

A Survey of Information Sources Used by Psychiatrists

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ABSTRACT

To study the information sources of psychiatrists, we sent a questionnaire to 400 randomly selected members of the American Psychiatric Association. Seventy-four percent responded. Journals and books (in that order) were the most important information sources. The average number of journals regularly read was 4.3. An average of 9.1 books had been read during the preceding twelve months. Twenty-eight percent of books were obtained through a library. Sixty-nine percent of the respondents use a medical library at least monthly. Important differences were found by type of practice. For example, academicians reported reading almost 19 books the preceding year; private practitioners, 6.4. We conclude that a major aim in the postgraduate education of psychiatrists should be instruction in the use of all information services. In addition, abstracts and an authoritative annual review should help psychiatrists keep up in areas outside their special interest.

WHAT are your sources of psychiatric information? How do you institute a search of, or review of, the literature? What are some of the difficulties you have in obtaining required information? These were among the questions contained in a questionnaire sent to 400 randomly selected psychiatrists. This paper reports the results from the 74 percent who responded.

A number of studies have analyzed the means by which physicians and other scientists seek information. The comprehensive study by the American Psychological Association on scientific information exchange is an outstanding example of the drawing together of many component studies into a process model that has suggested methodological changes and innovations and has aided in experimental design (1).

Herner's study of the information gathering habits of 606 individuals representing all of the various scientific divisions of Johns Hopkins University clearly indicated that patterns vary greatly from group to group (2). Harris commented in his review of medical communication sources that many studies seemed designed to achieve results which pleased their sponsors (3). Sherrington's bibliography indicated that most studies of the flow of medical information have been instituted by drug companies and publishers of journals (4).

Circulation studies at the Yale Medical Library indicated that psychiatrists are among the most frequent users of the literature (5). In an analysis of circulation at the Downstate Medical Center Library in Brooklyn (September 1, 1962–August 31, 1963) books on psychiatry constituted 10 percent of the loans analyzed. The runner-up subject accounted for 6 percent of the loans. This occurred even though Psychiatry was the only department in the medical school which maintained a professionally supervised library. The circulation statistics for this branch library were not included in the study (6). Earley, who surveyed the needs for continuing psychiatric education, has pointed out the need for studies of utilization of the literature (7).

The purpose of this study is to delineate general patterns of information usage representative of all psychiatrists in the United States. A survey was conducted to furnish information on broad topic areas. Such information, not previously available, could serve both as a point of departure for, and a basis of comparison with, other studies.

METHOD

A questionnaire was prepared and distributed to 400 psychiatrists randomly selected from the 1968 *Biographical Directory of Fellows and Members of the American Psychiatric Association*. All areas of the United States were represented. Each questionnaire was accompanied by a letter explaining the project and a stamped return envelope. The questionnaires were first mailed in February, 1970. A second questionnaire was mailed in March to the 168 psychiatrists who had not responded to the first letter. Tabulation was done in May.

The questionnaire was designed to be short and easily answered. Most questions required only that the respondent check a blank, write a number, or circle a response. Two open-end questions with no suggested answers were asked regarding any difficulties the psychiatrist might have in keeping up with psychiatric information and his recommendations for improvements. The only personal information requested was the major area of practice. A code number allowed correlation of an individual's response with the biographical data obtained from the *Directory*.

RESULTS

Response

Six persons were eliminated from the study because of disability, death, and undelivered mail—leaving an adjusted total sample of 394

TABLE 1
CHARACTERISTICS OF RESPONDING PSYCHIATRISTS

Major Area of Practice	Number	Age				Average
		31-40	41-50	51-60	61-70	
Private practice, solo	125	38%	44%	50%	36%	43%
Clinic, hospital, or group	55	23%	20%	11%	22%	19%
Mixed practice	42	10%	21%	8%	17%	15%
Academic	36	26%	5%	18%	0	12%
Administration	32	3%	10%	13%	25%	11%
Totals	290	100%	100%	100%	100%	100%

psychiatrists. Of these, 290, or 74 percent, responded. We had a higher return rate than did either the American Psychological Association (1) for similar studies (55 percent) or Vollan (8) in his study of postgraduate education activities (30 percent). We think there are two possible reasons for the good response: (1) The questionnaire was simple to complete and, therefore, minimally intrusive on the psychiatrist's time. (2) Many psychiatrists were enthusiastic and personally concerned about the items covered.

The response rate was highest (80 percent) for the 31-40 age group. Members of this group returned their questionnaires quickly, with over 70 percent replying to the initial letter, whereas the return rate for the 61-70 age group increased from 45 percent for the first mailing to 73 percent with the second mailing. A larger proportion of the younger group were academicians.

Biographical Characteristics

The responding psychiatrists ranged in age from 31 to 70 years. The average age of respondents was 48, compared with an average age of 49 for those who did not respond. Because the sample was taken from the 1968 *Directory*, which listed members as of October, 1967, younger psychiatrists were inadequately represented. Some indication of this is that the average age for respondents in the 31-40 age group was 37 years.

Forty-nine percent of the respondents had publications listed in the *Directory*, as did only 27 percent of the nonrespondents. This difference was significant at the .001 level, $\chi^2 = 15.16$. Respondents also differed significantly from nonrespondents in regard to board certification. Fifty-five percent of the respondents were board certified, and 42 percent of the nonrespondents were ($\chi^2 = 7.69$, $P .01$).

In response to the question of major area of practice, many psychiatrists checked more than one area. In some cases, it was still possible to determine which was the major area (the respondent had indicated percentage of time spent, ranked the areas, etc.), but those for whom one area could not be determined were grouped into the "mixed practice" category. Table 1 shows the distribution of responding psychiatrists. It should be noted that no cate-

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gory is necessarily exclusive and that many psychiatrists had overlapping commitments.

Sources of Information

Sources of information ranged from a high of 99 percent using journals to 27 percent listing detail men. The mean percentages are shown in Table 2. When analyzed by age, sources of information were much the same in all categories, varying more than 9 percent from the mean averages only once. The percentage of those who reported colleagues as a source of information gradually diminished from 93 percent in the 31-40 age group to 58 percent in the 61-70 age group. Similarly, in reporting their prime information sources, colleagues were named by 14 percent in the youngest group but by none in the oldest.

Journals were the primary source of information for 58 percent of the responding psychiatrists. Books were most important to 20 percent of those in the 31-40 age group. This figure progressively decreased to 11 percent in the 61-70 group. No other items varied more than a few percentage points by age or type practice from the means given in Table 3.

Reading Habits

Ways used to search the literature are analyzed in Tables 4 and 5.

Psychiatrists reported an average of 6.7 hours of professional reading per week. Sixty-two percent of their reading time was devoted to journals, 38 percent to books. There was a tendency toward slightly increased reading with age (8.3 hours in the 61-70 age group). Private practitioners read least (5.6 hours) and academicians most (9.1 hours). The only difference

TABLE 2
USAGE OF INFORMATION SOURCES

Journals	99%
Books and monographs	91%
Colleagues	82%
Professional newspapers (<i>Psychiatric News</i> , etc.)	82%
Professional society meetings	77%
Conventions	61%
Hospital meetings	51%
Drug company literature, other unsolicited mail	39%
Detail men	27%
Other	9%

TABLE 3

PRIME INFORMATION SOURCE

Journals	55%
Books and monographs	16%
Colleagues	9%
No preference indicated	9%
Other	3%
Hospital meetings	2%
Professional society meetings	2%
Professional newspapers (<i>Psychiatric News</i> , etc.)	2%
Conventions	1%
Drug company literature, other unsolicited mail	1%
Detail men	0%

of note by type of practice was that academicians spent a smaller portion of their time reading journals (54 percent) and a larger portion reading books (46 percent).

The average number of journals regularly read was 4.3 with a tendency toward increase with age, from 3.9 journals in the 31-40 age group to 5.5 journals in the 61-70 group. Administrators read the most journals, 5.7, and private practitioners the least, 3.7 journals. An average of 9.7 books was read during the previous 12 months. There was a gradual decrease with age, from 12.6 books read by the 31-40 age group to 8.3 books read by the 61-70 group. Variance by type of practice was great. Academicians averaged 18.9 books; mixed practice psychiatrists, 12.6 books; hospital-clinic psychiatrists, 9.6 books; administrators, 8.7 books; and private practitioners, 6.4 books.

Library Usage

Sixty-seven percent of books read were obtained by purchase, 28 percent through a library, 3 percent from colleagues, and 2 percent from other sources. Library materials were used less with increasing age, with a corresponding increase in proportion of books purchased. Academicians and administrators varied greatly from others, obtaining 46 percent of their books by purchase and 49 percent from libraries, 4 percent from colleagues, and 1 percent from such sources as books sent for review by publishers.

Seventy percent of academicians used medical libraries weekly and 22 percent at least monthly. For administrators, the respective fig-

TABLE 4
METHODS OF SEARCHING LITERATURE

Review articles	63%
Bibliographies	60%
Abstracts and indexes	57%
Library reference services	53%
Memory	47%
Conversations (recommendations)	37%
Card catalog	36%
Browsing	28%
Personal index	23%
Other	2%

ures are 35 and 53 percent. This contrasts with the lowest usage figures of 11 percent weekly and 41 percent monthly by private practitioners. The mean library usage figures were 27 percent weekly, 42 percent at least monthly, 23 percent at least yearly, and 8 percent who never used a library. There were minimal differences by age.

Among library reference services, guidance by the librarian was used by 40 percent, lists of recent acquisitions by 38 percent, requested bibliographies by 35 percent, MEDLARS by 11 percent, and other services by 11 percent. There were no notable differences by age, but academicians used all library reference services except guidance much more than the mean. In particular, 44 percent of academicians reported use of MEDLARS.

Information Difficulties

Lack of time to keep up with psychiatric information was reported by 39 percent of the responding psychiatrists. Such complaints were often related to criticisms of the quantity and quality of the published material which were

TABLE 5
PRIME METHOD OF SEARCHING LITERATURE

Library reference services	23%
Abstracts and indexes	17%
Bibliographies	17%
Review articles	16%
Personal index	6%
No preference indicated	6%
Card catalog	5%
Memory	4%
Browsing	4%
Conversations (recommendations)	1%
Other	1%

mentioned by 23 and 20 percent, respectively. The volume of literature was specified by 44 percent of academicians. This may reflect a sense of the need to be better informed and at the same time a strong feeling that much that is published is unnecessary and redundant.

Typical comments: "I hope the statistics reveal what most of us already know. Too much is published that is either repetitious or of little value." "There are very few advances." "Information in the literature is fabulously redundant." "Cut down on crap, publish or perish stuff."

Inadequate libraries were mentioned by several psychiatrists. At the same time, it was evident from the responses that many psychiatrists were unfamiliar with what was available through libraries. One psychiatrist commented, "I didn't know what MEDLARS was. Continuing education is most important."

Geographic isolation from both colleagues and libraries was mentioned by eleven psychiatrists. Such complaints were often coupled with suggestions that books be mailed to psychiatrists by libraries and that regional library services be available to the practicing physician.

Twenty-nine percent of the responding psychiatrists reported no difficulties keeping up with psychiatric information. Forty-four percent of administrators had no difficulties. Fewer problems were noted as age increased. Fifty-six percent of those from the 61-70 age group reported no problems.

Suggestions

The tenor of the suggestions often seemed to reflect a sense of urgency and even despair about what was considered a deluge of material. Many mentioned the need for higher editorial standards and more readable articles.

Greater use of abstracting services was suggested by 14 percent of the psychiatrists. Several suggested that abstracts should accompany each paper. It was mentioned that such abstracts could be grouped by subject, published quarterly, and mailed to psychiatrists. Another liked the system of having a computer match an individual psychiatrist's information needs with bibliographic data and produce a bibliography or abstracts of literature important to him.

The desire for more review articles was expressed by 13 percent of the responding psy-

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chiatrists. There was a willingness to exchange editorial control over what goes into a review for the opportunity to keep up adequately in that area. Several persons suggested that such articles should make explicit the author's background and biases. There was general interest in noncommercial preparation of any comprehensive review publication.

Twenty-one psychiatrists suggested improved, more readily available indexes. Several psychiatrists endorsed audiotapes for auto use as a useful adjunctive learning source. A typical comment was, "I drive four hours a week to and from institutions to which I consult. If it were possible to have worthwhile psychiatric information on cassettes for listening, it would be helpful to me."

DISCUSSION

The intent of this study was to discover the information sources used by psychiatrists and to have some indication of their relative importance. It does not attend to the question of why different information sources are used. An American Psychological Association study suggested that psychologists who reported books as significant information sources were more likely to be involved in teaching and to be engaged in more than one type of endeavor. This same study suggested that books and journals are apparently used to satisfy specific, different information needs. Books were viewed as more significant for general points or conclusions (9). Much more complete information is needed about the extent to which various media are oriented, or should be oriented, toward the satisfaction of specific information needs.

The data obtained by this study indicate that psychiatrists rely heavily on the literature for their information. In general, the figures are higher than those reported for other physicians and for nonmedical scientists (8, 2). This is true both in terms of the relative importance of written media versus oral media and in the amount of time spent reading.

These psychiatrists strongly felt that much of what was published was repetitious or insignificant. There is evidence that much of what is published is not widely read. A study of reading patterns of more than 200 psychologists indicated that nearly one-half of the articles in their 25 most widely read journals were read by no more than 2 persons. Only 10 of the

429 articles were read by more than 16 persons and, of these, 7 were reviews (10).

More in the way of review-type articles was a frequent recommendation of the psychiatrists in this study. In addition, they wanted more readily available abstracts and learning devices such as tape cassettes for auto use.

Some areas are notable for not being mentioned. Postgraduate courses were not listed in the questionnaire, and only one person indicated such courses as an information source. By contrast, such sources as patients and graduate assistants were mentioned several times.

There are important information services of which most psychiatrists are unaware. Many did not know of MEDLARS, which not only produces *Index Medicus*, but can also automatically produce subject bibliographies on demand. Familiarity with other available abstracting and indexing services seemed quite low. For example, the Chicago Institute for Psychoanalysis offers to institutions a monthly card index covering the contents of books and 130 English and foreign language serial publications on psychoanalysis, psychosomatic medicine, and related areas of the behavioral sciences. The newly available National Library of Medicine publication, *Abridged Index Medicus*, may partially fulfill the felt need for a more readily available index. Its cost, \$12 per year, makes it suitable for individual psychiatrists and smaller libraries that have hesitated to subscribe to more comprehensive, costly bibliographies. Its usefulness is limited in that relatively few journals of direct interest to most psychiatrists are indexed.

A similar lack of familiarity with library services was apparent. Many of the suggested improvements are available in some areas of the country. For example, the University of Kentucky Medical Center Library, in cooperation with the Ohio Valley Regional Medical Program, offers free of charge to all Kentucky health personnel medical reference service, photocopying and mailing of journal articles and books, preparation of subject bibliographies, consultation service to hospital libraries, and services of a drug information center.

The information reported by this study must be considered tentative as there are no other studies directly comparable to it. Too, despite the high response rate, the results cannot be generalized to the nonrespondents who repre-

sent a significantly different group. It is important to know the usage patterns and perceived needs of this group, which represents one quarter of the membership of the American Psychiatric Association. Their not returning the questionnaire, their lower rate of board certification, and the paucity of their publications, might be taken as an indication that their usage patterns are less adequate than those of the responding psychiatrists.

This study does suggest that a major effort in postgraduate education for psychiatrists should be instruction in the use of all of the information services which are currently available. Such instruction should begin in medical school and be reinforced, with emphasis on psychiatry, during the residency. It seems unlikely that any decrease in volume of publications will occur. Nevertheless, stricter editorial policies could improve the readability, pertinence, and currency of articles. It is clear that most psychiatrists do not and cannot read most of what is published. Abstracts and an authoritative annual review would help them to keep up in areas outside their special interests.

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Interviewers are normally very sympathetic towards people who admit their own shortcomings: the person who knows himself well enough to acknowledge his own imperfections commands greater respect than the person who has no imperfections at all.

—Harber, Fred. *Climbing the Ladder*. *Asst. Lib'n.* 63: 119, Aug. 1970.