B B C A A   B B A A C N   C B O C C B   A B B A   B B B A A N B N A A B
145  C E A C   A A A A B N B   A B A B B C A A A   B C A B B A A N   B B A A B N   B B B B B B   C C C A   B B B B B B B N B N A
146  B O B C   C A A B C N B   A B B C C C B N B   B B C B C C C N   A C A C C N   B A B A B B   C C C A   A B B B B B B N B N A
147  B O B C   O O N O C N B   A C C B B A A N D   B B B A B B B N   B B B B C N   B B B B B B   A A B A   B B B B B B B N A A B
148  A E B C   N N A A B N B   N B B N B N N N A   C B B A B A A N   N N A A N N   B C B B B B   A A N A   N N N N A N B N A A A
149  B O B C   B A N A A N A   A A A B B B C N A   B B B A C C A N   C C C B A N   A B A A A A   A A C A   B A B B B B B N A A B
150  B C B A   B B N C A N A   A B B C C B C N B   C B B A A C A N   C C C A A N   A A A A A B   A B C C   B B B A B A B B N N C
151  O C A A   A A E B B A A   B A B A B C B N B   B A A A C A N   C C B A C N   B A B A A B   A A C C   B A A A B B N B N B
152  O A B A   B N N B B N A   B B B B B B C N C   C B C B C C B N   C B C C C N   A A D A A A   B B B B   B B B B B B B N B N B
153  A B A B   B C B C A B D   A A A A A B N D   A B A A C C A N   B A B A C N   B C C C A N   B C B A   A A A B B B B A B N A
154  A A B A   B C D C A B A   A A A A A C N D   B C A A A C B N   B A B A B N   A B A B A N   A B A B   A A A A B B N B N B
155  B B B B   B B B B A B D   A A A A A C B N C   A B A A A A A N   A B A A B N   A B B A A N   B A A B   A B A A A A B A B N A
156  B A A C   A B A B A B D   A A A C A C B N O   A B A A A C A N   A B B A B N   A B A B A N   A B A A   A A A A A D B A B N B
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TABLE IX (Continued)

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C                    G L C . . . J J O J J O J O O O J C O J J G J J J O O G J O J G J J J J O O J C Q O J J U J C O O J C J U G O O O O O O Q Q O O
B   Q C C C Q O O C C O Q I ! ! ! ! ! ! ! ! 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 6 6 6
S   1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2

157 B B B C   B A B A A B C B   A A A B A C B N C   A A C C C C A N   A B B A S N   A B A A A N   A B A A   A B A A B B E N B A A
158 G A A B   A B A B A U U   A A A A A B N N D   A B C A C A A N   A B B A B N   A A B B A N   A B B A   A A B B B B B 9 A B A B
159 A A B B   B A B B N B A   N A A A A B B N D   B C A C C A A N   A B B A C N   A A B B C N   A B B A   A A B L B B B N E N B
160 A B B C   C B C B A B A   A A A B B C B N C   A B C A C A B N   B C B B B N   C D B C A N   B C B A   A A L E A B B N N N B
161 B A A B   A B B A A A A   A A L B A B A A N   B A A C A C A N   A B B A A N   B C D B C B   A C C C   A A B A A A B N B N N
162 C F B C   A A A B O A D   D B N B A C B N C   B A A C A C A N   A B B A A N   B B B B B B   A B B B   B B B B B B B N B M N
163 B E B A   C B B B N B   B A A B B C C A A   C B B A B C A N   C B A A A N   A A C A C B   A A A A   B B B P B A D C B A C
164 F B A C   B E E B N N B   B C B B C C C N B   B A A A C C B N   A B A C C N   A A B D B N   B B B B   B B B B B B C E A C
165 A D A B   B B N C N N B   B S B C C C C N B   B C A A C C B N   C B B A C N   B A B D B N   B B B B   B B B B B A A B N A
166 C C A C   B A N A B N A   A A A B B B C N A   C B A A C C A N   C C A A A N   A B A A A A   B B B B   B B B A B B B N B N B
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TABLE IX (Continued)

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254	B E B C	A A A A B N B	C C A A B B C N A	C B C A A C B N	C C A A C N	A A D A A A	A A C A	B B B B A B N B N C
255	B E A C	B B B C C N A	C C B C C C C N B	B B A B C B B N	C B B A B N	B B B A B A	A B C A	B B B B A B B N B N C
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257	D D A A	B A B N A N A	A C B C C C N D D	A B A A A A B N	C C B B C N	C D C B A B	B A A B	A A B A A B A A A A A
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TABLE IX (Continued)

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285 C D A A    C B A B B N B    B B B B B C C N C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    B A B B A B A C B N C
286 C D A B    C B B B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A A C C    B A B B A B A C B N C
287 C D A B    C B B B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
288 G D A A    C B A B B N B    B B B B B C C N C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
289 G D A A    B B B B B N B    B B D B B C C N C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
290 G D A A    C B A B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
291 G D A B    C B A B B N B    B B B B B C C N C    B B A B C B A N    C B B A A N    B B D B A A    A A C C    B A B B A B A C B N C
292 G D A B    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    B A B B A B A C B N C
293 B D B A    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    B A B B A B A C B N C
294 B D B A    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    A A B B A B A C B C C
295 B D B A    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    A A B B A B A C B C C
296 B D B A    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    A A B B A B A C B C C
297 B D B A    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    A A B B A B A C B C C
298 B D B A    C B A B B N B    B B B B B C C A C    B B A B C B A N    C B B A A N    B B D B A B    A A C C    A A B B A B A C B N C
299 B D B B    C B B B B N B    B B B B B C C N C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
300 B D B B    C B B B B N B    B B B B B C C N C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
301 B D A A    C P A B B N B    B B B B B C C N C    B B A B C B A N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
302 F D A A    C B B B C B B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A A    A A C C    B A B B A B A C C N C
303 B D A A    C B A B B N B    B B B B B C C N C    B B A B C B A N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
304 F C A A    C B E B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
305 F C A A    C B E B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
306 D C B A    C B E B B N B    B B B B B C C N C    B B A B B B B N    C B B A A N    B B D B A B    A B C C    B A B B A B A C B N C
307 D C B A    C B E B B N B    U B D B B C C N C    B B A B B B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
308 C C A A    C B E B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
309 C C A A    C B E B B V B    B B D B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
310 C C A A    C B E B B N B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
311 C C A A    C B E B B V B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
312 A C B B    C B E B C B B    B B B B B C C A C    B B A B C B B N    C B B A A N    B B D B A B    A B C C    A A B B A B A C B N C
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TABLE IX (Continued)

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O        O O J J Q O Q.O C O J C U O C O O J U O C U O O O C O O O O C Q O O O Q O U C Q J U O U J U C O O C Q Q Q
B    O O C Q O U C O O . i i 1 1 1 . 1 i 1 1 i 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 6 6 6
S    1 2 3 4 5 6 7 8 9 J i 2 3 4 5 5 7 8 9 J 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 5 9 0 1 2 3 4 5 6 7 8 9 0 1 2

313 ± C B E    C B F 8 C 6 6    8 6 B 8 8 C C ± 8    8 8 A B C B 8 N    C 8 8 ± ± N    8 8 D 8 ± 8    ± 8 C C    ± ± 8 B ± 8 A C 6 N C
314 G C 8 B    C B E B 8 N 8    8 8 8 8 8 C C N C    3 8 A 8 C 6 9 N    C 8 8 ± ± N    8 8 C 8 ± B    ± B C C    ± ± 8 8 A B ± C B N C
315 G C ± A    C 8 E 8 8 N 8    8 8 8 8 8 C C N C    8 8 A 8 C 6 8 N    C 8 8 A ± N    8 8 D 8 ± 8    ± B C C    ± ± 8 8 ± 8 ± C B N C
316 G C ± ±    C 8 E 8 8 N 8    8 8 8 8 8 C C N C    8 8 A 8 C 8 8 N    C 8 8 ± A N    8 8 D 8 A 8    ± 8 C C    ± ± A 8 ± 8 ± C B N C
317 G C ± A    C 8 E 8 8 N 8    8 8 8 8 8 C C N C    8 8 A 8 C 8 8 N    C 8 8 A ± N    8 8 D 8 ± 8    ± 8 C C    ± ± 8 ± 8 ± 8 ± C B N C
318 G C ± A    C B E 8 8 N 8    8 8 8 8 8 C C N C    8 8 A 8 C 8 9 N    C 8 8 ± ± N    8 8 D 8 ± 8    ± B C C    ± ± 8 A 8 A C B N C
319 A C ± ±    C B E 8 N 8    8 8 8 8 8 C C ± C    8 8 ± 8 C 8 8 N    C 8 8 A A N    8 8 D 8 ± 8    ± 8 C C    8 ± 8 8 ± 8 A C B N C
320 A C ± ±    C 8 E 8 8 N B    8 8 B B B C C ± C    8 8 A 8 C 8 8 N    C 8 8 A A N    8 8 D 8 ± 8    ± 8 C C    8 ± 8 8 A 8 ± C 8 N C
321 A C ± ±    C B E 8 8 N 8    8 8 B 8 B C C A C    8 8 ± 8 C 8 8 N    C 8 8 A A N    8 8 D 8 A 8    ± 8 C C    8 ± 8 8 A 8 ± C B N C
322 A C ± A    C 8 E 8 8 N 8    8 8 8 8 8 C C ± C    8 8 A 8 C 8 B N    C 8 8 A A N    8 8 D 8 A 8    ± 8 C C    8 ± 8 8 A 8 A C 8 N C
323 C D ± ±    C 8 ± 8 8 N 8    8 8 8 8 8 C C N C    8 8 A 8 C 8 A N    C 8 8 A A N    8 8 D 6 8 8    8 8 C C    ± 8 8 ± ± 8 ± C B N C
324 O E ± C    N N N N A N A    8 8 8 8 C 8 N 8 8    8 8 8 8 8 8 8 8    8 8 8 8 8 N    A A A A C 8    8 ± 8 ±    8 8 8 8 8 8 8 N 8 N 8
325 D E 8 A    C B A 8 N A    8 8 A C C C C N A    8 8 8 A C C 8 N    B C A B C N    A A A ± ± A    ± 8 8 8    8 ± 8 8 8 B B N B B C
326 F C ± A    C B E 8 8 N B    8 8 B B B C C A C    8 8 A B C B 8 N    C 8 8 A A N    8 8 D 8 A 8    N B C C    ± A 8 8 A 8 A C B N C
327 G E A C    N N A A A N C    A 8 ± C A 8 C N A    C C C A C 8 C N    8 8 A A N N    A N A B C N    8 8 8 8    8 8 8 8 8 8 N ± A B
328 A E B C    N N C C 8 N 8    8 8 B A ± N 8 N C    8 C C 8 C B 8 N    8 8 8 A A N    8 8 D A 8 N    8 8 8 8    8 8 8 8 8 8 A A B N 8
329 D D 8 C    A 8 N 8 A N 8    8 C B B A B C N C    C 8 C 8 8 C 8 N    8 C 8 C C N    8 C 8 C 8 8    C A N N    8 8 ± 8 8 A B N 8 N 8
330 G D A C    B A N 8 8 N 8    8 A 8 C C C C N 8    8 8 8 A A C A N    8 C C A C N    8 8 D A 8 8    A 8 8 A    8 8 8 8 8 8 8 N 8 N C
331 E C A ±    C N N O C N 8    C 8 C B B A ± A D    8 A 8 8 8 C A N    8 8 A B 8 N    8 8 D A 8 A    A A ± A    A A 8 8 A 8 8 N A A B
332 F F B A    B N N C D 8 A    8 8 C C 8 8 C N 8    A 8 8 A B C 8 N    8 8 8 A 8 N    A 8 8 A A ±    8 8 8 8    8 A A 8 8 8 8 N 8 N 8
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h=332

*Data variable numbers corresponding to the questionnaire are explained in Table VIII.

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