

THE UNIVERSITY OF CHICAGO

THE PERSONALITY OF THE LIBRARIAN

A DISSERTATION SUBMITTED TO  
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BY  
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# TABLE OF CONTENTS

|  | Page |
|--|------|
| ACKNOWLEDGMENTS . . . . .  | ii   |
| LIST OF TABLES . . . . .   | v    |
| LIST OF ILLUSTRATIONS . . . . .  | x    |
| Chapter  |      |
| I. INTRODUCTION . . . . .  | 1    |
| Personality and Vocational Choice  |      |
| The Librarian Stereotype   |      |
| II. STATEMENT OF THE PROBLEM . . . . .                                   | 26   |
| The General Problem  |      |
| Origin of the Problem  |      |
| Specific Hypotheses  |      |
| Limitations  |      |
| Definitions  |      |
| III. PROCEDURE AND SOURCES OF DATA . . . . .                             | 34   |
| Introduction   |      |
| General Procedure  |      |
| Test Instruments   |      |
| Test Groups  |      |
| Summary  |      |
| IV. RESULTS OF THE TESTING . . . . .                                     | 74   |
| Introduction   |      |
| The Hypotheses   |      |
| V. DISCUSSION OF RESULTS . . . . .                                       | 85   |
| General Observations   |      |
| The Hypotheses   |      |
| VI. SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH . . . . . | 113  |

TABLE OF CONTENTS--Continued

| APPENDICES  | Page |
|---|------|
| I. EXCERPTS DESCRIPTIVE OF THE LIBRARIAN STEREOTYPE . . . . . | 130  |
| II. FORMS . . . . .   | 136  |
| III. SUPPLEMENTARY TABLES AND ILLUSTRATIONS . . . . .         | 143  |
| IV. DATA ON TWO PUBLIC LIBRARY GROUPS . . . . .               | 174  |
| BIBLIOGRAPHY . . . . .  | 181  |

# LIST OF TABLES

| Table   | Page |
|---|------|
| 1. Ratings Made by 1,423 Professional Women Librarians and by Sixty-Five Drexel Institute School of Library Science Students on the Strong Vocational Interest Blank for Women . . . . .            | 12   |
| 2. Ratings Made by Fifty-Four Professional Men Librarians in the Bryan Sample and by 250 Professional Men Librarians in the Taylor Sample on the Strong Vocational Interest Blank for Men . . . . . | 13   |
| 3. Library Schools Represented in the Experimental Group . . . . .  | 54   |
| 4. Number of Subjects in Experimental Group, by School, Taking Each of the Five Tests Used in the Investigation . . . . .   | 55   |
| 5. Age of Students . . . . .  | 56   |
| 6. Marital Status of Students in the Experimental Group . . . . .   | 57   |
| 7. Highest Non-Professional Degrees Held by Students in the Experimental Group . . . . .  | 58   |
| 8. Type of College Attended by Students in the Experimental Group for Undergraduate Non-Professional Study . . . . .  | 59   |
| 9. Major Subjects in Undergraduate Study of Students in the Experimental Group . . . . .  | 59   |
| 10. Rank Order of Major Subjects in Undergraduate Study of Students in the Experimental Group . . . . .   | 60   |
| 11. Occupation of Father for Students in the Experimental Group . . . . .   | 61   |
| 12. Size of Home City or Town of Students in the Experimental Group . . . . .   | 63   |
| 13. Interval between College Graduation and Library School Attendance . . . . .   | 64   |
| 14. Degrees Sought by Students in the Experimental Group . . . . .  | 65   |
| 15. Work Preference, by Type of Library, of Students in the Experimental Group . . . . .  | 66   |
| 16. Work Preference, by Type of Work, of Students in the Experimental Group . . . . .   | 68   |
| 17. Results Obtained in Testing Hypothesis 1 . . . . .  | 75   |

# LIST OF TABLES--Continued

| Table  | Page |
|--|------|
| 18. Results Obtained in Testing Hypothesis 2 . . . . .   | 77   |
| 19. Results Obtained in Testing Hypothesis 3 . . . . .   | 78   |
| 20. Results Obtained in Testing Hypothesis 4 . . . . .   | 80   |
| 21. Results Obtained in Testing Hypothesis 5 . . . . .   | 81   |
| 22. Results Obtained in Testing Hypothesis 6 . . . . .   | 82   |
| 23. Results Obtained in Testing Hypothesis 7 . . . . .   | 83   |
| 24. Results Obtained in Testing Hypothesis 8 . . . . .   | 83   |
| 25. Geographical Origin of Students in the Experimental Group . . . .  | 143  |
| 26. Number of Students in Experimental Group, by Undergraduate Major<br>Field of Study, Taking Each of the Five Tests Used in the Inves-<br>tigation . . . . . | 144  |
| 27. Factors Listed by 124 Men and 392 Women in the Experimental Group<br>as Determining Their Choice of Library Work . . . . .                                 | 145  |
| 28. Satisfaction of Students in the Experimental Group with Vocational<br>Choice . . . . .   | 147  |
| 29. Response of Experimental Group to the Question, "Do You Think You<br>Are Temperamentally Suited for Library Work?" . . . . .                               | 147  |
| 30. Significance Levels of Experimental Group Perceptions of Associa-<br>tion of Six Personality Traits with Other Librarians and with<br>Themselves . . . . . | 148  |
| 31. Ranking by the Experimental Group of Twelve Personality Traits<br>from the Most to the Least Useful for Librarians . . . . .                               | 149  |
| 32. Chi-Squares and Significance Levels of Ratings by Experimental<br>Group Men and Women of Most and Least Useful Traits for the<br>Librarian . . . . .       | 150  |
| 33. MMPI Scores and Standard Deviations for the Two Groups Combined<br>in Table 34 to Constitute the Normative Group . . . . .                                 | 151  |

# LIST OF TABLES--Continued

| Table   | Page |
|---|------|
| 34. Mean Scores and Standard Deviations on the Minnesota Multiphasic Personality Inventory for Experimental and Normative Groups . . .                                    | 152  |
| 35. t-Ratios and Significance of Differences between Mean Scores of the Experimental and Normative Groups on the Minnesota Multiphasic Personality Inventory . . . . .    | 153  |
| 36. Frequency Distribution of T-Scores on Fourteen Scales of the Minnesota Multiphasic Personality Inventory for Men in the Experimental and Normative Groups . . . . .   | 154  |
| 37. Frequency Distribution of Raw Scores on Three Scales of the Minnesota Multiphasic Personality Inventory for Men in the Experimental and Normative Groups . . . . .    | 156  |
| 38. Frequency Distribution of T-Scores on Fourteen Scales of the Minnesota Multiphasic Personality Inventory for Women in the Experimental and Normative Groups . . . . . | 157  |
| 39. Frequency Distribution of Raw Scores on Three Scales of the Minnesota Multiphasic Personality Inventory for Women in the Experimental and Normative Groups . . . . .  | 159  |
| 40. Mean Scores and Standard Deviations on the Minnesota Multiphasic Personality Inventory for Men and Women in the Experimental Group                                    | 160  |
| 41. t-Ratios and Significance of the Difference between Mean Scores of Experimental Group Men and Women on the Minnesota Multiphasic Personality Inventory . . . . .      | 161  |
| 42. Mean Scores and Standard Deviations on the Allport-Vernon Study of Values for the Experimental and Normative Groups . . . . .   | 162  |
| 43. t-Ratios and Significance of Differences between Mean Scores of the Experimental and Normative Groups on the Allport-Vernon Study of Values . . . . .                 | 162  |
| 44. Means and Standard Deviations of Scores of Experimental Group Men and Women on the Allport-Vernon Study of Values . . . . .   | 163  |
| 45. t-Ratios and Significance of Differences between Mean Scores of Experimental Group Men and Women on the Allport-Vernon Study of Values . . . . .                      | 163  |

# LIST OF TABLES--Continued

| Table   | Page |
|---|------|
| 46. Mean Scores and Standard Deviations on the Allport-Allport A-S Reaction Study for the Experimental and Normative Groups . . . . .                                   | 164  |
| 47. t-Ratios and Significance of Differences between Mean Scores of the Experimental and Normative Groups on the A-S Reaction Study . . . . .                           | 164  |
| 48. Mean Scores and Standard Deviations on the Terman-Miles Attitude-Interest Analysis Test for the Experimental and Normative Groups . . . . .                         | 165  |
| 49. t-Ratios and Significance of Differences between Mean Scores of the Experimental and Normative Groups on the Terman-Miles Attitude-Interest Analysis Test . . . . . | 165  |
| 50. Means and Standard Deviations on the Bernreuter Personality Inventory for the Experimental and Normative Groups . . . . .   | 166  |
| 51. t-Ratios and Significance of Differences between Mean Scores of Experimental and Normative Groups on the Bernreuter Personality Inventory . . . . .                 | 167  |
| 52. Age of Staff Members of the Gary Public Library and the Newark Public Library . . . . .   | 175  |
| 53. Marital Status of Staff Members of the Gary Public Library and the Newark Public Library . . . . .  | 175  |
| 54. Highest Non-Professional Degree Held by Staff Members of the Gary Public Library and the Newark Public Library . . . . .  | 176  |
| 55. Type of College Attended by Staff Members of the Gary Public Library and the Newark Public Library . . . . .  | 176  |
| 56. Undergraduate Degree Major for Staff Members of the Gary Public Library and the Newark Public Library . . . . .   | 177  |
| 57. Occupation of Fathers of Librarians in the Gary Public Library and the Newark Public Library . . . . .  | 177  |
| 58. Satisfaction with Vocational Choice, Gary Public Librarians and Newark Public Librarians . . . . .  | 178  |
| 59. Response of Gary Public Librarians and Newark Public Librarians to the Question "Do You Think You Are Temperamentally Suited for Library Work?" . . . . .           | 178  |



LIST OF TABLES--Continued

| Table  | Page |
|--|------|
| 60. Perception of Association by Gary Public and Newark Public<br>Staffs of Six Personality Traits with Librarians in General and<br>with Themselves . . . . . | 179  |
| 61. Means and Standard Deviations of Test Scores for Staff Members<br>of the Gary Public Library and the Newark Public Library . . . . .                       | 180  |

# LIST OF ILLUSTRATIONS

| Figure  | Page |
|---|------|
| 1. Mean T-Score Profiles of the Experimental and Normative Group Men on 14 Scales of the MMPI . . . . .       | 168  |
| 2. Mean T-Score Profiles of the Experimental and Normative Group Women on 14 Scales of the MMPI . . . . .     | 169  |
| 3. Mean T-Score Profiles of the Experimental Group Men and Women on 14 Scales of the MMPI . . . . .           | 170  |
| 4. Mean Score Profiles of the Men in the Experimental and Normative Groups on the Study of Values . . . . .   | 171  |
| 5. Mean Score Profiles of the Women in the Experimental and Normative Groups on the Study of Values . . . . . | 171  |
| 6. Mean Score Profiles of Men and Women in the Experimental Group on the Study of Values . . . . .            | 172  |

## CHAPTER I

### INTRODUCTION

#### Personality and Vocational Choice

People obviously work to earn a living, but as many observers have pointed out there is more to working than just earning a living. Work is required to satisfy certain innate needs of the individual, whatever the genesis of those needs may be. According to Lewinsky, "There seems to be an inner force which seeks outlets in regular and regulated employment."<sup>1</sup> The economic motive for most people will doubtless always be a prime one; at the same time, that it is not always the crucial element is attested to by the fact that many people work at occupations less financially remunerative than others they might have chosen, others work when the need for economic returns has never existed, and still others continue to work when this need has passed. Though the nature of the forces at work in occupational choice is still not clearly understood, there seems to be general agreement that work is "an expression of basic personality organization and should satisfy basic needs."<sup>2</sup>

#### Theories

Personality types have long been associated with occupations and from these observed associations have stemmed the familiar stereotypes that are so

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<sup>1</sup>Hilde Lewinsky, "Occupation and Obsession," British Journal of Medical Psychology, XIX (1943), 388.

<sup>2</sup>Bertram R. Forer, "Personality Factors in Occupational Choice," Educational and Psychological Measurement, XIII (Autumn, 1953), 361.

common in our society. According to Feather

Vocational counselors, psychologists, and laymen have long conceived of personality stereotypes which are typical of specific occupations. The business man, the scientist, the social worker, and the teacher are all said to exhibit characteristics which differentiate them from one another and from people in general; they are considered 'types.'<sup>1</sup>

For many years attempts to appraise vocational fitness have consumed the efforts of psychologists and vocational counselors; and, though authorities have frequently noted the part played by non-intellectual factors in determining both entrance into occupations and success in them, it is only within the last fifteen years or so that the attention of research workers seems to have been directed toward constructing the necessary theoretical framework for the formulation and testing of hypotheses concerning vocational choice and success. The theories that have been advanced are still in tentative form; at the same time, however, they at least provide a stimulus and a frame of reference for more meaningful and rationally directed research on the problems that have been raised. Illustrative of the theories that have proposed within recent years may be mentioned those of Roe, Ginzberg, and Super.

Autonomous-homonomous drives.--In 1947, Roe proposed a set of hypotheses concerning vocational choice in which she used, as a frame of reference, the personality theory of Argyal as stated in his Foundations for a Science of Personality.<sup>2</sup> Personality, according to this theory, is the end product of the resolution of two basic drives--the autonomous and the homonomous. Where the autonomous drive is ascendant

the person has a tendency to master the environment, and by conquest and achievement to impose his intrinsic determination upon a widening realm

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<sup>1</sup>Don B. Feather, "The Relation of Personality Maladjustments of 503 University of Michigan Students to Their Occupational Interests," Journal of Psychology, XXXII (August, 1950), 72.

<sup>2</sup>Andras Argyal, Foundations for a Science of Personality (New York: The Commonwealth Fund, 1941).

of events. . . . In the trend toward increased autonomy, the biologically chaotic items of the environment are fitted into the structure of the individual's life.<sup>1</sup>

In the case of the homonomous tendency

the person seeks to fit himself into larger organizations. The trend toward homonomy expresses the tendency of human beings to share and to participate in, to fit into and to conform with superindividual categories such as the family, the social group, a meaningful world order, etc. Characteristic examples of the trend toward homonomy are social, religious, ethical and esthetic attitudes.<sup>2</sup>

Accepting the theory postulated by Angyal, Roe then considered that at the professional level, at least, the relative strength of the two drives might be a determining factor in professional choice, something in this manner:

Men, whose autonomous drives are strong, but not markedly so, whose intellectual make-up tends to the relatively greater dominance of non-verbal ability, and whose homonomous drives seem to find satisfaction in empathy with ideas, with symbols of things rather than with the things themselves, are men who are well suited to the pursuit of science and likely to be attracted to it. In another group, where homonomous drives seem to be very much stronger, but in whom the major need is for empathy for the world outside, with things rather than with people, or with people as a special sort of thing--in this group, who need to incorporate the world into themselves and then to re-express it, we find the artists. In the same group with stronger homonomous drives, we also find a more apparent feminine emotional adaptation. In still another group, homonomous needs are very dominant, and their expression is through empathy with people. These are the men who are most feminine in their emotional adaptation and who are happiest in such professions as the ministry, teaching, social work, and medicine.<sup>3</sup>

Berg points out that though Roe's psychoanalytical explanation may be intriguing, it lacks merit in so far as empirical testing is concerned and that the idea would lead to considerable frustration when attempts were made to apply the theory in a meaningful manner.<sup>4</sup>

Decision-making stages.--A major project, directed more toward the

<sup>1</sup>Anne Roe, "Personality and Vocation," The Study of Personality, ed. Howard Brand (New York: John Wiley & Sons, 1954), p. 384.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., pp. 386-87.

<sup>4</sup>Irwin Berg, "Personality Structure and Occupational Choice," Personnel and Guidance Journal, XXXII (November, 1953), 152.

underlying theory of vocational choice than toward identifying discrete variables related to vocational selection, was described in the work of Ginzberg and his associates in 1951. The general theory proposed by Ginzberg stemmed from his concern with constructing bridges between the social and psychological sciences. Concentrating on individuals from the middle class socio-economic groups, Ginzberg concluded that there are three distinct phases of occupational decision making, as indicated below:

1. The period between 6 and 11 when the individual makes what can be termed a fantasy choice.
2. A second period generally coinciding with early and late adolescence, 11 to 17, during which the individual is making a tentative choice.
3. The period from 17 to early adulthood when the individual is making a realistic choice.

These periods may themselves be broken down into several stages. The outstanding conclusions from the findings appear to be that occupational choice is a developmental process; it is not a single decision, but a series of decisions made over a period of years. Each step in the process, according to Ginzberg, has a meaningful relation to those which precede and follow it. From the primary findings there follow two important generalizations: first, the process is largely irreversible, and second, it ends in compromise.<sup>1</sup>

Ginzberg's theory was criticized by Super on several counts, the main ones being that (1) it failed to consider the literature of research in this area; (2) it equated vocational choice with expressed interests which was deemed to be an inadequate explanation; (3) the distinction made between choice and adjustment was a spurious one; and (4) it failed to provide an adequate description of the dynamics of the compromise process.<sup>2</sup>

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<sup>1</sup>Eli Ginzberg, "Toward a Theory of Occupational Choice," Occupations, XXX (April, 1952), 491-94.

<sup>2</sup>Donald E. Super, "A Theory of Vocational Development," American Psychologist, VIII (May, 1953), 186-87.

Vocational development.--Roe's theory related to professional groups and Ginzberg's theory was derived from the study of the more privileged strata from the middle classes. The theory proposed by Super would seem to have wider application. Following the line of reasoning that he had developed in several articles, Super postulated that vocational choice is actually a series of choices, and that the term "vocational development" is more appropriate than "vocational selection." His theory was stated in the form of ten hypotheses:

1. People differ in their abilities, interests and personalities.
2. They are qualified, by virtue of these characteristics, each for a number of occupations.
3. Each of these occupations requires a characteristic pattern of abilities, interests, and personality traits, with tolerance wide enough, however, to allow both some variety of occupations for each individual and some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and hence their self-concepts, are generally fairly stable from late adolescence until late maturity, making choice and adjustment a continuous process.
5. This process may be summed up in a series of life stages, characterized as of growth, exploration, establishment, maintenance, and decline, and these stages may in turn be subdivided into (a) the fantasy, tentative and realistic phases of the exploratory stage, and (b) the trial and stable phases of the establishment stage.
6. The nature of the career pattern (that is, the occupational level attained and the sequences, frequency, and duration of trial and stable jobs) is determined by the individual's socio-economic level, mental ability, and personality characteristics, and by the opportunities to which he is exposed.
7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and the development of the self-concept.
8. The process of vocational development is essentially that of development and implementing a self-concept; it is a compromise process in which the self-concept is a product of the interaction of inherited attitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of the role playing meet with the approval of superiors and fellows.
9. The process of compromise between individual and social factors, between self-concept and reality, is one of role playing, whether the role is played in fantasy, in the counseling interview, or in real life activities such as school classes, clubs, part-time work, and entry jobs.

10. Work satisfactions and life satisfactions depend upon the extent to which the individual finds adequate outlets for his abilities, interests, and personality traits and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate.<sup>1</sup>

One interesting feature of Super's theory is that while each occupation requires a "characteristic pattern of abilities, interests, and personality traits," there is still sufficient tolerance for a variety of occupations for each individual and also for a variety of individuals in each occupation. This would afford a reasonable explanation for the affinity of certain occupations, such as those illustrated in Strong's vocational interest groups, and also for specialization within an occupation.

Super's theory, like all the other theories that have been proposed, has received a certain amount of criticism. For instance, Darley has stated:

This statement is an interesting descriptive listing of all the possible causal, contingent or conditional factors associated with the origin and development of interests. It would be difficult, however, to derive a specific set of hypotheses to guide research or to account for existing research findings on the basis of Super's summary.<sup>2</sup>

From a study of the literature it seems clear that a theory to account satisfactorily for all of the phenomena associated with vocational choice and success remains to be stated.

#### Research Studies

Research in the area of vocational choice is difficult to classify, as Warnath has pointed out, because of (1) the lack of clear descriptions of the manner in which subject preferences were elicited; (2) the fact that vocational choice may or may not be strictly a choice--it may represent an aspiration, a

<sup>1</sup>Ibid., pp. 189-90.

<sup>2</sup>John C. Darley and Theda Hagenah, Vocational Interest Measurement, (Minneapolis: The University of Minnesota Press, 1955), p. 159.



preference, an interest, or an actual choice; and (3) the almost inexhaustible number of discrete variables which may be related to vocational choice and reported on in journal articles.<sup>1</sup>

Approaches and methods.--Approaches to the study of personality in relation to vocational choice seem to have been almost as varied as the studies themselves. In general, though, they appear to fall into three categories: (1) those dealing with preferences of students at the elementary and high school levels; (2) those dealing both with preferences and actual choices at the college level; and (3) those dealing with adult occupational groups. In the first of these have been studies of minority groups and occupational preferences, of changes in preference with age, of family background, adjustment, of preferences in relation to tests of interests, etc. In the second group have been studies similar to those in the first group except that the selective nature of these groups means that very few will later be found in the lower occupational levels and except for the fact that the students are either closer to an actual choice or have already made the choice. In the third group, efforts have frequently been made to relate personality to success in the occupation, or, in a few instances, to eminence.

Since 1940, numerous studies have sought to relate in some way interests, values, or other personality variables, as well as the "total" personality to vocational selection. Of the interest inventories, the Strong Vocational Interest Blank and the Kuder Preference Record appear to have been the two interest inventories employed most commonly; of the structured values tests, the Allport-Vernon Study of Values has continued to be used more frequently than others in this group; and of the personality inventories, the

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<sup>1</sup>Charles W. Wernath, "Vocational Selection," Review of Educational Research, XXVI (October, 1956), 349.

Minnesota Multiphasic Personality Inventory, especially since 1950, perhaps has been the most widely used. A number of the projective techniques have also been employed, but to judge from monographic reports and journal articles, the Rorschach and the Thematic Apperception Test appear to have been the two upon which chief reliance has been placed.

Various combinations of instruments and methods in assessment programs, sometimes conducted by a team of experts from various related disciplines, are also found, particularly in such major projects as that of Ginzberg and his associates, which resulted in the publication, Occupational Choice: An Approach to a General Theory;<sup>1</sup> the extensive Veterans Administration assessment program for trainees in clinical psychology at the University of Michigan;<sup>2</sup> the Harvard Studies in Career Development;<sup>3</sup> and the program being carried on by the Institute of Personality Assessment and Research at the University of California at Berkeley.<sup>4</sup> With respect to this last project, the Institute is seeking to develop techniques for appraising an individual's potentials for success in vocational and professional training, and in the area of research it is attempting to utilize assessment procedures as research techniques in an effort to shed light on the characteristics of persons who are highly effective both in their personal lives and in their professional careers, and the manner in which such

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<sup>1</sup>Eli Ginzberg, Sol W. Ginsburg, Sidney Axelrad, and John L. Herma, Vocational Choice: An Approach to a General Theory (New York: Columbia University Press, 1951).

<sup>2</sup>E. Lowell Kelly and Donald W. Fiske, The Prediction of Performance in Clinical Psychology (Ann Arbor: University of Michigan Press, 1951).

<sup>3</sup>David V. Tiedman and Joseph G. Bryan, "Prediction of College Field of Concentration," Harvard Educational Review, XXIV (Spring, 1954), 122-39.

<sup>4</sup>Donald W. MacKennon, "Applications of Clinical Psychology to Assessment," Progress in Clinical Psychology, II, Pt. 1 (New York: Grune & Stratton, 1952), 425-29.

integrated persons are produced in our society.<sup>1</sup>

Groups studied.--Studies attempting to relate personality to vocational preference or choice have dealt with a wide variety of subjects including, as previously noted, student groups, and of persons already engaged in an occupation or profession. In the last group will be found studies of sales-people, clerical and factory workers, policemen, farmers, etc., and of such professional groups as nurses, teachers, social workers, engineers, scientists, and so on. Search of appropriate indexes to the literature of librarianship, education, and psychology, however, revealed few studies of librarians. In view of the many articles dealing with the librarian stereotype that have appeared in professional journals, especially American and British, during the last forty years or so, the dearth of objective psychological studies is somewhat surprising. If librarians were disinclined to undertake the research studies, either because of the lack of interest or the necessary psychological and research training, it would appear that the unexplored field might have tempted research workers in psychology and sociology. Since the present study is concerned with librarians, the review of the few serious reports dealing with librarians that were located will be discussed in a separate section.

#### Studies of Librarians

For purposes of review, studies dealing with the librarian are here grouped under the headings, (1) vocational interests; (2) personality traits; and (3) miscellaneous reports. Mention of the numerous articles touching on the librarian stereotype is reserved for a later section in this chapter.

Vocational interests.--Three studies of the vocational interests of librarians were located. In two of these the Strong Vocational Interest Blank

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was used, and in the third both the Strong and the Kuder Preference Record were employed.

The Strong Vocational Interest Blank, mentioned earlier as being one of the two most widely used of the vocational interest inventories, is based on the assumption that occupational groups can be differentiated through patterns of interests. The test consists of some 400 items dealing with occupations, amusements, school subjects, peculiarities of people, best and least liked activities, preferences, and estimates of abilities and personal characteristics. The test has been standardized in terms of the interests of men and women known to be successful in their own occupations, and for the occupations for men thirty-four scales have been published and for the occupations for women, twenty-four are available. Raw scores on the test are converted to standard scores and then to letter grades from A to C. According to the test authors, an A rating means that the individual has the interests of persons who are successfully engaged in the particular occupation; ratings of B+, B, and B- suggest in descending degree the probability that the person has those interests; a C rating means that the person does not have the interests of the particular group being scored.<sup>1</sup>

The occupations for men and women are grouped according to similarity of interests. At the present time, there are eleven groups of occupations for men, and ten for women.<sup>2</sup>

In 1935, a scale for women librarians was published, based upon the test scores of 425 "successful" librarians in the most common types of libraries and library work selected from a list that was supplied by the American Library

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<sup>1</sup>Edward K. Strong, Vocational Interests of Men and Women (Stanford, Calif.: Stanford University Press, 1943), pp. 67-68.

<sup>2</sup>Ibid., pp. 155-63.

Association. In an analysis of the interests of the various women's occupations centering around four major factors (Interest in male association, Interest in people, Interest in language, and Interest in science), Strong reported that women librarians (who fall in Group X, along with artists and authors) showed very low interest in male association, only social workers being lower; negative interest in people, lowest of the five groups studied; comparatively low interest in language, and even lower interest in science.<sup>1</sup>

Two studies of the vocational interest of women librarians, as they are shown by the Strong Blank, were found. The first of these was reported in Bryan's study of public librarians,<sup>2</sup> and the second was a master's thesis by Whittock dealing with sixty-five women students enrolled in 1952 at the Drexel Institute School of Library Science.<sup>3</sup> In the Bryan study, the Blank was scored on all of the twenty-four scales that are available for women's occupations, while in the Drexel study, only fifteen of the scales were used. A comparison of the ratings made by the two groups is shown in Table 1. There is considerable similarity between the two sets of ratings, it may be noted, the main differences being shown by the ratings on the scales for artist, author, office worker, and housewife. It is somewhat surprising that neither group scored higher than a B on the scale for their own profession. However, Bryan reported that her women librarians in the top and middle administrative groups scored B+ on this scale, which is more nearly similar to the score of the original criterion group.

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<sup>1</sup>Ibid., pp. 162-66.

<sup>2</sup>Alice I. Bryan, The Public Librarian (New York: Columbia University Press, 1952), pp. 122-24.

<sup>3</sup>John Melville Whittock, "A Study of Interests of the Female Students Enrolled in the School of Library Science, Drexel Institute of Technology, as Measured by the Strong Vocational Interest Blank and the Kuder Preference Record" (unpublished Master's dissertation, School of Library Science, Drexel Institute of Technology, 1952).

TABLE 1

RATINGS MADE BY 1,423 PROFESSIONAL WOMEN LIBRARIANS AND BY SIXTY-FIVE  
DREXEL INSTITUTE SCHOOL OF LIBRARY SCIENCE STUDENTS ON THE  
STRONG VOCATIONAL INTEREST BLANK FOR WOMEN

| Occupation                           | Rating                      |                              | Occupation                               | Rating         |                 |
|--------------------------------------|-----------------------------|------------------------------|--|----------------|-----------------|
|                                      | P. L.<br>Group <sup>a</sup> | Drexel<br>Group <sup>b</sup> |  | P. L.<br>Group | Drexel<br>Group |
| Librarian . . . . .                  | B                           | B                            | Mathematics-science<br>teacher . . . . . | C+             | ..              |
| Artist . . . . .                     | B                           | B-                           | Laboratory<br>technician . . . . .       | C+             | ..              |
| Author . . . . .                     | B                           | B-                           | Nurse . . . . .                          | C+             | ..              |
| Office worker . . . .                | B                           | B-                           | Dietician . . . . .                      | C+             | ..              |
| Housewife . . . . .                  | B-                          | B-                           | Life insurance<br>saleswoman . . . . .   | C              | C               |
| Elementary teacher                   | B-                          | B-                           | Psychologist . . . .                     | C              | C+              |
| Stenographer-<br>secretary . . . . . | B-                          | B-                           | Buyer . . . . .                          | C              | C               |
| Social worker . . . .                | B-                          | B-                           | Home economics<br>teacher . . . . .      | C              | ..              |
| English teacher . . .                | C+                          | C+                           | YWCA secretary . . .                     | C              | C               |
| Physician . . . . .                  | C+                          | ..                           | Physical education<br>teacher . . . . .  | C              | ..              |
| Lawyer . . . . .                     | C+                          | C+                           |  |                |                 |
| Occupational<br>therapist . . . . .  | C+                          | ..                           |  |                |                 |
| Dentist . . . . .                    | C+                          | ..                           |  |                |                 |

<sup>a</sup>Bryan, *op. cit.*, p. 123.

<sup>b</sup>Whitlock, *op. cit.*, p. 33.

Two studies of the vocational interests of men librarians on the Strong inventory were also located. At the time of the Bryan study there was no scale for men librarians; consequently, she was not able to obtain a rating of her men librarians on this scale.<sup>1</sup> In 1955, however, Taylor, with a criterion group of 250 prominent men librarians from over the country, was able to devise a scale for men librarians.<sup>2</sup> The results obtained on the Strong Blank from the two samples of men is shown in Table 2. It will be noted that Bryan obtained ratings on all of the thirty-four scales, while Taylor, whose main purpose was

<sup>1</sup>Bryan, *op. cit.*, pp. 124-27.

<sup>2</sup>Gerry M. Taylor, "Vocational Interests of Male Librarians in the United States" (unpublished Master's dissertation, Graduate School of Library Science, The University of Texas, 1955).

TABLE 2

RATINGS MADE BY FIFTY-FOUR PROFESSIONAL MEN LIBRARIANS IN THE BRYAN  
SAMPLE AND BY 250 PROFESSIONAL MEN LIBRARIANS IN THE TAYLOR  
SAMPLE ON THE STRONG VOCATIONAL INTEREST BLANK FOR MEN

| Occupation           | Rating                       |                               | Occupation          | Rating          |                  |
|----------------------|------------------------------|-------------------------------|---------------------|-----------------|------------------|
|                      | Bryan<br>Sample <sup>a</sup> | Taylor<br>Sample <sup>b</sup> |                     | Bryan<br>Sample | Taylor<br>Sample |
| Librarian . . . . .  | ..                           | A                             | Math-physical       |                 |                  |
| Musician . . . . .   | A                            | B-                            | science teacher .   | B-              | ..               |
| Author-journalist .  | B+                           | B+                            | Real estate         |                 |                  |
| Public administrator | B+                           | A                             | salesman . . . . .  | C+              | ..               |
| Advertising man . .  | B+                           | ..                            | YMCA secretary . .  | C+              | ..               |
| Printer . . . . .    | B+                           | B-                            | President, manufac- |                 |                  |
| Psychologist . . . . | B                            | ..                            | turing concern . .  | C+              | ..               |
| Lawyer . . . . .     | B                            | B                             | Office worker . . . | C+              | C+               |
| Artist . . . . .     | B                            | B-                            | Dentist . . . . .   | C+              | ..               |
| Physician . . . . .  | B                            | B-                            | Engineer . . . . .  | C+              | ..               |
| Architect . . . . .  | B                            | ..                            | Production manager  | C+              | ..               |
| Social science high  |                              |                               | Farmer . . . . .    | C+              | ..               |
| school teacher . .   | B                            | ..                            | Banker . . . . .    | C+              | ..               |
| City school          |                              |                               | YMCA physical       |                 |                  |
| superintendent . .   | B                            | ..                            | director . . . . .  | C+              | ..               |
| Chemist . . . . .    | B-                           | ..                            | Sales manager . . . | C               | ..               |
| Personnel manager .  | B-                           | B+                            | Accountant . . . .  | C               | ..               |
| Mathematician . . .  | B-                           | ..                            | Policeman . . . . . | C               | ..               |
| Minister . . . . .   | B-                           | ..                            | Carpenter . . . . . | C               | ..               |
| Certified public     |                              |                               | Forest service man  | C               | ..               |
| accountant . . . .   | B-                           | ..                            |                     |                 |                  |

<sup>a</sup>Bryan, *op. cit.*, p. 125.

<sup>b</sup>Taylor, *op. cit.*, p. 46.

to construct the scale and not to make comparisons between his group and other groups, used only eleven of the available scales including the librarian scale that he had devised.

Only fifty-four of the 163 men in the public library sample returned the form distributed by Bryan; as a result, she stated that the results may not be representative of the group, nor of public library men in general. Since Taylor's sample was very carefully chosen from most of the major types of libraries over the country and from various administrative levels, it probably

may be considered to be representative of men librarians in general. In the table it may be noted that ratings of men librarians in the two samples are different on the scales for musician, printer, artist, physician and personnel manager and that the ratings agree on the scales for author-journalist, and lawyer. Taylor found the percentage of overlap of interests of men librarians with ten other groups to be as follows: public administrator, 96.0; personnel manager, 70.2; lawyer, 58.0; author-journalist, 57.9; musician, 57.1; physician, 56.1; printer, 56.0; engineer, 31.5; artist, 30.1; and office worker, 29.0. It should be noted that in the Taylor study one of the major criteria in the selection of the sample was "success" in the profession as exemplified by the holding of an administrative position.

In summary, then, on the Strong Vocational Interest Blank, the interests of women librarians appear to be similar to those of the artist, author, and office worker; and to a much less extent like those of the housewife, elementary teacher, stenographer-secretary, and social worker. Interests of men librarians are strongly like those of the public administrator, author-journalist, personnel manager, and lawyer; and to a less extent like those of the psychologist, architect, social science high school teacher, and city school superintendent. Comparison of the ratings made by the men and the women librarians is in agreement with the statements made by Strong and others that women's vocational interests are more general, diffused, and less specific or intense, than are the vocational interests of men.<sup>1</sup>

In his study of Drexel students, Whittock also used the Kuder Preference Record which, unlike the Strong test, is scored for nine fields of interests rather than for specific occupations. The nine fields are these: mechanical, computational, scientific, persuasive, artistic, musical, social service,

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<sup>1</sup>Strong, *op. cit.*, pp. 124-30.



literary, and clerical. He reported that highest scores were made by the sixty-five students on the literary scale; above average scores on the scientific and musical scales; little below average scores on the mechanical scale; and lowest scores on the computational, social service, clerical and persuasive scales.<sup>1</sup>

✓ Personality traits.—In 1940, Milczewski for his master's thesis at the University of Illinois Library School, attempted to determine the personal characteristics of library school students that should be measured or evaluated, and to present a synthesis of current methods of analyzing and measuring qualities possessed by students that might be meaningful to librarianship.<sup>2</sup> The method used was an analysis of publications which he deemed pertinent to the personality of librarians in general and to the types of positions as found in classification plans, rating scales, published material on measurement and analysis in library schools, etc. From this material he extracted lists of personality traits considered as desirable by library administrators and library school faculty members, reconciled discrepancies, and compiled a comprehensive list he felt would be useful for library schools in planning a program of analysis and measurement. While this study has only peripheral interest here, it serves to illustrate the type of approach to the study of the personality of the librarian (except that it was more logically planned and systematically conducted) that has been employed in the profession.

Findings from a personality test used with a large group of librarians were reported by Bryan in The Public Librarian.<sup>3</sup> Since the main purpose of

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<sup>1</sup>Whitlock, op. cit., p. 27.

✓ <sup>2</sup>Marion Anthony Milczewski, "Personality Ratings of Library School Students" (unpublished Master's dissertation, University of Illinois, 1940).

<sup>3</sup>Bryan, op. cit., pp. 39-44.

this study was not personality analysis, relatively little space or attention could be devoted to the study of the personality of the subjects. Bryan used a personality inventory known as the Guilford-Martin Inventory of Factors GAMES which purports to measure the following five traits:

Factor G--General activity; tendency toward vigorous and quick muscular activity in contrast to a disinclination to such activity.

Factor A--Ascendence-submission; social leadership, or tendency to come to the fore in a social situation in contrast to taking a more passive or inconspicuous role.

Factor M--Masculinity-femininity; typically masculine emotional and temperamental make-up (emotional toughness) in contrast to feminine make-up (emotional sensitivity or refinement).

Factor I--Inferiority; feelings of inadequacy and self depreciation in contrast to self-confidence and perhaps over-evaluation of self.

Factor N--Nervousness; tendency to jumpiness; tenseness; being easily irritated or annoyed, in contrast to composure, calmness, and relaxation.

Emphasizing that the median scores on the test merely represented the central tendency in the group as a whole (which consisted of 157 men and 1,651 women professional librarians), Bryan summed up test findings by presenting the following description of the personality profile of the typical public librarian.

As compared with the average male university student, the typical male librarian is rather submissive in social situations and less likely to show qualities of leadership. He is within the normal range of masculinity in his attitudes and interests, but tends to lack confidence in himself and to feel somewhat inferior. His feelings of inferiority, however, seem not to worry him excessively, for he experiences less than average nervous tension and irritability. He shows no great drive for overt activity, but is normally sedentary for his age. On the whole, he seems to have made a reasonably good adjustment to life, and one might guess that stomach ulcers would not be his occupational disease.

The typical female librarian has a personality profile that is remarkably similar to that of her male colleague. As compared with the average university student, she is submissive in social situations, lacks self-confidence, feels inferior, has a normal amount of drive for overt activity, and feels a normal degree of nervous tension and irritability. She is normally feminine in her attitudes and interests. Like the typical male, she seems reasonably well adjusted.<sup>1</sup>

<sup>1</sup>Ibid., p. 43.

Miscellaneous.--Aside from a few scattered, brief references to librarians in a few psychology texts and journals (which for the most part dealt with vocational preferences of college freshmen and sophomores), only one item seems worth noting here. In an article entitled, "Neuroses of Librarianship," McCrum discusses possible reasons for the existence of neurosis in the profession and suggests, "as an optimist by conviction and choice," what seemed to her to be the therapy indicated.<sup>1</sup>

Pointing to the relative youth of librarianship among the professions, she reasoned that professional adolescence may represent one of the grounds for neurosis. The second possible cause she attributed to the prevailing stereotype of the librarian and of his work. "It is difficult," she stated, "even for a robust personality, to encounter too many such misconceptions of the work he has chosen to do, without showing a certain number of psychological scars."<sup>2</sup> The third reason she proposed is the conflict between the scholar as the consumer of knowledge and the librarian as the conserver of materials from which knowledge is derived. Without full understanding of library objectives and operations, the frustrated scholar comes to dislike the librarian who, to him, seems preoccupied with hoarding, not using materials. The fourth cause of possible maladjustment and frustration, she considered to be the conflict between the constant interruption to which the librarian is subject by virtue of the fact that his time must be at the disposal of the public, and the need for conserving his time for studious work if he is to be worth interrupting.

Three therapeutic measures were suggested. Pointing to the fact that the age of the universal scholar had passed but that of the integrated scholar

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<sup>1</sup>Blanche Pritchard McCrum, "Neuroses of Librarianship," Bulletin of the Medical Library Association, XLII (October, 1954), 412-20.

<sup>2</sup>Ibid., p. 415.

has just begun, she suggested that librarians begin to take more pride in their work, that as generalists in many fields and specialists in the activities unique to libraries they attempt to provide service of such quality as to cause the library to be recognized as one of the great institutions in our civilization. The second measure she proposed was that librarians publish what they learn and discover, not so much for the purpose of enhancing personal prestige and promoting advancement, as from that of genuine extension of professional knowledge. As a third measure, she proposed sympathetic support and understanding of library schools in their efforts to provide more adequate education to meet contemporary needs. Along with this, she expressed the conviction that there should be frank admission that all library work is not professional in caliber and that suitable training should therefore be provided for library technicians to release professional librarians for work that is truly professional in nature.

#### Librarian Stereotype

As a social type, the librarian might be described in terms of such ascertainable facts as sex, age, marital status, education, experience, income, etc., that is, in a statistical or quantitative fashion. For the purposes of this study, however, a description in qualitative terms is not only more meaningful, but quite as readily obtainable from the abundance of accounts that may be found in popular professional journals and similar sources. These accounts serve not only as a source of information about the stereotype but also as a means for its perpetuation.

A stereotype has been defined as a "false classificatory concept in which, as a rule, a strong emotional-feeling tone of like or dislike, approval or disapproval is attached."<sup>1</sup> The falseness of these concepts arises from the

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<sup>1</sup>Kimball Young, Social Psychology (2d ed.; New York: F. S. Crofts & Company, 1946), p. 190.

fact that the traits or qualities which are selected as categories of generality are not those which correspond to reality; yet despite their falseness, these concepts reflect the illogical nature of our basic values.<sup>1</sup> Sociologists also point out that since stereotypes provide an easily understandable and persistent picture of the world we live in, any disturbances are considered a threat and are, therefore, strongly resisted; hence the tenacity of stereotypes and the slowness with which they are subject to change.<sup>2</sup> In spite of their inaccuracy, there can be little doubt that stereotypes play a conspicuous role in determining the status and prestige of occupational groups.

To arrive at a synthesis of the traits associated with the librarian stereotype, around a hundred articles listed under the headings "Librarians," and "Librarianship" in Library Literature and other appropriate indexes were examined. Since the purpose was to obtain a description typical of the American point of view, articles published in English and other foreign journals were not considered; and, because of the repetitious nature of these articles, most of which were in library periodicals and written by librarians, tedious documentation by a frequency count or long listing appeared unnecessary. Consequently, representative extracts were culled from enough articles to show, first, that both the general public and librarians are aware of the stereotype and are agreed on the essential details of description; and secondly, by means of a chronological listing, to illustrate the persistence of the phenomenon.<sup>3</sup> Then, in order to determine whether the library school student subjects of this

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<sup>1</sup>Ibid., pp. 192, 196.

<sup>2</sup>S. Stansfeld Sargent, Social Psychology (New York: Ronald Press, 1950), p. 326; John J. Honingmann, Culture and Personality (New York: Harper & Brothers, 1954), p. 34.

<sup>3</sup>These excerpts, chronologically arranged, are found in Appendix I under the headings, "Laymen," and "Librarians."

study had preconceived ideas about the librarian as a "type," they were requested to indicate their impressions of librarians in terms of six common personality traits. Responses of the students to the question are summarized later in this section.

#### Conceptions of the Stereotype

General public.--The two groups of laymen who seem to have been most articulate in expressing their opinions of librarians appear to be public library patrons and college professors. Those in the first group have emphasized non-intellectual traits, that is, those most commonly associated with personality, while those in the second group have more often been concerned with intelligence, knowledge of books and other scholarly characteristics. Some of the articles are entirely adverse in their criticism, others decidedly favorable, while still others represent an admixture of the two. Typical unfavorable terms and phrases used were these: introverted, aloof; unimaginative, pedantic, dull, colorless, uninterested; overcautious, conservative, unadventurous, averse to change; prim, inhibited; meek, retiring, defensive, passive; possessive; worried, harried; overorderly, chained to routines; non-intellectual, lacking in scholarliness and knowledge of books. On the favorable side there were terms such as these: intelligent, intellectual, cultured; cooperative, helpful, patient, zealous; "nice," courteous, friendly, kind, sympathetic; conscientious; possessed of a sense of humor.

Librarians.--Articles by librarians were found to be more numerous than those by laymen; each critical article by a layman, or an unfavorable portrayal in fiction, over the radio or television or on the screen apparently elicited a "rash" of denials. Some of the writers seemed to be much more concerned with the unattractive personal appearance ascribed to the librarian than with the personality implications of the picture that had been drawn.

Other writers, though mainly intending to discredit the stereotype, admitted that there must be elements of truth in the picture or it would not continue to persist. Close examination of the articles revealed that, on the whole, the librarians were more openly and severely critical of themselves and of their colleagues than were their laymen critics. It may be suspected that self-deprecation is found among librarians to a greater extent than among other professional groups. The self-condemnatory nature of many of the articles was so pronounced, in fact, as to produce a tonal effect of almost masochistic quality.

In considering the representative list of unfavorable terms excerpted from articles by librarians, it should be noted that many, if not most, of these articles which were designed to deny the stereotype were simply repeating (at times with some exaggeration) the terms and phrases conveyed to them via press, radio, television, screen, etc. At the same time a rather substantial portion of the terms were found, as previously noted, in the self-critical articles. Typical of the unfavorable terms, or epithets, were these: overorderly, absorbed with routines and red tape; proprietary, boarders; passive, spineless, lacking in vigor; meek, mild, timid, shy, retiring, inarticulate; introverted, aloof, withdrawn; indecisive, unsure of role, middle-of-the-roaders, without strong convictions; unwilling to change, imitators, not innovators; frustrated, inhibited; pedestrian, lacking in some vital spark, unadventurous; bored, uninterested, dull, pedantic. Representative of the more favorable terms that were found were these: conscientious, systematic, unselfish, high ideals, sympathetic, friendly, helpful, intelligent, imaginative, unbiased, alert, dependable.

Library school students.--The 525 library school students who were the subjects of this study were asked to rate other librarians, in comparison with

with people in general, as being introspective, deferential to authority, self-confident, orderly, conscientious, innovative and creative, to a greater, same, or less degree. The following impressions of the students were found to be statistically significant and not simply the result of chance ratings. Librarians were perceived to be more introspective than other people, more deferential to authority, more orderly, and more conscientious. The 125 library school men also perceived them to be less self-confident and less innovative and creative than people in general (Table 30, Appendix III).

To summarize, it seems obvious that a stereotype of the librarian does exist and that librarians and library school students, as well as laymen, are aware of its existence and are essentially in agreement respecting the main characteristics ascribed to it. It is also obvious that the stereotype has been drawn very largely from popular images of the middle-aged woman librarian. The characteristics which describe the librarian stereotype seem to fall in the following main categories:

1. Orderliness, meticulousness, acquisitiveness  
Preoccupation with rules, routines, records; possessive and proprietary.
2. Conformity, conservatism  
Conscientiousness, traditional and conventional attitudes and behavior; aversion to change; neutral, without strong convictions; cautiousness; dependability; lack of imagination.
3. Passivity, submissiveness  
Non-argumentative nature; sacrificing and uncomplaining; mildness; lacking in vigor and qualities of leadership; not adventurous.
4. Introspection; non-social attitudes and behavior  
Introverted nature; detached, aloof; impersonal; "bookish."
5. Anxiousness; lack of self-confidence  
Timidity, shyness, inclination toward worry; lack of decisiveness; defensive attitudes; inhibited; irritable.



## Possible Consequences

In 1950, a sociologist observed that librarianship is a "new and self-conscious occupation."<sup>1</sup> The number and the tone of the articles written by librarians that have reference to themselves and their colleagues and which patently are concerned with the impressions made on other people testify to self-consciousness in the profession, aside from other evidence that is available. The self-critical and defensive tone of the articles is symptomatic of doubt, apprehension and anxiety over status and prestige. Anxiety associated with acquiring and maintaining status has been referred to by Davis as "socialized anxiety,"<sup>2</sup> and by Levin as "status anxiety."<sup>3</sup> While both writers were thinking about the anxieties involved in occupational choice, it would seem that the terms are not inappropriately used in connection with the anxiety that prevails in the library profession, which may be due in part, at least, to the popular conception or misconception of the librarian and his work. As McCrum has put it, a certain number of "psychological scars" are bound to result from long-continued misconceptions by others of one's profession.<sup>4</sup> Continuing widespread apprehension in an occupation cannot fail to have an unfavorable effect on the morale and general welfare of the members of the group.

Associated with the above is the possible effect that the stereotype

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<sup>1</sup>Everett Hughes, "Discussion" [of Alice Bryan's The Public Librarian] Chicago, University, Graduate Library School, A Forum on the Public Library Inquiry, ed. Lester Asheim (Chicago: University of Chicago Press, 1950), p. 107.

<sup>2</sup>Allison Davis, "Socialization and Adolescent Personality," Adolescence, Forty-Third Yearbook, Part I (Chicago: National Society for the Study of Education, 1944), pp. 198-216.

<sup>3</sup>Max M. Levin, "Status Anxiety and Occupational Choice," Educational and Psychological Measurement, IX (Spring, 1949), 29-37.

<sup>4</sup>Supra, pp. 17-18.

may have on recruiting to the profession, even though there is some evidence to indicate that librarianship is not without a certain amount of prestige among students. For instance, Frumkin in a poll of 100 liberal arts students found that of the predominantly women's occupations with less than 100,000 women workers in them, only librarians and dieticians were given excellent standings.<sup>1</sup> Form, in an informal survey of college students and townspeople, reported that librarians were respected, even if they were not liked.<sup>2</sup> A similar finding with high school students was reported by McCann.<sup>3</sup> It is likely that the respect accorded librarians, however, is mainly due to the intellectual, or background factors, associated with librarianship, and the dislike to personality factors. However this may be, the fact remains that the number of recruits each year continues to be entirely inadequate to meet demands; and though continuing low enrollments in library schools are doubtless due to a number of factors, it is not unreasonable to assume that the unattractive popular images of the librarian may be partly responsible for the situation.

#### Relationship to the Study

The connection between the stereotype of the librarian and the present study would seem to be clear. The stereotype has existed for a long time and there is no appreciable evidence that the picture has changed materially during that period. It is logical to believe that the stereotype has had and will

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<sup>1</sup>Robert M. Frumkin, "The Prestige and Status of Women's Occupations: A Liberal Arts College Student Evaluation," Alpha Kappa Delta, XXVI (Spring, 1956), 34-37.

<sup>2</sup>William H. Form, "Popular Images of Librarians," Library Journal, LXXII (June 15, 1946), 852-53.

<sup>3</sup>Eleanor McCann, "It Is Really More or Less a Gift," Catholic Library World, XXVI (May, 1955), 272-73.

continue to have a negative and harmful effect both on the general well-being of the profession and on recruitment. To-date, however, there has been no systematic, objective study which sought to test the validity of the stereotype, to try to determine the extent of agreement between personality characteristics which describe the stereotype and those which describe the modal librarian who, in this study, is represented by the library school student, or prospective librarian. It is true that the stereotype has been drawn from the practicing librarian, not from the prospective librarian. At the same time, a start will have been made toward getting at the facts in the case if the extent of agreement between the personality description of the prospective librarian and that of the stereotype can be learned.

## CHAPTER II

### STATEMENT OF THE PROBLEM

#### The General Problem

The choice of an occupation may have various relationships to personality structure: (1) the occupation may exercise a selective influence in that persons with certain personality characteristics may typically be attracted to it; (2) the occupation may actually affect personality structure in that it fosters certain personality characteristics and retards others; and (3) the occupation may not only "select" its members, but also affect the personality structure of those engaged in it. This investigation centers upon the first of the relationships mentioned above, i.e., it represents an attempt to determine the extent to which the library profession "selects" members with particular personality traits.

#### Origin of the Problem

Dearth of experimental literature.--There have been a great many popular, often emotionally-charged articles dealing with the personality of the librarian which, for the most part, appear to be aimed at discrediting the librarian stereotype. Except for the few objective studies noted in Chapter I, however, very little in the way of scientific investigation of the personality structure of the librarian has been reported in the literature. Despite this lack, there is ample evidence that the importance of the problem is recognized in the profession; the numerous trait lists appearing from time to time in textbooks and elsewhere, rating forms used in many libraries, mention in studies of

library education and of particular library schools, etc., all bear witness to this fact. As examples of investigations dealing with particular library schools may be mentioned the studies of Wilson, Danton and Merritt, and Wiseblood.

In his study of the preprofessional backgrounds of students at the University of Illinois Library School, Wilson in 1937 concluded:

... if the School desires to admit only those students who have the capacity to profit most highly by the course of instruction . . . it appears that attention must be directed toward obtaining additional information in regard to aptitudes, and personality traits and other non-intellectual factors which enter into scholastic success in library school and in success in the profession after leaving the School.<sup>1</sup>

Sixteen years later, Danton and Merritt in their study of the University of California School of Librarianship graduates reported something of the same idea in a concluding statement, which reads:

Success having been found to lie elsewhere than in youth and good scholarship, an effort should be made to discover wherein it does lie; perhaps it is in such nebulous areas as interest, personality, or motivation, none of which has been investigated in this study.<sup>2</sup>

In an attempt to assess the predictive value of an achievement test for success in library school, Wiseblood in 1953 came to a somewhat similar conclusion:

The student not only enters school with a characteristic intellectual capacity, which is in part measurable by standardized tests, but also with a unique set of values and attitudes which predispose him to respond in various ways to his academic environment. It is the student's value-attitudinal system which to a large extent determines his adjustment and motivation upon which scholastic success greatly depends. It is this value-attitudinal system of the student which is neither identified nor measured

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<sup>1</sup>Eugene Holt Wilson, "Pre-Professional Background of Students in a Library School" (abstract of unpublished Ph.D. dissertation, University of Illinois, 1937), pp. 9-10.

<sup>2</sup>J. Periam Danton and LeRoy C. Merritt, Characteristics of the Graduates of the University of California School of Librarianship ("Occasional Papers," No. 22; Urbana, Illinois: Library School, University of Illinois, 1951), p. 16.

by the conventional, standardized objective examinations and records of past academic achievement. . . . The student's conception of himself, his attitudes . . . his feelings, all of which influence his subsequent adjustment, motivation, drive and persistence in his academic study, must be incorporated in the predicting equation if forecasting efficiency is to be increased.<sup>1</sup>

Need for the study.--A desirable personality structure in the librarian apparently has been taken for granted for a long time, yet there is little precise information as to what the term, "desirable," means; it is not known what personality traits should be sought in recruiting for the profession, nor is it known with any degree of exactness what traits are most desirable for particular types of library work. From a broader point of view, whether librarians are what they are because of the profession, or whether the profession is what it is today because of those who are engaged in it, can only be conjectured.

Whatever the reasons for the lack of knowledge about the personality of the librarian may be, it would appear obvious that a beginning should be made in providing the needed information. A logical starting point, in the opinion of the investigator, was to attempt to identify and describe the personality traits that characterize the library school student. Such a study should provide at least some information as to whether personality structure exercises a selective influence in recruitment to the profession.

#### Specific Hypotheses

To direct and systematize the investigation, it was necessary to break down the general problem into more specific parts, or questions to be answered. States in the form of hypotheses, the eight questions for which answers were sought in the study are those given below.

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<sup>1</sup>Edward Wiseblood, "The Cooperative General Culture Test as a Predictor of Success in The University of Texas Graduate School of Library Science" (unpublished Master's dissertation, Graduate School of Library Science, The University of Texas, 1953), pp. 61-62.

Hypothesis 1.--The librarian is more orderly, meticulous, neat, and compulsive in behavior than people in general.

Hypothesis 2.--The librarian is more conscientious, scrupulous, and conforming, and less innovative and creative than people in general.

Hypothesis 3.--The librarian is more deferential, submissive, and respectful of authority than people in general.

Hypothesis 4.--The librarian is more self-contained, self-sufficient, preoccupied with subjective feelings, introspective, introverted, and non-social than people in general.

Hypothesis 5.--The librarian is more anxious and less self-confident than people in general.

Hypothesis 6.--The librarian is more neurotic than people in general.

Hypothesis 7.--The male librarian is more feminine in his interests than men in general.

Hypothesis 8.--The value system of the librarian is characterized by over-emphasis on the theoretical and the aesthetic values, and by under-emphasis on the economic and political values.

#### Limitations

The conduct and the findings of the investigation have been conditioned and limited by the factors described in the paragraphs that follow.

Methodology and instruments used.--Insofar as could be determined, the present study is the first comprehensive one of its kind. Because of this fact it is necessarily exploratory in nature and, in consequence, has the limitations characterizing that type of investigation. Because of the large number of subjects and their dispersion in seventeen library schools, it was necessary to make use of structured inventories as test instruments which are known to have limitations when used in personality study. The findings, therefore, can be

valid only to the extent that the measuring instruments that were used have validity.

The population studied.--Though the term, "librarian," is used throughout the study, it refers only to the 525 men and women enrolled in 1947-1948 in seventeen library schools accredited by the American Library Association at that time, and to the twenty men enrolled during the years, 1955-1957, in the library school at The University of Texas, who were the subjects that were studied. Findings, then, must be regarded in the light of this particular group.

Comparisons and evaluations.--This study was concerned with the librarian as a general type. No effort was made to distinguish in terms of personality variables the "successful" from the "unsuccessful," to differentiate among age groups represented in the sample, among groups indicating preferences for particular types of work, or between those with and those without previous library experience. Further, no attempt was made to identify and describe a "best" personality type--best either from the proximate viewpoint of suitability for library work, or from the ultimate point of view for the good of the profession as a whole. Finally, no comparisons were attempted between library school students and students preparing for other professions, such as law, medicine, teaching, or social service. These limitations were established, not from any lack of interest in the problems involved or failure to recognize their importance, but solely to restrict the investigation to a manageable size and to maintain focus on the central objective.

Qualifications of the investigator.--An inescapable limitation in any research study is implicit in the qualifications of the investigator, who in this instance is a librarian, not a psychologist. Long experience as a library school teacher and administrator perhaps provided him with insight into and



understanding of some of the problems involved that the psychologist probably would not have, yet this could not fully compensate, of course, for the lack of extensive training in psychology.

#### Definitions

For the purposes of the investigator, the definitions of the more general terms employed are those given below. In other instances, where terms were to be used infrequently, the definition has been located in the discussion where the term was introduced.

Anxiety.--A condition characterized by subjective feelings of tension, timidity, nervousness, apprehension and fear.

Anxiety neurosis.--"Broad, general irritability, chronic feelings of anxiety expectation; may or may not be accompanied by an incapacitating attack of acute anxiety and fear."<sup>1</sup>

Anxiety, Neurotic.--"On the assumption that a certain amount of anxiety is normal or even desirable, anxiety becomes neurotic when it is accompanied by the symptoms of anxiety neurosis."<sup>2</sup>

Attitude.--"A readiness to react favorably or unfavorably, to accept or reject; characterized by positive or negative affect."<sup>3</sup>

Creativity.--The "manifest ability to produce and develop ideas."<sup>4</sup>

Defense mechanism.--The process or method by which individuals adapt to frustrating circumstances. According to psychologists, defense mechanisms are both natural and desirable, "essentially intelligent and typically human."<sup>5</sup>

<sup>1</sup>Joseph W. Wulfek and Edward M. Bennett, The Language of Dynamic Psychology (New York: McGraw-Hill Book Company, 1954), p. 20.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., p. 23.

<sup>4</sup>Daniel Horn, "A Study of Personality Syndromes," Character and Personality, XII (June, 1944), 261.

<sup>5</sup>Percival M. Symonds, The Dynamics of Human Adjustment (New York: D Appleton-Century Company, 1946), p. 169.

Extraversion (or Extraversion).--"An attitude or type of personality in which one's interests are directed mainly toward external nature and social phenomena, rather than toward himself and his own experiences."<sup>1</sup>

Innovation.--Receptive attitude toward change; sympathy for novel, unusual, or "big" ideas.

Interests.--Expressed preferences for particular concepts or activities. In this study, interests are taken to mean those that are measured by the Interest Scale of the Minnesota Multiphasic Personality Inventory and by the Terman-Miles Attitude-Interest Analysis Test.

Introspection.--"Observation by an individual of his own mental processes; systematic self-observation."<sup>2</sup>

Introversion.--"Term employed by Jung for the direction of interests inward, rather than outwards to the external world of men and things; a type of temperament or personality, characteristic of individuals whose interest is in their own thoughts and feelings, rather than in the world around them."<sup>3</sup>

Librarian.--The modal student in the group of library school student subjects of this study.

Neurotic behavior.--"Action which attempts to defend the personality against threats and conflicts, especially within the unconscious."<sup>4</sup>

Personality.--"The dynamic organization within the individual of those psycho-physical systems which determine his unique adjustments to his environment."<sup>5</sup>

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<sup>1</sup>Howard C. Warren (ed.), A Dictionary of Psychology (New York: Houghton Mifflin Company, 1934), p. 100.

<sup>2</sup>James Dreever, A Dictionary of Psychology (Baltimore: Penguin Books, Inc., 1952), p. 142.

<sup>3</sup>*Ibid.*

<sup>4</sup>Wulfeck and Bennett, *op. cit.*, p. 74.

<sup>5</sup>Gordon W. Allport, Personality, A Psychological Interpretation (New York: Henry Holt & Co., 1937), p. 48.

Rigidity.--"Inflexible behavior. Although many forms of behavior are available for use, some individuals tend to use the same forms of behavior under all sorts of conditions; this indicates rigidity. People who are overly aggressive, overly passive, or overly withdrawing may fear acting in any other way."<sup>1</sup>

Stereotype.--"A false classificatory concept in which, as a rule, a strong emotional-feeling tone of like or dislike, approval or disapproval is attached."<sup>2</sup>

Trait.--"A highly stable personality characteristic developed from the combined influence of the individual's past experience and his physical characteristics. Some individuals seem to be constantly acting aggressively, passively, friendly or cautiously, etc. These fairly constant modes of action are often called personality traits."<sup>3</sup> The definition of particular traits accepted in this study is the definition employed by the authors of the tests that were used.

Values.--Attitudes held toward certain entities, activities, or concepts, as shown by responses to questions in the Allport-Vernon Study of Values.

Value system.--"The structure or organization into hierarchies of things that have personal worth as sources of pleasure, satisfaction and gratification to the individual."<sup>4</sup>

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<sup>1</sup>Wulfeck and Bennett, op. cit., pp. 93-94.

<sup>2</sup>Young, op. cit., p. 190.

<sup>3</sup>Wulfeck and Bennett, op. cit., p. 108.

<sup>4</sup>Ibid., p. 110.

## CHAPTER III

### PROCEDURE AND SOURCES OF DATA

#### Introduction

The purpose of this chapter is to present a summary of the procedure employed and to provide a description of the testing instruments used and an account of the groups that were studied. Where more useful or appropriate, certain descriptive and procedural details have been introduced elsewhere in the report.

#### General Procedure

##### Selection of Testing Instruments

Since the tests had to be taken by a large number of students in several library schools and administered under varying conditions, it was necessary to select ones that could be easily administered and easily scored. Because of the differences in the amount of time allowed for testing by the schools, the tests also had to be varied in the length of time needed for their completion. As a result of these factors, the instruments finally selected were paper-and-pencil tests that were practically self-administering and that, with two exceptions, could be quickly completed by the subjects. The tests were inventories of personality traits, of interests, and of value systems. In addition, each student completed a three-page questionnaire.

The questionnaire.--The library school students were requested to complete a questionnaire designed to supply factual information about age, sex,

marital status, educational background, etc., and some information of a more subjective nature relating to vocational choice, to self-perceptions, and to impressions of librarians in general. The data from the first category are summarized in tabular form in a later section of the present chapter. Information from the second category that proved appropriate for use in testing the hypotheses is presented in Chapters IV and V; some of the more interesting information not employed for the above purpose is presented in Tables 27-32, Appendix III.

Personality inventories.—Of the tests employed, the two upon which chief reliance has been placed in the study are the Minnesota Multiphasic Personality Inventory,<sup>1</sup> commonly referred to as the "MMPI," and the Allport-Vernon Study of Values.<sup>2</sup> The three other tests used were the Allport-Allport A-S Reaction Study,<sup>3</sup> the Terman-Miles Attitude-Interest Analysis Test,<sup>4</sup> and selected scales of the Bernreuter Personality Inventory.<sup>5</sup> A description of each of the instruments is given in a later section of the present chapter.

#### Securing Cooperation<sup>6</sup>

Initial inquiry.—In the spring of 1947 when this investigation was begun, thirty-six schools were listed as accredited under the "Minimum Stand-

<sup>1</sup>Starke E. Hathaway and J. Charnley McKinley, The Minnesota Multiphasic Personality Inventory (New York: The Psychological Corporation, 1943).

<sup>2</sup>Gordon W. Allport and Philip E. Vernon, A Study of Values (New York: Houghton-Mifflin Company, 1928).

<sup>3</sup>Gordon W. Allport and Floyd H. Allport, A-S Reaction Study (New York: Houghton-Mifflin Company, 1931).

<sup>4</sup>Lewis M. Terman and Catherine Cox Miles, Attitude-Interest Analysis Test (New York: McGraw-Hill Book Company, Inc., 1936).

<sup>5</sup>Robert G. Bernreuter, The Personality Inventory (Stanford University, Calif.: Stanford University Press, 1935).

<sup>6</sup>The staffs of two public libraries also served as test subjects. For an explanation of why the test results were not included in the report, see Appendix IV.

ards for Library Schools" adopted by the Council of the American Library Association in 1933. From the thirty-six schools a selection of twenty-four representative schools was made; omitted were two Canadian schools, five Catholic schools, one school for Negroes, and four Type III schools<sup>1</sup> which, for the most part, had low enrollments at the time. Following the selection, the deans and directors of the twenty-four were sent a preliminary inquiry explaining the objective and nature of the proposed study and inviting their cooperation and the participation of their students in the testing program.<sup>2</sup>

Results.--Two of the twenty-four deans declined to cooperate because of the brief period of time left in the spring semester, and a third because of the pressure of work. Three others expressed willingness to cooperate, but either because of very low enrollments or lack of interest on the part of students, they thought that the results would not be worth the time and expense involved. A fourth dean was interested and agreed that his students would take the tests, but when the students returned from field work they felt they were too pressed for time to participate in the testing. Students from the remaining seventeen schools, then, constituted the original test group. One other school, that at the University of Texas which was not in existence at the inception of the study, was later brought in to furnish twenty men students needed for one of the tests. In Table 3, p. 54, is shown a list of cooperating schools and the number of students from each.

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<sup>1</sup>Under the "Minimum Requirements for Library Schools," adopted by the American Library Association in 1933 and in force through 1948, the accredited schools were classified as Type I, II, or III. Type III schools offered an undergraduate major, usually in the senior year. Type II schools required college graduation for admission and commonly awarded a fifth-year bachelor's degree; Type I schools had the same requirement and awarded the same degree, but in addition offered work leading to a sixth-year master's, or in one case to the doctor's degree. Since 1951, under the new standards, the fifth year master's degree is the first professional degree most commonly granted.

<sup>2</sup>Copy of the letter is contained in Appendix II.

### Testing Conditions and Arrangements

Nature of participation.--In the preliminary letter to the deans and directors, emphasis was placed on securing the voluntary participation of students in the testing.<sup>1</sup> It was also requested that students be assured that their status in the school could in no way be affected by test results and that there would be no identification of individuals. In an effort to insure anonymity, students were asked not to write their names on test materials, to enclose the questionnaire and tests when completed in a large envelope that was provided, and to seal the envelope before turning the material in to the person administering the tests.

Fifteen of the seventeen deans and directors later reported that testing was on a completely voluntary basis; two stated that students were required to take the tests.

Testing periods.--The time made available by the schools for the testing varied from one hour to an entire day. For the most part, however, the schools allowed either a two-hour or a four-hour period in one or two sessions. In every instance, the minimum time that was allowed permitted students to complete the questionnaire and to take at least one of the tests.

Administering the tests.--In most instances the tests were administered by the dean, the director, or a designated faculty member. In a few cases, the assistance of a member of the psychology department or a member of the counseling office of the college or university was secured. The tests were generally scheduled, but in three cases students were permitted to pick up materials in the school office and upon completion to return them there.

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<sup>1</sup>See letter, Appendix II.

### Securing Normative Data

Difficulties.--At the outset, little difficulty was anticipated in securing data for comparison with those obtained for the experimental group, but systematic search of the literature failed to produce much that could be used. Most of the test groups reported on in the literature were either too young or their class rank too low to permit comparison with a graduate group. Along with this, investigators often failed to report on mean ages, educational levels, and such necessary measures as the standard deviation along with mean scores. Later, when more attention was being given to graduate and professional groups by research workers, new tests had come into use, thus precluding comparison of their results with those obtained with the tests used in the study.

Decisions.--Largely because of the difficulty of securing normative data, the decision was made to limit comparisons to general college populations as nearly similar as possible to the experimental group with respect to sex, age, and educational level. Another factor was also considered in making this decision. Comparisons between the experimental group and a number of different occupational groups on a number of measures, each having several scales, could have resulted in spuriously "significant" differences, that is, differences due to chance alone.

### Organization and Analysis of Data

Organization.--The test answer sheets for two of the inventories, the Minnesota Multiphasic Personality Inventory and the Bernreuter, were machine scored; the remaining three tests, the A-S Reaction Study, the Attitude-Interest Analysis Test, and the Study of Values, were hand scored with the aid of scoring forms provided by the test publishers. In the case of the MMPI, the raw scores



for twelve of the seventeen scales were next converted to "T" or "standard" scores to make them comparable with the scores of other groups reported in the literature where standard scores are most commonly used. Conversion of the three remaining scales of the MMPI, however, was not necessary since raw scores on these scales were known for the group with which comparison was being made. It should be noted that the significance of differences between scores is not affected by whether the means are reported in terms of raw or standard scores. Conversion of scores on the remaining tests to another form was not indicated.

Following the preparation of a coding plan for the questionnaires and the test scores, all data were punched on IBM cards, four cards being used for each subject to permit greater flexibility in running across tabulations. With the use of an IBM sorting machine, the tabulations that appeared to be indicated were run and the results were then recorded in tables--these being, for the most part, designed for use in describing the experimental group.

Analysis.--Simple percentages were computed for data used in tables involving such factors as age, sex, education, etc., of the experimental group. For test data, means and standard deviations were computed.

The next operation involved was testing the significance of differences between mean scores of the experimental and the normative groups on the various tests that had been given. Here, the measure employed was what is known as the "t-test," which is used in determining whether two samples are taken from the same population. If, for example, two groups of persons were given a psychological test, the results of the test might differ for the two groups. The question involved is whether the assumption can be made that the differences found represent true differences, that is, that they are drawn from different populations, or chance differences that could result from testing two groups drawn from the same population. The t-test furnishes an estimate of the prob-

ability that such differences are a result of chance. If, for example, as a result of a  $t$ -test, with an  $N$  of 30, a  $t$  of 2.40 is found, it may be determined from statistical tables that this difference could occur by chance between one and two times in 100 cases. (  $.02p < .01$ --where  $p$  = the probability.) The formula used to derive the value of  $t$  is the one given below:<sup>1</sup>

$$t = \frac{M_1 - M_2}{d_M} \quad \text{or} \quad \frac{\text{Difference between means}}{\text{Standard error of the difference}}$$

In dealing with certain questionnaire item responses, as for example, Question 7 where students were asked to state opinions as to whether they considered themselves and other librarians to be introspective, orderly, conscientious, etc., to a greater; the same, or a less degree than people in general, a slightly different procedure was employed. Here the problem was to determine the significance of the difference between the observed and the expected frequency of responses in each of the categories. On the basis of chance, a third of the total responses would be expected to fall in each of the three categories, i.e., "greater," "same," and "less." It had been hypothesized, however, that more than a third of the respondents would select the "greater" category in the case of some of the traits, and more than a third would select the "less" category in the case of other traits. The question then to be resolved had to do with the reliability of the hypothesis, or in other words, the probability that the division suggested by the hypothesis was a reliable division.

To answer this question, a measure known as Chi-square ( $X^2$ ) was employed to determine the probability levels. It should be noted that the types of divisions, involving degrees of freedom ( $df$ ), represent an important feature of  $X^2$ . If, for example,  $X^2$  were found to be 6.04 and there were four degrees

<sup>1</sup>Joy P. Guilford, Fundamental Statistics in Psychology and Education (2d. ed.; New York: McGraw-Hill Book Company, 1950), p. 214.

of freedom, by reference to a Chi-square table, it would be found that such a Chi-square will occur only in about one time in 100 (.01) by chance. It may then be assumed that the value thus found has statistical significance.

In connection with responses concerned with the trait introspection, for instance, it was hypothesized that more than a third of the respondents would select the "greater" category and this proved to be the case for both men and women.<sup>1</sup> In the case of the men,  $\chi^2$  was found to be 31.30 and  $p < .001$ ; for women,  $\chi^2$  was 69 and  $p < .001$ . In both cases, then, the difference between the expected frequency and the observed frequency could be due to chance only about once in 1000 cases and it was, therefore, assumed to be a true difference. The formula used in deriving  $\chi^2$  was the following:

$$\chi^2 = \frac{(fo - fe)^2}{fe} \quad \text{or} \quad \frac{(\text{observed frequency} - \text{expected frequency})^2}{\text{expected frequency}}$$

After the significance of differences had been determined, various appropriate measures, previously selected, were used in testing the several hypotheses that had been formulated. The measures, which included questionnaire responses as well as tests, varied in number from one to six for each hypothesis.

Test data for men and women in the experimental group were analyzed separately. The first reason for this procedure was that normative data were available for men and women as separate groups, but not for them as one group. In the second place, a number of studies employing the same tests as those used in the study had clearly demonstrated characteristic trends and differences for

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<sup>1</sup>It should be noted that in dealing with responses on this particular question, the "same" category was divided equally between the "greater" and the "less" categories, thereby giving the most conservative estimate of  $\chi^2$ .

<sup>2</sup>Guilford, *op. cit.*, p. 276.

the sexes; but even had it been possible to combine the two groups for purposes of analysis, the preponderance of women in the experimental group (400 to 125) would have had too great an influence on measures of central tendency. Separate analysis of data, however, did not preclude comparison of the men and the women throughout the study.

### Test Instruments

#### The Questionnaire

Factual data.--As previously noted, the information obtained from the questionnaire that was completed by each of the library school students was of two kinds: factual and impressionistic. The first furnished information about age, sex, marital status, educational background, father's occupation, work preference by type of library and by type of work, degrees being sought, etc. Most of this information has been deemed pertinent in the description of the experimental group and it is, therefore, presented with accompanying tables later in this chapter.

Impressionistic data.--The second type of information derived from the questionnaire consisted of opinions, impressions, and perceptions. While much of this information was of interest, only a small part proved to be applicable to the testing of the hypotheses. The unused portion, consisting of reasons for the choice of library work, the rating of a list of twelve personality traits according to their usefulness for the practicing librarian, and opinions of students relative to their possession of a temperament they felt was suited to library work, is given in tabular form in Appendix III.

#### Personality Inventories

The following section contains descriptive information about the five personality inventories used in the study. Three of the five (the MMPI, the

Study of Values, and the Bernreuter) consist of several scales or subtests. As was mentioned earlier not all of the subtests were found to be applicable in testing the hypotheses; for this reason, only the scales that were actually used are described below.

The Minnesota Multiphasic Personality Inventory.--According to the test authors, the MMPI is a "psychometric instrument designed ultimately to provide in a single test, scores on all of the important phases of personality."<sup>1</sup> The term "ultimately" doubtless refers not only to progress expected in the further validation and better understanding of the scales with more widespread use of the test, but also to the fact that since the original scales were constructed, a number of new scales have become available and others are in the process of being devised. This particular test was selected because experts in the field of personality testing appear to consider it the best of the non-projective, or "structured," paper-and-pencil inventories.<sup>2</sup> The group form of the test used in the study consists of 565 statements to be answered by "True," or "False," and normally requires about fifty minutes for completion by the average subject. The MMPI is distinguished from other personality inventories, first, by the essentially psychiatric nature of its scales or subtests; secondly, by the fact that the scales were empirically validated; and in the third place, by the fact that the test has built-in validity scales (L, F, and K), which are described in a following section.

In addition to the three validity scales, nine clinical scales have

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<sup>1</sup>S. R. Hatheway and J. C. McKinley, Minnesota Multiphasic Personality Inventory, Manual (Rev. ed.; New York: The Psychological Corporation, 1951), p. 5.

<sup>2</sup>Albert Ellis, "The Validity of Personality Questionnaires," Psychological Bulletin, XLIII (September, 1946), 385-440; also reviews in the Third Mental Measurements Yearbook, ed. Oscar K. Buros (New Brunswick, N.J.: Rutgers University Press, 1949), pp. 104-110.

been most commonly used. Three of the clinical scales were not used in testing the hypotheses and consequently were omitted from the description of the scales that follow; the three omitted scales are: Hypochondriasis (Hs), Paranoia (Pa); and Schizophrenia (Sc). Test results on the three, however, are contained in Tables 34-41 in Appendix III.

Five additional scales, which have been devised during the last few years, were also used. The five are these: Social Introversion (Si);<sup>1</sup> Dominance (Do);<sup>2</sup> Responsibility (Re);<sup>3</sup> Neuroticism (Ne);<sup>4</sup> and the Anxiety Index.<sup>5</sup>

Originally, the test was constructed for use with hospitalized patients, but since then it has been extensively used by research workers with "normal" populations, especially college groups; in consequence, the various scales have tended to assume somewhat different meanings from those originally used to describe them. The scale designations and the implications of elevated scores for normal subjects as employed in this study are given below. The descriptions accompanying the scales have been quoted or paraphrased from the

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<sup>1</sup>L. E. Drake, "Scale O (Social Introversion)," Basic Readings on the MMPI in Psychology and Medicine, ed. George Schlager Welsh and W. Grant Dahlstrom (Minneapolis: University of Minnesota Press, 1956), pp. 181-83; Lewis E. Drake, "A Social I.E. Scale for the MMPI," Journal of Applied Psychology, XXX (February, 1946), 51-54.

<sup>2</sup>Harrison G. Gough, Herbert McCloskey, Paul E. Meehl, "A Personality Scale for Dominance," Journal of Abnormal and Social Psychology, XLVI (July, 1951), 360-66.

<sup>3</sup>Harrison G. Gough, Herbert McCloskey, and Paul E. Meehl, "A Personality Scale for Social Responsibility," Journal of Abnormal and Social Psychology, XLVII (January, 1952), 73-80.

<sup>4</sup>John F. Winne, "A Scale of Neuroticism: An Adaptation of the Minnesota Multiphasic Inventory," Journal of Clinical Psychology, VII (April, 1951), 117-22.

<sup>5</sup>George S. Welsh, "An Anxiety Index and Internationalization Ratio for the MMPI," Journal of Consulting Psychology, XVI (February, 1952), 65-72.

Manual,<sup>1</sup> from Masserman,<sup>2</sup> from dissertations by Goulding<sup>3</sup> and Sternberg,<sup>4</sup> or in the case of the "new" scales from the sources just cited.

Psychiatric Designation

Implications of Elevated Scores for "Normals"

The Validity Scales

Lie score (L)

A measure of the degree to which the subject may be attempting to falsify his scores by always choosing the response that places him in the most acceptable light socially.

Validity score (F)

Designed to serve as a check on the validity of the entire record.

K score (K)

Essentially, a correction factor to sharpen the discriminatory power of the clinical variables measured by the Inventory. A high K score represents defensiveness against psychological weaknesses; a low score tends to indicate that the person is, if anything, overly candid and self-critical.

The Clinical Scales

Depression (D)

A high score denotes poor morale of the emotional type with a feeling of uselessness and inability to assume a normal optimism with regard to the future. A high score further suggests a characteristic personality background in that the person who reacts to stress with depression is characterized by lack of self-confidence, tendency to worry, narrowness of interests, and introversion.

<sup>1</sup>Hathaway and McKinley, Minnesota Multiphasic Personality Inventory, Manual, pp. 18-22.

<sup>2</sup>Jules H. Masserman, The Practice of Dynamic Psychiatry (Philadelphia: W. B. Saunders Company, 1955), pp. 78-79.

<sup>3</sup>Charles Wheelock Goulding, "A Study of the Distribution of Minnesota Multiphasic Inventory Profiles in a College Population" (unpublished Master's dissertation, University of Minnesota, 1951), p. 29.

<sup>4</sup>Carl Sternberg, "The Relation of Interests, Values and Personality to the Major Field of Study in College" (unpublished Ph.D. dissertation, New York University, 1953), p. 147.

**Psychiatric Designation****Implications of Elevated Scores for "Normals"****Hysteria (Hy)**

High scores are indicative of naivete, self-centeredness, intolerance of ambivalences in own feelings, conformity, infantilism in emotional needs, dependence on others, need for social acceptance; lack of self-confidence; at the same time, high scorers may be enthusiastic, uninhibited, and outgoing in their interpersonal contacts. Low scorers are apt to be misanthropic and asocial.

**Psychopathic deviate (Pd)**

High scores are indicative of self-centeredness, aggressiveness, poor incorporation of social and ethical standards, disregard for rules, regulations, the rights and feelings of others; high scorers, however, often are likable and intelligent. Low scores are indicative of conventionalism, rigidity, and overconcern with social status.

**Interest (Mr)**

High scores signify interests in the direction of the opposite sex; in the case of males, liking for "feminine" activities and dislike for "masculine," feminine sensitivity to other people and their needs; in the case of females, the opposite of the above. Male high scorers tend to be passive, imaginative, and sensitive; lower scorers are easy-going, adventurous, and given to defensive masculinity. Female high scorers are confident, aggressive, scientific and dominating; lower scorers are more likely to be submissive, yielding, constricted and fault-finding.

**Psychasternia (Pt)**

High scores denote over-anxiety and tension; compulsivity in behavior; difficulties in making decisions; undue concern over trifling matters; lack of self-confidence; mild depression; inability to concentrate. Low scores are indicative of subjects who are usually relaxed, easy-going, and confident.

**Hypomania (Ma)**

High scorers are characterized by over-production in thought and action, sometimes by tenseness, emotional instability, amorality, and a tendency toward disregard of social conventions, but warm, expansive, and outgoing. Low scorers tend to be listless, apathetic, and lacking in drive and ambition.

**Additional Scales****Social Introversion (Si)**

A measure of the tendency to withdraw from social contact.



## Psychiatric Designation

## Implications of Elevated Scores for "Normals"

## Dominance (Do)

Designed to measure dominance in face-to-face situations; the dominant person is not readily intimidated or defeated; his own feelings in face-to-face situations seem to be feelings of safety, security, personal rightness and self-confidence.

## Responsibility (Re)

High scores indicate willingness to accept the consequences of one's own behavior; dependability; trustworthiness; a sense of obligation to the group; conscientiousness; internally determined principles; ethical sensibility; self-reliance and resourcefulness.

## Neuroticism (Ne)

Designed to differentiate normals from neurotics of mixed diagnosis. This scale was derived from the three scales of MMPI commonly referred to as the "neurotic triad"--the Hypochondriasis scale (Hs), the Depression scale (D), and the Hysteria scale (Hy).

## Anxiety Index (AI)

Not a scale in exactly the same sense as the preceding ones, none of which alone represents a measure of anxiety; AI is a composite of four scales (Hs, D, Hy, and Pt) designed to reflect the interrelationships of the component parts.

Study of Values.--The Allport-Vernon Study of Values is an a priori instrument for classifying expressed attitudes based on Eduard Spranger's ideal types of men. The measurement of these attitudes is concerned with the proportionate relationships of all the six values (Theoretical, Economic, Social, Aesthetic, Political, and Religious), rather than the exact quantity of a particular value within an individual. Spranger posited six basic evaluative attitudes resulting from the striving of men toward different normative goals, which he designated as values. In constructing the test, Allport and Vernon attempted to present alternative responses which would represent and conform to, as closely as possible, Spranger's definitions and characterizations of his value-types.<sup>1</sup> The six values are described in the test

<sup>1</sup>Edward M. Glaser and Julius E. Maller, "The Measurement of Values," Character and Personality, IX (September, 1940), 67-81.

authors' Manual as follows:<sup>1</sup>

The Theoretical.--The dominant interest of the theoretical man is discovery of truth. In the pursuit of this goal he characteristically takes a 'cognitive' attitude, one that looks for identities and differences; one that divests itself of judgments regarding the beauty and utility of objects, and seeks only to observe and to reason. Since the interests of the theoretical man are empirical, critical, and rational, he is necessarily an intellectualist, frequently a scientist or philosopher. His chief aim in life is to order and systematize his knowledge.

The Economic.--The economic man is characteristically interested in what is useful. . . . This type is thoroughly 'practical' and conforms well to the prevailing stereotype of the average American business man. The economic attitude frequently comes into conflict with other values. The economic man wants education to be practical, and regards unsapplied knowledge as waste. . . . The value of utility likewise conflicts with the aesthetic value, excepting when art serves commercial ends. . . . In his personal life he is likely to confuse luxury with beauty. . . .

The Aesthetic.--The aesthetic man sees his highest value in form and harmony. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He regards life as a manifold of events; each single expression is enjoyed for its own sake. He need not be a creative artist; nor need he be effete; he is aesthetic if he but finds his chief interest in the artistic episodes of life.

The Social.--The highest value for this type is love of people. In the Study of Values it is the altruistic or philanthropic aspect of love that is measured. . . . The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish. He is likely to find the theoretical, economic, and aesthetic attitudes cold and inhuman. In contrast to the political type, the social man regards love as itself the only suitable form of human relationship. Spranger adds that in its purest form the social interest is selfless and tends to approach very closely to the religious attitude.

The Political.--The political man is interested primarily in power. His activities are not necessarily within the narrow field of politics; but whatever his vocation, he betrays himself as a Machtmensch. Since competition and struggle play a large part in all life, many philosophers have seen power as the most universal and fundamental of motives. There are, however, certain personalities in whom the desire for a direct expression of this motive is uppermost, who wish above all else for personal power, influence, and renown.

The Religious.--The highest value of the religious man may be called unity. He is mystical, and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality. Spranger defines the religious man as one "whose mental structure is permanently directed to the creation of the

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<sup>1</sup>Gordon W. Allport and Philip E. Vernon, A Study of Values, Manual of Directions (New York: Houghton Mifflin Company, 1931), pp. 8-11.

highest and absolutely satisfying value experience." Some men of this type are "immanent mystics," that is, they find in the affirmation of life and in active participation therein their religious experience. . . . The "transcendental mystic" on the other hand seeks to unite himself with a higher reality by withdrawing from life; he is the ascetic, and like the holy men of India, finds the experience of unity through self-denial and meditation. In many individuals the negation and affirmation of life alternate to yield the greatest satisfaction.

Considering the theoretical implications of the test for the psychology of personality, the test authors conclude that

these values (with the possible exception of the social) must be interpreted as self-consistent, pervasive, enduring, and above all generalized, traits of personality. A person's activity is seldom determined exclusively by the stimulus of the moment, by a transient interest, or by an attitude specific to each situation; it is usually determined by general evaluative attitudes which exert a directive effect upon his common activities, and in so doing guarantee the stability and consistency of personality.<sup>1</sup>

A note on the social value is indicated here. In the old form of the Study of Values used in the investigation, the scale had low reliability. According to the test authors, "Specifically, the results may indicate the need for two distinct types: the narrow personalized love and the broader, socialized and philanthropic love. What is ordinarily called sociability and gregariousness seems to be a still different interest."<sup>2</sup> In the 1951 revised edition of the test the definition of the "social" value was made more specific; the scale now purports to measure only altruistic love or philanthropy.<sup>3</sup>

A test of values was chosen as one of those to be used in the study because of the close relationship between values and personality; this particular test was selected because in the judgment of eminent psychologists it appears to be the best of the structured value inventories;<sup>4</sup> and, in addition,

<sup>1</sup>Ibid., p. 11.

<sup>2</sup>Ibid., p. 10.

<sup>3</sup>Gordon W. Allport, Philip E. Vernon, and Gardner Lindzey, Study of Values, Manual of Directions (Rev. ed.; Houghton Mifflin Company, 1951), p. 6.

<sup>4</sup>William F. Dukes, "Psychological Studies of Values," Psychological Bulletin, LII (January, 1955), 24-50; Elizabeth Duffy, "A Critical Review of Investigations Employing the Allport-Vernon Study of Values and Other Tests," Psychological Bulletin, XXXVII (October, 1940), 597-612.

the very extensive use of the test has provided a large body of comparative data.

The A-S Reaction Study.--The Allport-Allport A-S Reaction Study is designed to measure the "disposition of an individual to dominate his fellows (or to be dominated by them) in various face-to-face relationships in everyday life."<sup>1</sup> The test, consisting of thirty-three questions, poses common, everyday situations such as "Do you feel self-conscious in the presence of superiors in the academic or business world?" and provides for the choice of one of three responses, such as "Markedly," "Somewhat," or "Not at all." Separate forms of the test are provided for men and women.

The test was selected for use in the study, not only because of its brevity and ease of scoring, but mainly because of the importance of the trait, ascendance-submission, and its correlation with such other traits as extroversion and introversion, neuroticism, conformity, etc. While the scale is considered to be "only crude and approximate in representing the subtleties of organization in single personalities" it appears to be reasonably satisfactory in measuring group trends.<sup>2</sup>

Attitude-Interest Analysis Test.--The Terman-Miles Attitude-Interest Analysis Test, designed to measure the relative strength of masculinity and femininity of interests, was based "upon the actual differences between male and female groups ranging in age from early adolescence to life extremes."<sup>3</sup>

The test consists of 910 items grouped into the following seven exer-

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<sup>1</sup>Gordon W. Allport and Floyd A. Allport, The A-S Reaction Study, Manual of Directions (New York: Houghton Mifflin Company, 1939), p. 2.

<sup>2</sup>Richard Ruggles and Gordon W. Allport, "Recent Applications of the A-S Reaction Study," Journal of Abnormal and Social Psychology, XXIII (October, 1939), 527.

<sup>3</sup>Lewis M. Terman and Catherine Cox Miles, Sex and Personality, A Study of Masculinity and Femininity (New York: McGraw-Hill, 1936), p. 3.

cises: word association, ink-blot association, information, emotional and ethical responses, interests, personalities and opinions, and introvertive responses. Items are responded to by checking one of from two to four multiple responses. The test is so thoroughly described and documented in the publication just cited that fuller description here would appear to be unnecessary. It was chosen as one of the tests to be used because of the importance of interests in the assessment of personality and, like the others in the battery, because of its self-administering nature.

Bernreuter Personality Inventory.---The purpose of this inventory, commonly referred to as the "Bernreuter," is to measure six traits: neurotic tendency (B1-N); self-sufficiency (B2-S); introversion-extroversion (B3-I); social dominance (B4-D); self-confidence (F1-C); and sociability (F2-S). Since the scales have been shown to be very substantially correlated, the test authors recommend that not all six be employed at the same time. The inventory consists of 125 questions, based upon questions that had previously been used in such tests as those constructed by Thurstone, Allport, and Laird. Three possible responses are provided for each question, "Yes," "No," and "I." Though norms are provided by which raw scores can be converted to percentile scores, the change was not made because, for the purposes of this study, the raw scores appeared to be satisfactory. Though having relatively little value when used with individuals, according to Super, the test has been shown to measure group trends with a reasonable degree of reliability.<sup>1</sup> According to the same author while "unfavorable" scores are indicative of maladjustment, "favorable" scores are not necessarily indicative of good adjustment, as for example, low neuroticism scores and psychopathic inferiority.<sup>2</sup>

<sup>1</sup>Donald E. Super, "The Bernreuter Personality Inventory: A Review of the Literature," Psychological Bulletin, XXXIX (February, 1942), 94-120.

<sup>2</sup>Ibid., p. 115.

Only two of the scales, B2-S, Self-sufficiency, and P2-S, Sociability, were used in testing the hypotheses. Scores for all of the six scales, however, are shown in Tables 55 and 56 in Appendix III.

#### Selection of Measures Used in Testing Hypotheses

Previously it was noted that from one to six measures were used in testing each hypothesis and also that some of the subtests or scales of some of the inventories did not appear to be applicable for this purpose. The rationale underlying the selection of the measures that were used is briefly noted in the following paragraphs.

Comparison of the description of the measure with the hypothesis statement will, in most instances, make clear the reason for the use of the particular measure. An example is found in Hypothesis 3 which refers to submissiveness and deference. Two measures of ascendancy-submission (the Dominance scale of the MMPI and the A-S Reaction Study) were used to test for submissiveness; and a questionnaire item relating directly to deference to authority was used to test for that part of the hypothesis. However, it should be noted that the terms used in stating the hypotheses are so closely related that a measure which is very obviously related to some term in the statement may oftentimes apply to other terms in the statement as well. Submissiveness and deference clearly are very closely associated terms. In Hypothesis 1, the terms "orderliness," "neatness," and "meticulousness," though not synonymous terms, convey very similar meanings; in fact, in this hypothesis, it was felt that a test for orderliness would be sufficient for proof or disproof of the hypothesis.

In other instances, a measure might be described in such a way as to be applicable in more than one hypothesis. For example, Psychasthenia (Pt) by definition is a measure of anxiety, compulsivity, and self-confidence. It was

used in Hypothesis 1 as a measure of compulsivity in behavior, but it might also have been used in Hypothesis 5 both as a test of anxiety and of lack of self-confidence. It was not employed there since enough other measures of anxiety and self-confidence were available. Likewise, Hysteria (Hy) might have been used as a test of conformity in Hypothesis 2, but it was not needed there. In the discussion in Chapter V, however, in connection with the discussion of a particular hypothesis, reference is frequently made to the findings from measures used in testing other hypotheses.

In a few cases, it may be that the definition provided by the test authors furnishes no obvious clue to the reason a particular measure was used in testing an hypothesis. The Religious Value scale of the Study of Values, used in Hypothesis 2 as a test of conservatism and conformity, furnishes an example. When the institutional nature of religion is considered, however, the connection becomes clear. Most people doubtless have religious beliefs and affiliate with particular religious denominations as a result of emotional childhood experiences. Later on, with maturity, the adult may critically refine these values, yet at the same time may continue to employ religion as a defense mechanism and to conform to the traditional beliefs and practices perpetuated through the church.

#### Test Groups

The sections which follow present a somewhat detailed description of the library school, or experimental group, and provide such information as was available about the control and normative groups used for purposes of comparison.

#### Experimental Group

Number and representation by schools.--The original test group consisted of 124 men and 400 women enrolled in seventeen of the thirty-six library

schools that were accredited by the A.L.A. at the time the study was begun. As shown in Table 3, Chicago furnished the largest number of subjects of any of the schools, but it should be noted that the figure there represents volunteers for each of two years. Listed in the table is an eighteenth school, the University of Texas, not in existence at the inception of the investigation, which furnished twenty men. Since these twenty were brought in later as additional subjects needed for one of the tests (MMPI), they are not represented in any of the tables descriptive of the experimental group, except those involving this particular test.

TABLE 3

## LIBRARY SCHOOLS REPRESENTED IN THE EXPERIMENTAL GROUP

| Library School                 | No. of Men | No. of Women | Both Groups |            |
|--------------------------------|------------|--------------|-------------|------------|
|                                |            |              | No.         | % of Total |
| Chicago <sup>a</sup> . . . . . | 43         | 28           | 71          | 13.03      |
| Columbia . . . . .             | 11         | 14           | 25          | 4.59       |
| Denver . . . . .               | 2          | 30           | 32          | 5.87       |
| Drexel . . . . .               | 8          | 28           | 36          | 6.60       |
| Emory . . . . .                | 3          | 13           | 16          | 2.94       |
| Kentucky . . . . .             | 0          | 12           | 12          | 2.20       |
| Louisiana . . . . .            | 1          | 28           | 29          | 5.32       |
| Michigan . . . . .             | 16         | 22           | 38          | 6.97       |
| Minnesota . . . . .            | 1          | 31           | 32          | 5.87       |
| New Jersey . . . . .           | 0          | 11           | 11          | 2.02       |
| North Carolina . . . . .       | 5          | 25           | 30          | 5.50       |
| Peabody . . . . .              | 11         | 31           | 42          | 7.71       |
| Pratt . . . . .                | 10         | 23           | 33          | 6.06       |
| Southern California . . . . .  | 3          | 24           | 27          | 4.95       |
| Syracuse . . . . .             | 6          | 17           | 23          | 4.22       |
| Texas <sup>b</sup> . . . . .   | 20         | 0            | 20          | 3.67       |
| Western Reserve . . . . .      | 1          | 34           | 35          | 6.42       |
| Wisconsin . . . . .            | 4          | 29           | 33          | 6.06       |
| Total . . . . .                | 145        | 400          | 545         | 100.00     |

<sup>a</sup>Figures for Chicago include volunteer subjects for each of two years, and to a lesser extent the same was true of Peabody.

<sup>b</sup>The Texas students were used for only one test.



It will be noted that the ratio between men and women is higher than that normally obtaining in total library school enrollments. The explanation lies in the fact that a large percentage of men are most commonly concentrated in a few schools and most of these schools were contained in the group listed; too, deans and directors were urged to persuade the men to take the tests so that the sample would be adequate in size for purposes of the investigation.

The number of tests taken by students in the seventeen schools varied from two to five, depending on the amount of time that was made available and whether the tests were regularly scheduled. All or part of the total in three schools took all five of the tests; in four schools, four of the tests; in eight schools, three tests; and in two schools, two tests (Table 4).

TABLE 4

NUMBER OF SUBJECTS IN EXPERIMENTAL GROUP, BY SCHOOLS; TAKING EACH OF THE FIVE TESTS USED IN THE INVESTIGATION

| Library Schools               | Tests and Number Taking Each |     |             |     |      |    |                 |     |                            |     |
|-------------------------------|------------------------------|-----|-------------|-----|------|----|-----------------|-----|----------------------------|-----|
|                               | A-S Reaction                 |     | Bern-reuter |     | MMPI |    | Study of Values |     | Attitude-Interest Analysis |     |
|                               | M                            | F   | M           | F   | M    | F  | M               | F   | M                          | F   |
| Chicago . . . . .             | 22                           | 18  | 21          | 18  | 22   | 11 | 24              | 18  | 31                         | 26  |
| Columbia . . . . .            | 11                           | 14  | 11          | 14  | 0    | 0  | 11              | 14  | 0                          | 0   |
| Denver . . . . .              | 2                            | 30  | 2           | 30  | 0    | 0  | 2               | 30  | 0                          | 0   |
| Drexel . . . . .              | 5                            | 28  | 8           | 28  | 0    | 0  | 5               | 28  | 6                          | 0   |
| Emory . . . . .               | 3                            | 13  | 3           | 12  | 3    | 13 | 3               | 11  | 3                          | 13  |
| Kentucky . . . . .            | 0                            | 12  | 0           | 12  | 0    | 0  | 0               | 12  | 0                          | 12  |
| Louisiana . . . . .           | 1                            | 28  | 1           | 28  | 0    | 0  | 1               | 28  | 0                          | 0   |
| Michigan . . . . .            | 16                           | 22  | 0           | 22  | 0    | 0  | 16              | 22  | 16                         | 0   |
| Minnesota . . . . .           | 1                            | 31  | 1           | 31  | 0    | 0  | 1               | 31  | 1                          | 31  |
| New Jersey . . . . .          | 0                            | 0   | 0           | 11  | 0    | 11 | 0               | 0   | 0                          | 0   |
| North Carolina . . . . .      | 5                            | 25  | 5           | 25  | 0    | 0  | 5               | 25  | 4                          | 0   |
| Peabody . . . . .             | 11                           | 27  | 5           | 30  | 5    | 27 | 6               | 30  | 11                         | 0   |
| Pratt . . . . .               | 10                           | 23  | 9           | 23  | 0    | 0  | 10              | 23  | 10                         | 23  |
| Southern California . . . . . | 3                            | 0   | 3           | 24  | 0    | 0  | 0               | 5   | 0                          | 0   |
| Syracuse . . . . .            | 6                            | 17  | 6           | 17  | 0    | 0  | 0               | 0   | 6                          | 17  |
| Texas . . . . .               | 0                            | 0   | 0           | 0   | 20   | 0  | 0               | 0   | 0                          | 0   |
| Western Reserve . . . . .     | 4                            | 0   | 4           | 31  | 0    | 0  | 0               | 0   | 0                          | 0   |
| Wisconsin . . . . .           | 4                            | 28  | 4           | 29  | 0    | 0  | 4               | 28  | 0                          | 0   |
| Total . . . . .               | 104                          | 316 | 83          | 385 | 50   | 62 | 88              | 305 | 88                         | 122 |

Age.--As a group, the men were approximately a year and a half older than the women, the mean age for the first group being 29.7, with S.D. of 4.80, and for the second group, 28.0, with S.D. of 7.80 (Table 5). The median age

TABLE 5  
AGE OF STUDENTS

| Age Groups           | Men   |        | Women |        | Both Groups |        |
|----------------------|-------|--------|-------|--------|-------------|--------|
|                      | No.   | %      | No.   | %      | No.         | %      |
| 20-24 . . . . .      | 9     | 7.32   | 178   | 45.52  | 187         | 36.38  |
| 25-29 . . . . .      | 48    | 39.02  | 88    | 22.51  | 136         | 26.46  |
| 30-34 . . . . .      | 46    | 37.40  | 47    | 12.02  | 93          | 18.09  |
| 35-39 . . . . .      | 16    | 13.01  | 38    | 9.72   | 54          | 10.51  |
| 40-44 . . . . .      | 3     | 2.44   | 19    | 4.86   | 22          | 4.28   |
| 45-49 . . . . .      | 1     | .81    | 14    | 3.58   | 15          | 2.92   |
| 50-54 . . . . .      | 0     | .00    | 4     | 1.02   | 4           | .78    |
| 55-59 . . . . .      | 0     | .00    | 3     | .77    | 3           | .58    |
| Total . . . . .      | 123   | 100.00 | 391   | 100.00 | 514         | 100.00 |
| No information       | 2     | ...    | 9     | ...    | 11          | ...    |
| Total . . . . .      | 125   | ...    | 400   | ...    | 525         | ...    |
| Mean age . . . . .   | 29.7  | ...    | 28.0  | ...    | 28.6        | ...    |
| S.D. . . . .         | 4.80  | ...    | 7.80  | ...    | 5.85        | ...    |
| Median age . . . . . | 30.0  | ...    | 25.0  | ...    | 27.0        | ...    |
| Range . . . . .      | 21-43 | ...    | 20-57 | ...    | 20-57       | ...    |

for the men was 30, and for the women 25. The majority of the men fell in the two age groups, 25-29 and 30-34, while the majority of the women were in the 20-24 and 25-29 age groups, an over-all difference between the two of about five years. The higher mean age for the men may be accounted for by the fact that a high percentage of men were delayed from two to five years by military service, that a higher percentage of them than of women were studying for an advanced degree and by the fact that men probably are usually older when they enter library school.<sup>1</sup> The variability in the two groups is clearly indicated

<sup>1</sup>Cr. Bryan, op. cit., p. 117.

by the standard deviations and the age ranges. In the case of the women, the larger range may suggest that entry into the profession for women at an older age may be somewhat easier and more common than for men.

Marital status.--As shown in Table 6, of the 517 supplying information, an overwhelming majority (77.95 per cent) were single, as might be expected; 16.83 were married, 5.22 per cent divorced, widowed or separated. Forty-eight of the men, or 39.03 per cent of the total, were married, as compared with 39 of the women, or 9.90 per cent of the total.

TABLE 6

## MARITAL STATUS OF STUDENTS IN THE EXPERIMENTAL GROUP

| Status              | Men |        | Women |        | Both Groups |        |
|---------------------|-----|--------|-------|--------|-------------|--------|
|                     | No. | %      | No.   | %      | No.         | %      |
| Single . . . . .    | 70  | 56.91  | 333   | 84.52  | 403         | 77.95  |
| Married . . . . .   | 48  | 39.03  | 39    | 9.90   | 87          | 16.83  |
| Divorced . . . . .  | 4   | 3.25   | 12    | 3.04   | 16          | 3.10   |
| Widowed . . . . .   | 0   | .00    | 7     | 1.78   | 7           | 1.35   |
| Separated . . . . . | 1   | .81    | 3     | .76    | 4           | .77    |
| Total . . . . .     | 123 | 100.00 | 394   | 100.00 | 517         | 100.00 |
| No information      | 2   | . . .  | 6     | . . .  | 8           | . . .  |
| Total . . . . .     | 125 | 100.00 | 400   | 100.00 | 525         | 100.00 |

Educational background.--Of the 522 students furnishing information, 43, or 8.30 per cent, were undergraduate (juniors and seniors); 432, or 83.40 per cent, held bachelor's degrees in subject fields other than library science; 41, or 7.91 per cent, held an academic master's degree, and two, or less than one-half of 1 per cent, held an earned doctor's degree (Table 7). In addition to academic degrees, 32 of the men and 17 of the women held degrees in library science: one man and three women held a fourth-year bachelor's degree; 30 men and 14 women, the fifth-year bachelor's degree; and one man, a sixth-year master's.

TABLE 7

HIGHEST NON-PROFESSIONAL DEGREES HELD BY STUDENTS  
IN THE EXPERIMENTAL GROUP

| Degree Held          | Men |        | Women |        | Both Groups      |        |
|----------------------|-----|--------|-------|--------|------------------|--------|
|                      | No. | %      | No.   | %      | No.              | %      |
| None . . . . .       | 6   | 4.84   | 37    | 9.39   | 43               | 8.30   |
| Bachelor's . . . . . | 93  | 75.00  | 339   | 86.04  | 432 <sup>a</sup> | 83.40  |
| Master's . . . . .   | 23  | 18.55  | 18    | 4.57   | 41               | 7.91   |
| Doctor's . . . . .   | 2   | 1.61   | 0     | . . .  | 2                | .39    |
| Total . . . . .      | 124 | 100.00 | 394   | 100.00 | 518              | 100.00 |
| No information       | 0   | . . .  | 3     | . . .  | 3                | . . .  |
| Total . . . . .      | 124 | . . .  | 397   | . . .  | 521              | . . .  |

<sup>a</sup>Does not include one man and three women with library science major in the bachelor's degree.

Slightly over four-fifths (82.19 per cent) of the 494 students reporting the information had attended, or were attending at the time, a liberal arts college or a university for their undergraduate study. Of those remaining, approximately 16 per cent were either graduates of or had attended a teachers college; and eight, or about 1.5 per cent, had attended a technical college or institute for their undergraduate work (Table 8).

In Tables 9 and 10 are shown the major subjects in undergraduate study reported by the 121 men and 393 women supplying the information. Here may be noted the high percentages of majors in literature, foreign languages and history, and the low percentages in the natural sciences and the fine arts, a pattern that is highly similar to those reported in previous studies.<sup>1</sup> Liter-

<sup>1</sup>Cf. Wilson, *op. cit.*, pp. 43-45; Harriet E. Howe, "Study of the University of Denver School of Librarianship Graduates, 1928-1939," *Library Quarterly*, X (October, 1940), 535; Danton and Merritt, *op. cit.*, p. 2; Bryan, *op. cit.*, p. 60; Harold Wayne Billings, *The Education of Librarians in Texas, 1925* ("Texas Papers on Library Topics," No. 1; Austin, Texas: Graduate School of Library Science, The University of Texas, 1956), pp. 210-11.

TABLE 8

TYPE OF COLLEGE ATTENDED BY STUDENTS IN THE EXPERIMENTAL GROUP  
FOR UNDERGRADUATE NON-PROFESSIONAL STUDY

| Type                 | Men |        | Women |        | Both Groups |        |
|----------------------|-----|--------|-------|--------|-------------|--------|
|                      | No. | %      | No.   | %      | No.         | %      |
| Liberal arts . . .   | 37  | 31.90  | 167   | 44.18  | 204         | 41.30  |
| University . . . .   | 65  | 56.04  | 137   | 36.25  | 202         | 40.89  |
| Teachers college . . | 13  | 11.20  | 67    | 17.72  | 80          | 16.19  |
| Technical . . . . .  | 1   | .86    | 7     | 1.85   | 8           | 1.62   |
| Total . . . . .      | 116 | 100.00 | 378   | 100.00 | 494         | 100.00 |
| No information . . . | 9   | ...    | 22    | ...    | 31          | ...    |
| Total . . . . .      | 125 | ...    | 400   | ...    | 525         | ...    |

TABLE 9

MAJOR SUBJECTS IN UNDERGRADUATE STUDY OF STUDENTS  
IN THE EXPERIMENTAL GROUP

| Major Field of Study    | Men |        | Women |        | Both Groups |        |
|-------------------------|-----|--------|-------|--------|-------------|--------|
|                         | No. | %      | No.   | %      | No.         | %      |
| Literature . . . . .    | 31  | 25.62  | 153   | 38.93  | 184         | 35.80  |
| History . . . . .       | 24  | 19.84  | 50    | 12.72  | 74          | 14.40  |
| Foreign languages . .   | 15  | 12.40  | 40    | 10.18  | 55          | 10.70  |
| Education . . . . .     | 8   | 6.61   | 34    | 8.65   | 42          | 8.17   |
| Social sciences . . .   | 16  | 13.22  | 24    | 6.11   | 40          | 7.78   |
| Library science . . .   | 3   | 2.48   | 34    | 8.65   | 37          | 7.20   |
| Biological sciences . . | 2   | 1.65   | 20    | 5.09   | 22          | 4.28   |
| Physical sciences . .   | 10  | 8.26   | 9     | 2.29   | 19          | 3.70   |
| Fine arts . . . . .     | 0   | ...    | 9     | 2.29   | 9           | 1.75   |
| Business administration | 3   | 2.48   | 4     | 1.02   | 7           | 1.36   |
| Other . . . . .         | 9   | 7.44   | 16    | 4.07   | 25          | 4.86   |
| Total . . . . .         | 121 | 100.00 | 393   | 100.00 | 514         | 100.00 |
| No information . . .    | 4   | ...    | 7     | ...    | 11          | ...    |
| Total . . . . .         | 125 | ...    | 400   | ...    | 525         | ...    |

TABLE 10

RANK ORDER OF MAJOR SUBJECTS IN UNDERGRADUATE STUDY  
OF STUDENTS IN THE EXPERIMENTAL GROUP

| Major Subject                     | Rank for Men | Rank for Women | Composite Rank |
|-----------------------------------|--------------|----------------|----------------|
| Literature . . . . .              | 1            | 1              | 1              |
| History . . . . .                 | 2            | 2              | 2              |
| Foreign language . . . . .        | 4            | 3              | 3              |
| Education . . . . .               | 7            | 4.5            | 4              |
| Social sciences . . . . .         | 3            | 6              | 5              |
| Library science . . . . .         | 8.5          | 4.5            | 6              |
| Biological sciences . . . . .     | 10           | 7              | 8              |
| Physical sciences . . . . .       | 5            | 9.5            | 9              |
| Fine arts . . . . .               | 11           | 9.5            | 10             |
| Business administration . . . . . | 8.5          | 11             | 11             |
| Other subjects . . . . .          | 6            | 8              | 7              |

ature, with 35.8 per cent, as shown in Table 10, ranked first; social sciences (if history and education are included), a close second with 30.35 per cent; and foreign languages, with approximately 11 per cent, was in third place. The three areas, literature, social sciences, and foreign languages thus accounted for slightly over three-fourths of the 514 students who supplied information. For the most part, the students who specified library science as the undergraduate major were enrolled at the time of the study as undergraduate students in the several schools where the undergraduate major was offered. The natural sciences, it may be noted, accounted for only about 8 per cent of the total, while fine arts, business administration, and miscellaneous "other" subjects represented almost negligible proportions.

Aside from consideration of undergraduate subject majors in relation to the needs of the profession, the subject has considerable importance for the present study from another point of view. A number of studies have shown that there is a close correspondence between personality structure and the field

chosen by students as the major one in undergraduate study.<sup>1</sup> Students with certain personality traits, it has been found, tend to "gravitate" toward rather specific subject areas. Some of the implications of the preponderance of a few subject fields in the experimental group will be noted in later chapters of the study.<sup>2</sup>

Father's occupation.--Information about the father's occupation was furnished by 502 students, or approximately 96 per cent of the total. Inspection of Table 11 reveals the middle-class origin of a majority in the group;

TABLE 11  
OCCUPATION OF FATHER FOR STUDENTS IN THE EXPERIMENTAL GROUP

| Occupational Group <sup>a</sup> | % of men<br>(N=118) | % of Women<br>(N=384) | % of Both<br>(N=502) |
|---------------------------------|---------------------|-----------------------|----------------------|
| Professional . . . . .          | 30.51               | 24.74                 | 26.09 <sup>b</sup>   |
| Managerial executive . .        | 11.86               | 14.85                 | 14.14                |
| Small owners . . . . .          | 6.78                | 14.32                 | 12.55                |
| Clerical, sales, etc. . .       | 13.56               | 13.54                 | 13.54                |
| Skilled occupations . .         | 24.58               | 12.76                 | 15.54                |
| Semi-skilled occupations        | 4.24                | 3.38                  | 3.59                 |
| Unskilled occupations .         | .84                 | 1.04                  | 1.00                 |
| Farming, etc. . . . .           | 7.63                | 14.85                 | 13.15                |
| Other . . . . .                 | . . .               | .52                   | .40                  |
| Total . . . . .                 | 100.00              | 100.00                | 100.00               |

<sup>a</sup>Based on classification used in U.S. Employment Service, Dictionary of Occupational Titles, Vol. I: Definitions of Titles (2d ed.; Washington, Government Printing Office, 1949), p. xix.

<sup>b</sup>For the 26.09 per cent, representing 131 students, there were 27 teachers, 20 ministers, 20 lawyers, 16 engineers, and 16 dentists and physicians.

<sup>1</sup>Feather, op. cit., pp. 71-78; Miriam Redlo, "MMPI Personality Patterns for Several Academic Major Groups" (unpublished Master's dissertation, The University of New Mexico, 1951); Sternberg, op. cit.

<sup>2</sup>For the number of subjects, by undergraduate major field of study, taking each of the tests, see Table 25, Appendix III.

approximately 40 per cent were from what might be termed the upper strata of the middle-class (professional, managerial and executive); approximately the same per cent from the middle strata (small owners; clerical, sales; skilled occupations); and a much smaller per cent from the lower strata (semi-skilled, farming, etc.). Fathers who could be classed as unskilled workers amounted to only about 1 per cent of the total. Some of the percentages shown here roughly approximate those reported by Bryan, where the fathers of 21 per cent of the professional personnel in her public library sample were classed as professional, about 20 per cent as self-employed, and 14 per cent as being in managerial positions.<sup>1</sup>

It is of interest to note that of the 131 of the fathers, or 26.09 per cent of the total classified as "Professional" in Table 11, 27 were teachers; 20, ministers; 20, lawyers; 16, dentists and physicians; and 16, engineers. It is interesting, also, to note that the first three of these five groups might be considered as having "bookish" or literary interests.

Size of home city.--Approximately one-fourth of the 507 students furnishing information about the size of home town or city came from places with a population of 5,000 or less; close to 30 per cent were from cities with from 5,000 to 50,000; something over 25 per cent, from places with between 50,000 and 500,000; and the remaining--approximately 20 per cent of the total--came from cities of over 500,000. For the group as a whole there is a fairly uniform distribution of percentages from the rural or small community to the large city and, except for the three largest population groups shown in Table 12, very slight differences were found between men and women; in the last three groupings, it may be seen that a higher percentage of men than of women (55 per cent as compared with 31 per cent) claimed home cities of more than 100,000 population.

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<sup>1</sup>Bryan, op. cit., pp. 34-35.



TABLE 12

## SIZE OF HOME CITY OR TOWN OF STUDENTS IN THE EXPERIMENTAL GROUP

| Size of Home City or Town | Men |        | Women |        | Both Groups |        |
|---------------------------|-----|--------|-------|--------|-------------|--------|
|                           | No. | %      | No.   | %      | No.         | %      |
| Under 1000 . . . .        | 8   | 6.67   | 42    | 10.85  | 50          | 9.86   |
| 1,001-2,500 . . . .       | 7   | 5.83   | 32    | 8.27   | 39          | 7.69   |
| 2,501-5,000 . . . .       | 3   | 2.50   | 35    | 9.04   | 38          | 7.50   |
| 5,001-10,000 . . . .      | 7   | 5.83   | 36    | 9.30   | 43          | 8.48   |
| 10,001-25,000 . . . .     | 10  | 8.33   | 37    | 9.56   | 47          | 9.27   |
| 25,001-50,000 . . . .     | 11  | 9.17   | 47    | 12.15  | 58          | 11.44  |
| 50,001-100,000 . . . .    | 8   | 6.67   | 38    | 9.82   | 46          | 9.07   |
| 100,001-250,000 . . . .   | 12  | 10.00  | 28    | 7.24   | 40          | 7.89   |
| 250,001-500,000 . . . .   | 13  | 10.83  | 35    | 9.04   | 48          | 9.47   |
| 500,001 or more . . . .   | 41  | 34.17  | 57    | 14.73  | 98          | 19.33  |
| Total . . . .             | 120 | 100.00 | 387   | 100.00 | 507         | 100.00 |
| No information . . . .    | 5   | ...    | 13    | ...    | 18          | ...    |
| Total . . . .             | 125 | ...    | 400   | ...    | 525         | ...    |

Earlier it was noted that 49 of the students held degrees in library science. To compare the distribution of the group with that found in the general population, the 49 were eliminated on the theory that they probably reported as their home communities, the communities where they held positions; this left a total of 458 who had supplied the information. Of this number, 26.4 per cent came from communities with less than 5,000 population, as compared with 44.7 per cent for the general population; 55.9 per cent reported cities with less than 500,000, as compared with 37.7 per cent of the population as a whole; and 17.7 per cent reported home cities of over 500,000, as compared with 17.6 per cent for the general population. These figures suggest the possibility that librarians may be drawn from medium size and moderately large communities to a greater extent than from small or rural communities or from large cities.

Interval between college graduation and library school attendance.--

Approximately one-fourth of the reporting students attended library school less than one year following college graduation, from which fact it may be assumed that they had decided upon library work as a career before or by the time of graduation from college. In the case of about 32 per cent, an interval of from one to three years intervened between college graduation and library school attendance. Approximately 20 per cent of those remaining waited from four to six years; 6 per cent, from seven to nine years; and about 15 per cent, ten years or longer. A good many of the men were doubtless delayed by military service, but it is unlikely that the same would hold true for the women. For the last two intervals, 7-9 and 10 or more years, periods not likely to have been the result of military service, the percentages of men and women are practically equal. It would appear, therefore, that a relatively high per cent of students (somewhat higher for women than for men, assuming an atypical situation resulting from military service) either chose library work as a career some time after college graduation or found it impossible to obtain professional training immediately following college graduation (Table 13).

TABLE 13

INTERVAL BETWEEN COLLEGE GRADUATION AND LIBRARY SCHOOL ATTENDANCE

| Interval          | Men |        | Women |        | Both Groups |        |
|-------------------|-----|--------|-------|--------|-------------|--------|
|                   | No. | %      | No.   | %      | No.         | %      |
| Less than 1 yr. . | 30  | 30.30  | 85    | 24.78  | 115         | 26.02  |
| 1-3 yrs. . . . .  | 12  | 12.12  | 129   | 37.61  | 141         | 31.90  |
| 4-6 yrs. . . . .  | 37  | 37.38  | 57    | 16.62  | 94          | 21.27  |
| 7-9 yrs. . . . .  | 8   | 8.08   | 19    | 5.54   | 27          | 6.10   |
| 10 yrs. or more . | 12  | 12.12  | 53    | 15.45  | 65          | 14.71  |
| Total . . . . .   | 99  | 100.00 | 343   | 100.00 | 442         | 100.00 |
| No information    | 26  | . . .  | 57    | . . .  | 83          | . . .  |
| Total . . . . .   | 125 | . . .  | 400   | . . .  | 525         | . . .  |

These findings are substantially in agreement with those of Bryan, who reported that for a greater percentage of women than of men, librarianship seems to be a primary vocational choice; she found that the women, as a group, received their library degrees 2.9 years after college graduation while in the case of the men the interval was 3.7 years.<sup>1</sup>

Degrees sought.--Over three-fourths of the 521 students supplying information were seeking the fifth-year bachelor's degree; 34, or 6.52 per cent, were studying for a fourth-year bachelor's with library science major; 23, or 4.42 per cent were seeking a fifth-year master's; 38, or 7.29 per cent, the sixth-year master's; and 16, or 3.07 per cent, the doctor's degree. Of the 54 seeking advanced degrees, there were exactly twice as many men as women (Table 14).

TABLE 14

## DEGREES SOUGHT BY STUDENTS IN THE EXPERIMENTAL GROUP

| Degree Sought                                   | Men |        | Women |        | Both Groups |        |
|---|-----|--------|-------|--------|-------------|--------|
|   | No. | %      | No.   | %      | No.         | %      |
| None . . . . .                                  | 1   | .80    | 2     | .50    | 3           | .58    |
| Bachelor's with<br>L.S. major<br>(4th year) . . | 2   | 1.60   | 32    | 8.08   | 34          | 6.52   |
| B.S. in L.S.<br>(5th year) . .                  | 77  | 61.60  | 327   | 82.58  | 404         | 77.54  |
| Master's in L.S.<br>(5th year) . .              | 8   | 6.40   | 15    | 3.79   | 23          | 4.42   |
| Master's in L.S.<br>(6th year) . .              | 21  | 16.80  | 17    | 4.30   | 38          | 7.29   |
| Doctor's . . . .                                | 15  | 12.00  | 1     | .25    | 16          | 3.07   |
| Other . . . . .                                 | 1   | .80    | 2     | .50    | 3           | .58    |
| Total . . . . .                                 | 125 | 100.00 | 396   | 100.00 | 521         | 100.00 |
| No information                                  | 0   | ...    | 4     | ...    | 4           | ...    |
| Total . . . . .                                 | 125 | ...    | 400   | ...    | 525         | ...    |

<sup>1</sup>Bryan, *op. cit.*, pp. 116-20.

Work preferences.--Preference for college and university work was shown by the men, almost 57 per cent of the 123 responding to the question. Almost half as many expressed preference for the public library; special libraries, with 10.57 per cent, was third choice, and work in government libraries, with about 5 per cent, a poor fourth choice. Among the women, the public library was first choice, with 35.39 per cent, and the college and university a close second with 32.05 per cent. Special libraries, with 18.21 per cent, stood in third rank, as was true for the men; and school libraries, with 11.02 per cent, came in fourth rank (Table 15). In fifth rank for women, as for men, came government libraries, with only 3.33 per cent expressing preference for libraries in this category.

TABLE 15

WORK PREFERENCE, BY TYPE OF LIBRARY, OF STUDENTS IN THE EXPERIMENTAL GROUP

| Type of Library  | Men  |        | Women |        | Both Groups |        |
|--|------|--------|-------|--------|-------------|--------|
|  | No.  | %      | No.   | %      | No.         | %      |
| University and college . .                             | 70   | 56.91  | 125   | 32.05  | 195         | 38.01  |
| University . . . . .                                   | (43) | ...    | (55)  | ...    | (98)        | ...    |
| Liberal arts college . .                               | (23) | ...    | (56)  | ...    | (79)        | ...    |
| Teachers college . . . .                               | (3)  | ...    | (5)   | ...    | (2)         | ...    |
| Junior college . . . . .                               | (1)  | ...    | (9)   | ...    | (10)        | ...    |
| Public . . . . .                                       | 34   | 27.64  | 138   | 35.39  | 172         | 33.53  |
| Municipal . . . . .                                    | (30) | ...    | (111) | ...    | (141)       | ...    |
| County, regional, state .                              | (4)  | ...    | (27)  | ...    | (31)        | ...    |
| Special . . . . .                                      | 13   | 10.57  | 71    | 18.21  | 84          | 16.38  |
| School . . . . .                                       | ...  | ...    | 43    | 11.02  | 43          | 8.38   |
| Secondary . . . . .                                    | ...  | ...    | (36)  | ...    | (36)        | ...    |
| Elementary . . . . .                                   | ...  | ...    | (7)   | ...    | (7)         | ...    |
| Government (U.S.), includ-<br>ing Army, Navy, etc. . . | 6    | 4.88   | 13    | 3.33   | 19          | 3.70   |
| Total . . . . .  | 123  | 100.00 | 390   | 100.00 | 513         | 100.00 |
| No information . . . .                                 | 2    | ...    | 10    | ...    | 12          | ...    |
| Total . . . . .  | 125  | ...    | 400   | ...    | 525         | ...    |

The fact that school libraries came so low on the list is doubtless accounted for by the fact that a large proportion of school librarians receive their training in library science departments not on the A.L.A. accredited list, and also by the fact that of the ten library science departments on this list, in which school librarianship was emphasized at the time of the study, only four were represented.

With respect to type of library work, exactly half of the men expressed preference for administration or supervision, and close to a third designated reference and bibliography as first choice. The first choices of the remaining 22 men were distributed in the following order: technical processes (6); personnel work (4); public relations (4); circulation (2); readers advisory (2); library school teaching (1); and "other" (3). The women, either because of more realistic thinking or because they simply did not prefer it, rated administration and supervision in fifth order of preference. First choice, with 28.61 per cent, was reference and bibliography; work with children and young people (in school and public libraries) came second with 22.83 per cent; technical processes came third, with 11.27 per cent; circulation, fourth, with 9.25 per cent; administration, as was noted, fifth, with 7.80 per cent; "other," sixth, with 6.65 per cent; readers advisory, seventh, with 6.36; general, or other or undecided, eighth, with 4.62; and public relations, ninth, with 1.16 per cent (Table 16).

The high percentage of preferences of the men for college and university work and for administration and supervision is doubtless explainable by the fact that men are generally preferred, especially those holding advanced degrees, for administrative positions in academic libraries. Advanced professional training is thus more likely to "pay off" in the academic library than in other types. A large majority of the men who were candidates for advanced degrees expressed preference for administrative positions in college and university libraries.

TABLE 16

## WORK PREFERENCE, BY TYPE OF WORK, OF STUDENTS IN THE EXPERIMENTAL GROUP

| Type of Work                | Men |        | Women |        | Both Groups |        |
|-----------------------------|-----|--------|-------|--------|-------------|--------|
|                             | No. | %      | No.   | %      | No.         | %      |
| Reference and bibliography  | 34  | 30.35  | 99    | 28.61  | 133         | 29.04  |
| Administration, supervision | 56  | 50.00  | 27    | 7.80   | 83          | 18.12  |
| Children and young people   | ..  | ..     | 79    | 22.83  | 79          | 17.25  |
| Technical processes         | 6   | 5.36   | 39    | 11.27  | 45          | 9.83   |
| Circulation                 | 2   | 1.79   | 32    | 9.25   | 34          | 7.42   |
| Readers advisory            | 2   | 1.79   | 22    | 6.36   | 24          | 5.24   |
| General, or undecided       | ..  | ..     | 16    | 4.62   | 16          | 3.49   |
| Personnel                   | 4   | 3.57   | 2     | .58    | 6           | 1.31   |
| Public relations            | 4   | 3.57   | 4     | 1.16   | 8           | 1.75   |
| Library school teaching     | 1   | .89    | 3     | .87    | 4           | .87    |
| Other                       | 3   | 2.68   | 23    | 6.65   | 26          | 5.68   |
| Total                       | 112 | 100.00 | 346   | 100.00 | 458         | 100.00 |
| No information              | 13  | ..     | 54    | ..     | 67          | ..     |
| Total                       | 125 | ..     | 400   | ..     | 525         | ..     |

## Normative Groups

The groups used for comparison with the experimental group were, with two exceptions, groups described either in the test manuals or in studies reported in the literature. The two exceptions were the University of Texas graduate students and the University of New Mexico senior and graduate students used in connection with the MMPI. The latter two groups would more properly be termed "control" groups, but to avoid confusion they have been designated as part of the normative group.

The following paragraphs provide brief descriptions of the several groups that were used for comparison with the experimental, or library school group, which has just been described in some detail.

Minnesota Multiphasic Personality Inventory.--The normative groups for the MMPI consisted of the following: (1) for the men, a group of 149 senior

and graduate students at the University of New Mexico reported on by Redlo in a master's thesis,<sup>1</sup> combined with a group of 46 men--five seniors and 41 graduates--from the University of Texas; (2) for the women, a group of 121 students from the University of Pennsylvania reported on by Fry,<sup>2</sup> combined with a group of 37 students--four seniors and 33 graduates--from the University of Texas.

The 149 senior and graduate men studied by Redlo were distributed in seven major subject groups as follows: psychology and sociology (20); mathematics, chemistry and physics (18); engineering (29); anthropology (22); business administration (23); art and music (17); and geology (8). The 41 senior and graduate men at the University of Texas were volunteer subjects drawn from 18 different subject areas, including the professional fields of architecture, education, engineering, law, and theology; the two students in theology were currently enrolled at a local Presbyterian theological seminary. Although the ages of students in the Redlo study were known to the author, for some reason they were not reported. The mean age for the University of Texas group was 26.20, with a standard deviation of 3.75. The mean age of the men in the experimental group, as shown in Table 5, was 29.7, with a standard deviation of 4.80. For lack of information about the mean age of the Redlo group, no comparison between the combined control or normative group, and the experimental group with respect to mean ages can be made.

The 121 women reported on by Fry were an unselected group from various subject areas, with a grade level of 15.8 and a mean age of 20.5. The 33 graduates and four seniors from the University of Texas, also volunteer subjects, were drawn from 17 different subject fields, including architecture, education,

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<sup>1</sup>Redlo, *op. cit.*

<sup>2</sup>Franklin D. Fry, "A Study of the Personality Traits of College Students and of State Prison Inmates as Measured by the MMPI," *Journal of Psychology*, XXVIII (October, 1944), 439-49.

journalism, and law, and had a mean age of 28.59, with a standard deviation of 5.46. Since the mean age of the women in the experimental group, shown in Table 5, was 28.0, with a standard deviation of 7.80, it is likely that the experimental group was in general the older of the two. However, since 36.38 per cent (187 out of 514) of the women in the experimental group were in the 20-24 age group and the median age for the entire group was 25.0, it is possible that the difference between the average ages of the two groups of women was smaller than that obtaining for the two groups of men.

Study of Values.--For the second main test used in the investigation, the normative groups consisted of the 1163 college men and the 1592 college women whose means scores were reported in the test authors' Manual of Directions.<sup>1</sup> Neither the mean ages of the two groups, or information about academic status were reported; nor, for that matter, were the mean scores for the values accompanied by standard deviations. Because of this last omission, a note here on the method of arriving at standard deviations would appear to be in order. The senior test author was unable to supply the S.D.s for the original two groups, but was able to furnish them for a group of 1140 college men and 188 college women.<sup>2</sup> Use of these measures would appear permissible since (1) they are quite similar to those reported in the literature; (2) they are based on a large N, and (3) each of the two normative groups is so large that it would make little practical difference which S.D.'s were accepted.

A-S Reaction Study.--The normative groups for the A-S Reaction Study consisted of 2578 men and 600 women, all students in the "three upper college classes in widely distributed institutions, thus fairly representing an unse-

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<sup>1</sup>Allport and Vernon, A Study of Values, Manual, p. 7.

<sup>2</sup>Letter from Dr. Gordon W. Allport, Department of Social Relations, Harvard University, July 17, 1951.



lected sample of college students. . . .<sup>1</sup> Since standard deviations were not reported along with the mean scores in the Manual of Directions and the test authors could not supply them, they had to be derived by combining similar groups for which the S.D.s were known. In the case of the men, the experimental group (N=104) and a college group (N=54) reported on by Broom<sup>2</sup> were combined. In the case of the women, three groups were combined: the experimental group (N=316), the Broom group (N=161), and a college group of 600 reported by Ruggles and Allport.<sup>3</sup> Because of the homogeneity of the variance in all the groups, the procedure appears to be reasonable and justified. Neither Broom nor Ruggles described their subjects except to report upper class rank in college.

Attitude-Interest Analysis Test.--The normative groups for this test consisted of 368 men and 523 women, both college educated and both in their twenties and thirties, reported by the test authors in Sex and Personality.<sup>4</sup> Since both the groups were unselected and therefore more heterogeneous than the experimental groups, the use of means and standard deviations provided by them represents an over-estimation rather than an under-estimation and, therefore, may be considered to be a conservative procedure.

The Bernreuter Personality Inventory.--Two of the six scales of the Bernreuter Personality Inventory were used in the study in testing hypotheses. The normative group for the first of the two, B2-S (Sociability), consisted of 658 college men and 391 college women; for the second, F2-S (Self-Sufficiency),

<sup>1</sup>Allport and Allport, A-S Reaction Study, Manual, p. 13.

<sup>2</sup>M. E. Broom, "A Study of the Test of Ascendance-Submission," Journal of Applied Psychology, XIV (July-August, 1930), 405-13.

<sup>3</sup>Ruggles and Allport, op. cit., p. 519.

<sup>4</sup>Terman and Miles, Sex and Personality, pp. 137, 142.

the normative groups consisted of 273 men and 144 women, both college groups. Neither class rank or mean age was reported for any of the four groups in the information provided by the test author.<sup>1</sup>

#### Summary

This chapter has furnished an account of the general procedure employed in the investigation, an enumeration and description of the various testing measures employed, a summary of the method of treating the data, and a description of the library school, or experimental, group and of the normative groups used for purposes of comparison.

The measures used in collecting data consisted of a questionnaire and five personality tests. The five tests were the Minnesota Multiphasic Personality Inventory which, as its name implies, is designed to measure a number of personality variables; the Allport-Vernon Study of Values which measures the relative strength in an individual of six values, theoretical, aesthetic, economic, social, political and religious; the Allport-Allport A-S Reaction Study, a test of dominance-submission; the Terman-Miles Attitude-Interest Analysis Test, designed to measure masculinity-femininity of interests; and the Bernreuter Personality Inventory. The last inventory purports to measure six aspects of personality, but only two of the six scales (B2-S, Self-Sufficiency, and F2-S, Sociability) were used in testing hypotheses.

The number of tests taken by the various library school groups varied from one to five, the number depending upon the amount of time made available by administrative officers of the cooperating schools.

Data derived from questionnaire responses and test scores were coded, punched on IBM cards, and the indicated tabulations run. Statistical operations

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<sup>1</sup>Robert G. Bernreuter, The Personality Inventory, Tentative Percentile Norms (Stanford, Calif.: Stanford University Press, October, 1938).

consisted of computing mean scores and standard deviations and determining the significance of certain questionnaire responses and of the differences found between the test scores of the experimental and normative groups.

A total of 125 men and 400 women students enrolled in 1947-1948 in seventeen of the thirty-six A.L.A. accredited schools constituted the original experimental group. An additional twenty men from another accredited school were later brought into the study as volunteer subjects for one of the five tests.

The mean age of the men in the original test group was 29.7, with S.D. of 4.80, and of the women, 28.0, with S.D. of 7.80; the median age of the men was 30.0, and of the women, 25.0. For the most part, the 525 students were college graduates seeking the fifth-year professional degree in library science; a relatively small proportion were candidates for a fourth-year degree in library science, a sixth-year master's degree, or a doctor's degree. Over three-fourths of the students reported undergraduate subject majors in literature, foreign languages and the social sciences. Slightly over four-fifths of the group had attended, or were attending at the time, a liberal arts college or university for their undergraduate study.

The normative group varied with each test. For most of the tests, the groups were those reported on by test authors or other research workers; for one of the tests, the MMPI, the control groups consisted of (1) forty-six men, mostly graduates, from the University of Texas combined with 149 senior and graduate men from the University of New Mexico; and (2) thirty-seven women, mostly graduates, from the University of Texas combined with 121 upper division women students from the University of Pennsylvania.

## CHAPTER IV

### RESULTS OF THE TESTING

#### Introduction

The purpose of this chapter is to present in summary form the results obtained in testing the eight hypotheses that were stated in Chapter II.<sup>1</sup> It will be noted that, except in the case of Hypothesis 6, from two to six measures were employed for each hypothesis. Reference to the description and definition of the various measures, given on pages 42-52 in Chapter III, may be found helpful in considering the results here presented. Interpretation and discussion of the findings are contained in Chapter V.

#### The Hypotheses

##### Hypothesis 1

Statement.--The librarian is more orderly, meticulous, neat, and compulsive in behavior than people in general.

Results.--The results obtained from the two measures used in testing this hypothesis are shown in Table 17. Here it may be noted that on the first measure, Question 7B, 4, of the questionnaire which requested students to rate themselves on the trait of orderliness, both men and women perceived themselves to be significantly more orderly than other people. To the extent, then, that self-perceptions may be accepted as evidence, this aspect of the hypothesis was

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<sup>1</sup>Mean scores and other test results for all of the measures, including the three scales of the MMPI and the four scales of the Bernreuter that were not used in testing the hypotheses, are contained in Tables 34-56, Appendix III.

TABLE 17  
RESULTS OBTAINED IN TESTING HYPOTHESIS 1

| Measures Used                | N <sup>a</sup> |      | χ <sup>2</sup> | t    | p                  | Sig. <sup>b</sup> |
|------------------------------|----------------|------|----------------|------|--------------------|-------------------|
|                              | Exp.           | Nor. |                |      |                    |                   |
| Men                          |                |      |                |      |                    |                   |
| Questionnaire<br>7B, 4 . . . | 114            | ..   | 8.98           | ..   | <.001              | ***               |
| Pt scale,<br>MMPI . . .      | 50             | 195  | ...            | 4.42 | <.001 <sup>c</sup> | ***               |
| Women                        |                |      |                |      |                    |                   |
| Questionnaire<br>7B, 4 . . . | 371            | ..   | 28.00          | ..   | <.001              | ***               |
| Pt scale,<br>MMPI . . .      | 62             | 152  | ...            | 1.07 | ...                | ..                |

<sup>a</sup>In Tables 17-23 in this chapter, the N shown under "Exp." is for the experimental group and that under "Nor.," for the normative group.

<sup>b</sup>In Tables 17-24, under the abbreviation "Sig.," \* indicates the probability of the difference as being due to chance is 2-5 times in 100 cases; \*\*, 1 in 100; and \*\*\*, 1 in 1000.

<sup>c</sup>In a direction opposite from that predicted.

strongly supported. On the second measure, the Psychasthenia scale of the MMPI (Pt), used in this instance largely as a measure of compulsive behavior, the scores of the men were shown to be significantly lower than the scores of the normative men, while those of the women were found to be no different from the scores of the normative group women; consequently, with respect to compulsivity, the hypothesis was not supported.

#### Hypothesis 2

Statement.--The librarian is more conscientious, scrupulous and conforming, and less innovative and creative than people in general.

Results.--As shown in Table 18, six measures were used in testing the second hypothesis. The first of these was Question 7B, 5, of the questionnaire, where students were asked to rate themselves, in comparison with people in general, on the trait of introspection. It may be noted from the table that both men and women perceived themselves to be significantly more introspective than other people; thus, assuming the validity of the measure, this part of the hypothesis was strongly confirmed.

The next two measures were employed primarily as measures of conscientiousness, scrupulousness and conformity. On the first of these, the Responsibility scale of the MMPI (Re), the men were shown to have a sense of responsibility to a significantly greater degree than the normative men; on the other hand, the women were found not to differ from the normative group women. On the Religious Value scale of the Study of Values, the men were shown as being not different from the normative group men, while the women scored significantly higher on the scale than did the normative group women. Thus, it appears that with respect to the three traits, the hypothesis was only partially supported.

The next two measures, the Hypomania scale of the MMPI (Ma) and the Psychopathic Deviate scale of the MMPI (Pd), were employed as tests both of conformity and of innovation and creativity. On the first of these, both men and women were found to score significantly lower than the normative groups, which signifies that with respect to the traits being measured by the scale, the hypothesis was strongly conformed. On the Pd scale, however, it was confirmed, again with regard to the traits of conformity, innovation and creativity, only in the case of the men who scored significantly lower than the men in the normative group.

On the last measure used, Question 7B, 6, of the questionnaire where

TABLE 18

RESULTS OBTAINED IN TESTING HYPOTHESIS 2

| Measures Used | N    |      | $\chi^2$ | t    | p                  | Sig. |
|---------------|------|------|----------|------|--------------------|------|
|               | Exp. | Nor. |          |      |                    |      |
| Men           |      |      |          |      |                    |      |
| Questionnaire |      |      |          |      |                    |      |
| 7B, 5 . .     | 114  | ..   | 37.00    | ..   | <.001              | ***  |
| Re scale,     |      |      |          |      |                    |      |
| MMPI . . .    | 50   | 46   | ..       | 2.48 | <.01               | **   |
| Religious     |      |      |          |      |                    |      |
| Value . .     | 88   | 1163 | ..       | 1.43 | ..                 | ..   |
| Ma scale,     |      |      |          |      |                    |      |
| MMPI . . .    | 50   | 195  | ..       | 2.85 | <.01               | **   |
| Pd scale,     |      |      |          |      |                    |      |
| MMPI . . .    | 50   | 195  | ..       | 4.14 | <.001              | ***  |
| Questionnaire |      |      |          |      |                    |      |
| 7B, 6 . .     | 114  | ..   | 12.66    | ..   | <.001 <sup>a</sup> | ***  |
| Women         |      |      |          |      |                    |      |
| Questionnaire |      |      |          |      |                    |      |
| 7B, 5 . .     | 371  | ..   | 146.00   | ..   | <.001              | ***  |
| Re scale,     |      |      |          |      |                    |      |
| MMPI . . .    | 62   | 37   | ..       | .22  | ..                 | ..   |
| Religious     |      |      |          |      |                    |      |
| Value . .     | 305  | 1592 | ..       | 5.77 | <.001              | ***  |
| Ma scale,     |      |      |          |      |                    |      |
| MMPI . . .    | 62   | 152  | ..       | 3.45 | <.001              | ***  |
| Pd scale,     |      |      |          |      |                    |      |
| MMPI . . .    | 62   | 152  | ..       | .97  | ..                 | ..   |
| Questionnaire |      |      |          |      |                    |      |
| 7B, 6 . .     | 371  | ..   | .88      | ..   | ..                 | ..   |

<sup>a</sup>In a direction opposite from that predicted: the men perceived themselves as being more innovative and creative than people in general.

students were requested to rate themselves, in comparison with people in general, on the qualities of innovation and creativity, the hypothesis was not supported insofar as the two associated traits are concerned.

## Hypothesis 3

Statement.--The librarian is more deferential, submissive, and respectful of authority than people in general.

Results.--As indicated in Table 19, the three measures used in this hypothesis were Question 7B, 2, which requested students to rate themselves, again in comparison with other people, on the trait, deference to authority;

TABLE 19

RESULTS OBTAINED IN TESTING HYPOTHESIS 3

| Measures Used | N    |      | $\chi^2$ | t    | p   | Sig. |
|---------------|------|------|----------|------|-----|------|
|               | Exp. | Nor. |          |      |     |      |
| Men           |      |      |          |      |     |      |
| Questionnaire |      |      |          |      |     |      |
| 7B, 2 . . . . | 114  | ..   | .04      | ..   | ..  | ..   |
| A-S Reaction  | 104  | 2578 | ..       | 1.43 | .07 | ..   |
| Do scale,     |      |      |          |      |     |      |
| MMPI . . . .  | 50   | 46   | ..       | .31  | ..  | ..   |
| Women         |      |      |          |      |     |      |
| Questionnaire |      |      |          |      |     |      |
| 7B, 2 . . . . | 371  | ..   | .08      | ..   | ..  | ..   |
| A-S Reaction  | 316  | 600  | ..       | 1.40 | .09 | ..   |
| Do scale,     |      |      |          |      |     |      |
| MMPI . . . .  | 62   | 37   | ..       | .48  | ..  | ..   |

the A-S Reaction Study, a measure of dominance-submission; and the Dominance scale of the MMPI (Do). On the first measure, the students perceived themselves as being neither more nor less deferential than other people; hence, assuming the validity of self-perceptions, this part of the hypothesis received no support from the measure that was used. On the second measure, only a slight tendency toward greater submissiveness was found, this tendency being perhaps of borderline significance in the case of the men. From this evidence it cannot be said that the hypothesis statement relative to submissiveness was



substantiated. Results obtained from the third measure, again with respect to the trait of submissiveness, did not support the hypothesis since neither the men nor the women were shown to be less dominant than the normative groups.

#### Hypothesis 4

Statement.--The librarian is more self-contained, self-sufficient, preoccupied with subjective feelings, introspective, introverted, and nonsocial than people in general.

Results.--As shown in Table 20, five measures were used in testing the fourth hypothesis. On the first of these, Question 7B, 1, of the questionnaire, a self-rating on the trait of introspection, it may be noted that both men and women perceived themselves to be introspective to a significantly high degree. If the validity of the measure can be assumed, it would appear then that, with respect to this particular trait, which is associated with preoccupation with subjective feelings and to some extent with introversion, also, the hypothesis was confirmed.

On the second measure, the Self-sufficiency scale of the Bernreuter (B2-S), the women were shown to be significantly more self-sufficient than the normative group women; in the case of the men, however, the tendency toward greater self-sufficiency, as shown by test results, can be considered to have borderline significance only. Thus, with respect to self-sufficiency, it may be said that the hypothesis was supported in the case of the women, but not in the case of the men.

On the third measure, the Sociability scale of the Bernreuter (B2-S), both men and women were shown (according to the definition of this measure), to be significantly more non-social than the normative groups.

On the fourth measure, the Social Introversion scale of the MMPI (S1), neither the men nor the women were found to be more socially introverted than

TABLE 20

RESULTS OBTAINED IN TESTING HYPOTHESIS 4

| Measures Used                  | N    |      | $\chi^2$ | t    | p     | Sig. |
|--------------------------------|------|------|----------|------|-------|------|
|                                | Exp. | Nor. |          |      |       |      |
| Men                            |      |      |          |      |       |      |
| Questionnaire<br>TB, 1 . . . . | 114  | ..   | 26.52    | ..   | <.001 | ***  |
| R2-S,<br>Bernreuter            | 83   | 658  | ..       | 1.62 | <.05  | ..   |
| F2-S,<br>Bernreuter            | 83   | 273  | ..       | 4.11 | <.001 | ***  |
| S1 scale,<br>MMPI . . . .      | 50   | 46   | ..       | .20  | ..    | ..   |
| Social Value                   | 88   | 1163 | ..       | 2.52 | <.02  | *    |
| Women                          |      |      |          |      |       |      |
| Questionnaire<br>TB, 1 . . . . | 371  | ..   | 78.80    | ..   | <.001 | ***  |
| R2-S,<br>Bernreuter            | 385  | 391  | ..       | 2.51 | <.02  | *    |
| F2-S,<br>Bernreuter            | 385  | 144  | ..       | 8.79 | <.001 | ***  |
| S1 scale,<br>MMPI . . . .      | 62   | 37   | ..       | .05  | ..    | ..   |
| Social Value                   | 305  | 1592 | ..       | 1.97 | <.05  | *    |

were the normative group men and women. On this measure, therefore, the "non-social" part of the hypothesis received no confirmation.

On the last measure, the Social Value scale of the Study of Values, both men and women were shown to be significantly stronger in this value than were the normative groups. On this measure, then, the hypothesis statement referring to the non-social nature of librarians was not substantiated.

#### Hypothesis 5

Statement.--The librarian is more anxious and less self-confident than people in general.

**Results.**--Four measures were used in testing the fifth hypothesis: the Anxiety Index, the Depression scale (D)--here used both as a measure of anxiety and of self-confidence; the Hysteria scale (Hy), also used as a test of anxiety and self-confidence; the Question 7B, 3, of the questionnaire, in which students were asked to rate themselves, in comparison with other people, on the trait of self-confidence.

Results of the testing, given in Table 21, show that the hypothesis was supported by none of the measures used. It should be noted, however,

TABLE 21

## RESULTS OBTAINED IN TESTING HYPOTHESIS 5

| Measures Used              | N    |      | $\chi^2$ | t     | p                  | Sig. |
|----------------------------|------|------|----------|-------|--------------------|------|
|                            | Exp. | Nor. |          |       |                    |      |
| Men                        |      |      |          |       |                    |      |
| AI scale,<br>MMPI . . .    | 50   | 46   | . .      | 1.54  | (.20) <sup>a</sup> | . .  |
| D scale,<br>MMPI . . .     | 50   | 195  | . .      | 1.43  | (.20) <sup>a</sup> | . .  |
| Hy scale,<br>MMPI . . .    | 50   | 195  | . .      | .10   | . . .              | . .  |
| Questionnaire<br>7B, 3 . . | 114  | . .  | .42      | . . . | . . .              | . .  |
| Women                      |      |      |          |       |                    |      |
| AI scale,<br>MMPI . . .    | 62   | 37   | . .      | 1.21  | . . .              | . .  |
| D scale,<br>MMPI . . .     | 62   | 152  | . .      | .86   | . . .              | . .  |
| Hy scale,<br>MMPI . . .    | 62   | 152  | . .      | 1.82  | (.05) <sup>a</sup> | *    |
| Questionnaire<br>7B, 3 . . | 371  | . .  | 2.59     | . .   | (.10)              | . .  |

<sup>a</sup>In a direction opposite to that predicted.

that there was a slight tendency for the men to be more depressed than men in the normative group which may indicate an inclination toward lack of self-

confidence; too, on the last measure, there was a tendency for the women to consider themselves as being less self-confident than other people. In neither instance, however, was the tendency sufficiently strong as to attain statistical significance.

#### Hypothesis 6

Statement.--The librarian is more neurotic than people in general.

Results.--As shown in Table 22, the hypothesis received no support from the one measure used in testing it, the Neuroticism scale of the MMPI (Ne).

TABLE 22

RESULTS OBTAINED IN TESTING HYPOTHESIS 6

| Measures<br>Used  | Men  |      |     |    |      | Women |      |     |    |      |
|-------------------|------|------|-----|----|------|-------|------|-----|----|------|
|                   | N    |      | t   | p  | Sig. | N     |      | t   | p  | Sig. |
|                   | Exp. | Nor. |     |    |      | Exp.  | Nor. |     |    |      |
| Ne scale,<br>MMPI | 30   | 46   | .77 | .. | ..   | 62    | 37   | .38 | .. | ..   |

#### Hypothesis 7

Statement.--The male librarian is more feminine in his interests than men in general.

Results.--The two measures used in testing the hypothesis, the Interest scale of the MMPI (Mr) and the Terman-Miles Attitude-Interest Analysis Test, are both designed to measure masculinity-femininity of interests. It will be noted from the results shown in Table 23 that the hypothesis received strong support from both of the measures that were employed in testing it.

TABLE 23

## RESULTS OBTAINED IN TESTING HYPOTHESIS 7

| Measures Used                   | Men  |      |      |       |      |
|---------------------------------|------|------|------|-------|------|
|                                 | N    |      | t    | p     | Sig. |
|                                 | Exp. | Nor. |      |       |      |
| M scale, MMPI                   | 50   | 195  | 6.31 | <.001 | ***  |
| Attitude-Interest Analysis Test | 88   | 368  | 5.23 | <.001 | ***  |

## Hypothesis 8

Statement.--The value system of the librarian is characterized by over-emphasis on the theoretical and aesthetic values, and by under-emphasis on the economic and political values.

Results.--Four scales of the Allport-Vernon Study of Values were used in testing the hypothesis: the Theoretical, the Aesthetic, the Economic, and the Political.

TABLE 24

## RESULTS OBTAINED IN TESTING HYPOTHESIS 8

| Measures Used   | Men <sup>a</sup> |       |      | Women <sup>b</sup> |       |      |
|-----------------|------------------|-------|------|--------------------|-------|------|
|                 | t                | p     | Sig. | t                  | p     | Sig. |
| Study of Values |                  |       |      |                    |       |      |
| Theoretical     | 3.83             | <.001 | ***  | 1.54               | <.07  | . .  |
| Aesthetic       | 7.31             | <.001 | ***  | 1.23               | . . . | . .  |
| Economic        | 8.77             | <.001 | ***  | 8.10               | <.001 |      |
| Political       | 7.90             | <.001 | ***  | 7.44               | <.001 | ***  |

<sup>a</sup>N for the experimental group was 88; for the normative group, 1163.

<sup>b</sup>N for the experimental group was 305; for the normative group, 1592.

As indicated in Table 24, the hypothesis was strongly supported for the men by all of the measures employed. In the case of the women, it was also strongly supported by the last two measures; very slightly supported by the first measure; and not supported by the second measure.

## CHAPTER V

### DISCUSSION OF RESULTS

#### General Observations

Before entering into a discussion of results obtained in testing the hypotheses, a few general observations appear to be indicated. The first of these refers to the lack of comparable data, the second to the three main test measures employed in the study, and the third to the subjects in the experimental group.

#### Lack of Comparable Studies

As noted in Chapter I, how little is known in a systematic way of the personality of librarians was accentuated when data were sought with which to compare findings of the present study. In the majority of psychological studies, it is likely that investigators will have recourse to a considerable body of experimental literature with which to check and compare their findings. In this case, only one brief section in one study, that of Bryan's The Public Librarian,<sup>1</sup> seemed to have bearing on the present study; and even here, the subjects were mature, practicing librarians, not library school students; too, the one personality inventory used was not one of the several employed in this study. Despite dissimilarity between the two, however, reference will be made from time to time in the discussion to this one study for the purpose of noting community of traits in prospective and practicing librarians. Reference will

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<sup>1</sup>Bryan, op. cit., pp. 39-44.

also be made to the librarian stereotype that was discussed in the first chapter for a similar reason, even though it is recognized that the stereotype was not drawn from prospective librarians, but from those already engaged in the practice of the profession. One result of the lack of comparable studies is that the discussion of findings is necessarily somewhat more restricted than might otherwise have been the case.

#### Test Measures

The Minnesota Multiphasic Personality Inventory.--Several studies have revealed that the characteristic profile of college students on the MMPI differs rather markedly from that of adults in the same age groups in the general population. For example, Goodstein,<sup>1</sup> in a study dealing with regional differences in the scores of college men and in comparing his findings with those of Black<sup>2</sup> for college women, reported that the men were more deviant in their responses on the MMPI than the general adult population used in standardizing the instrument. Peaks on the Kf, Ma, Sc, and Pt scales indicated that college men are more feminine in their interests, less inhibited and more active, and tend to worry more than non-college men in the general population.

Except for Pa, where the peaks almost coincide, the most noticeable difference between men and women, it was reported, are found on the Kf, Ma, Pt, D, and Hs scales. Women appear to be more defensive against psychological weaknesses as shown by their higher scores on the K scale; and, while college

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<sup>1</sup>L. D. Goodstein, "Regional Differences in MMPI Responses among Male College Students," Basic Readings on the MMPI in Psychology and Medicine, ed. George Schlager Welsh and W. Grant Dahlstrom (Minneapolis: University of Minnesota Press, 1956), pp. 574-78.

<sup>2</sup>J. D. Black, "MMPI Results for Fifteen Groups of Female College Students," Basic Readings on the MMPI in Psychology and Medicine, ed. George Schlager Welsh and W. Grant Dahlstrom (Minneapolis: University of Minnesota Press, 1956), pp. 562-73.



men are considerably more feminine in their interests than men in general, college women are not more masculine than women in general.

Since college men normally score higher on the MMPI than non-college men and since, also, college men are more deviant in their responses than are college women, it might be assumed that the differences found for the experimental group were due to these factors. Since, however, the experimental group was compared with typical college students similar with respect to age, sex, and class standing and not with the general population, the differences that were found could not have been due solely to the above two factors.

Studies have also revealed that characteristic differences exist on the MMPI scales between groups of college students majoring in the different subject areas such as literature, history, art, music, etc., and also in such professional fields as engineering, law and medicine. For instance, Blum,<sup>1</sup> Brown,<sup>2</sup> Redlo,<sup>3</sup> and Sternberg,<sup>4</sup> using the MMPI with various subject major groups reported characteristic tendencies and differences on the several scales. Since a very high percentage of students in the experimental group in this study were drawn from literature, languages and the social sciences, fairly close correspondence between their scores and the scores of similar groups reported on in other studies might reasonably have been expected. However, this was generally not the case; for example, Sternberg reported that his English group scored higher than his other eight groups on the Hy, Pd, Pa, Pt and Sc scales. The experimental group, with a high concentration of English

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<sup>1</sup>Lawrence P. Blum, "A Comparative Study of Students Preparing for Five Selected Professions Including Teaching," Journal of Experimental Education, XVI (September, 1947), 31-65.

<sup>2</sup>H. W. Brown, "Similarities and Differences in College Populations on the MMPI," Journal of Applied Psychology, XXXII (October, 1946), 541-49.

<sup>3</sup>Redlo, op. cit.

<sup>4</sup>Sternberg, op. cit.

majors, either scored no differently on these scales or in several cases scored significantly lower than the normative group; the normative group, it may be recalled, was made up of students from a large number of different subject major fields. Thus, the fact of undergraduate subject major specialization does not appear satisfactorily to account for the differences found on this test between the experimental and normative groups.

Study of Values.--In the case of the Study of Values, the second main inventory used in the study, the test authors in their Manual reported distinctive differences between college men and women on the six scales of the test.<sup>1</sup> Women are shown to be stronger in the aesthetic, the social, and the religious values, and conversely, men are shown to be stronger in the theoretical, the economic, and the political values. The original findings of the test authors have since been amply verified.<sup>2</sup>

As was the case with the MMPI, numerous studies have also shown distinctive differences on the Study of Values between groups of students majoring in different subject areas and also between those with expressed interest in or already in preparation for the various professions.<sup>3</sup> Engineering students and students in the natural sciences, for instance, normally score high on the theoretical scale and low on the aesthetic; art and literature students, on the other hand, score low on the theoretical and high on the aesthetic.

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<sup>1</sup>Gordon W. Allport, Philip E. Vernon and Gardner Lindzey, Study of Values, Manual (Rev. ed.; New York: Houghton Mifflin Company, 1951), pp. 8-10.

<sup>2</sup>Dukes, op. cit., p. 26.

<sup>3</sup>Paul L. Whitley, "A Study of the Allport-Vernon Test for Personal Values," Journal of Abnormal and Social Psychology, XXVIII (April-June, 1933), 6-16; Daniel Harris, "Group Differences in Values within a University," Journal of Abnormal and Social Psychology, XXIX (April-June, 1934), 95-102; Benjamin R. Schaeffer, "The Validity and Utility of the Allport-Vernon Study of Values Test," Journal of Abnormal and Social Psychology, XXX (January-March, 1936), 419-22; Duffy, op. cit.; Sternberg, op. cit.

While certain anticipated trends in the scores of men and women in the experimental group were revealed by test scores, these trends and differences were not always in accord with what might have been expected. For this test, as was true in the case of the MMPI, there was a preponderance of literature and language students in the experimental group; and, while scores on the aesthetic scale were high, so also were scores on the theoretical scale--exceptionally high in the case of the men. The differences revealed by scores on this test, therefore, probably could not have been due solely to sex or to the fact of concentration in certain subject areas.

The questionnaire.--It will be recalled that students were requested to rate themselves, in comparison with other people, as being orderly, conscientious, innovative and creative, self-confident, introspective, and deferential to authority.<sup>1</sup> Certain differences between questionnaire items and items on the inventories, especially the MMPI, should be noted here.

The MMPI has built-in scales to gauge the extent to which subjects are favoring themselves by answering "good." By means of these scales, the validity of responses can be assessed and indicated corrections made for scores on the various scales. The validity of the questionnaire responses, on the other hand, could not be tested in this manner. Nevertheless, the questionnaire served a useful purpose in that it provided the subjects with an opportunity for more direct identification and projection than was the case with inventory items. Subjects were all librarians or prospective librarians and the questionnaire items related directly to librarians; the MMPI items, on the other hand, had no direct or obvious connection with librarians. There was no other way to

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<sup>1</sup>Students were also requested to rate other librarians on the same six traits and, further, to rate twelve common personality traits with respect to their usefulness to the librarian. Results of these ratings are shown in Tables 30-32 in Appendix III.

secure this information than to ask directly for it. Truman Kelley has pointed out, "If facts of a unique nature, known only to specific individuals, are desired, then an oral or written questionnaire addressed to the persons knowing these facts is the only possible method of approach."<sup>1</sup>

In a sense, it might be considered that the students actually were not rating themselves on questionnaire items in some instances, but rather that they were displacing attitudes or feelings from themselves onto other librarians. In the immediately preceding question, they were asked to rate other librarians on the same traits; the close proximity of this question furnished a frame of reference as well as a stimulus for both identification and projection.

What a person perceives, according to MacKinnon, depends on what he needs.<sup>2</sup> Characteristically, a person identifies with "good" qualities in other people, but is inclined to project "bad" qualities of himself onto others. Identification, resulting from introjection, on the positive side may furnish one with a feeling of security or escape from anxiety.<sup>3</sup> From responses to questionnaire items, a clear tendency on the part of students was noted for them to "identify" with traits having a favorable connotation or positive valence, and to "project" in the case of traits having an unfavorable meaning tone, such as the trait of deference to authority; and, in the case of traits having a somewhat neutral tone, for them to respond with neutral ratings. The lack of statistical precision and validity in questionnaire data, it was felt, was to some extent compensated by the directness and

<sup>1</sup>T. L. Kelley, Scientific Method (Columbus, Ohio: Ohio State University Press, 1932), p. 35.

<sup>2</sup>Donald W. MacKinnon, "Personality," Annual Review of Psychology, II (Stanford, Calif.: Annual Reviews, Inc., 1951), 113.

<sup>3</sup>Symonds, op. cit., pp. 270-335.

the clear applicability of the questions, as well as by the opportunity provided by the responses for a better understanding of values and motives.

#### The Experimental Group

Test data revealed greater differences between the men in the experimental group and those in the normative group than between the corresponding two groups of women. This is not to say that there were no differences between the two groups of women, but rather that the differences were simply not so pronounced. The scores of the women tended to deviate less from test norms, hence there was less likelihood of there occurring statistically significant differences between mean scores. The less inhibited nature of the men, on the other hand, was reflected in the more pronounced variability of their test scores.

In connection with the experimental group men and women, another factor should be noted also. This has to do with the intensity of motivation for securing professional training. According to Darley, the "present evidence would indicate that women's occupations are less channelized and less professionally intense than are men's."<sup>1</sup> It is recognized that many women (and this probably would be particularly true in the case of library work and teaching) seek training with the expectation of practicing the profession for a comparatively brief period, or on a somewhat irregular basis. A chief goal for them is marriage and thereafter their concern will be very largely with the home.<sup>2</sup> It is true that many of them work regularly or intermittently while their children are growing up, and on a more permanent basis later on; it is true, also, that a

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<sup>1</sup>John G. Darley, Clinical Aspects and Interpretation of the Strong Vocational Interest Blank (New York: Psychological Corporation, 1941), p. 13.

<sup>2</sup>In Table 3, Chapter III, it was shown that close to three-fourths of the women in the experimental group fell in the 20-24 and 25-29 age groups, periods when marriage for women can most probably be anticipated.

high percentage of the women in the experimental group in this study will remain single. Nonetheless, their motivation in preparing for entry into the profession probably would be different from that of the men who at the time were aware of the fact that they were dependent on the profession for a livelihood for themselves and their families. The difference in motivation was probably reflected in the more unequivocal responses of the men to test questions.

#### The Hypotheses

With one exception, several associated terms, all related to one central idea, were used in stating the hypotheses. For example, in Hypothesis 1, the terms "orderly," "meticulous," and "neat" are all associated with compulsive and obsessional behavior; and, with the exception of Hypothesis 6, more than one measure was used to test each of the hypotheses. In consequence of using several measures, it was in some instances possible to deduce the presence or absence of a trait tendency from findings from a measure that was not used directly in testing for the particular trait. Perhaps it should also be noted that a negative finding from one measure does not necessarily cancel out a positive finding from another measure. In the first place, they may be measuring different traits or different aspects of the same trait; in the second place, traits may have both qualitative and quantitative characteristics, yet both are relative and at this time hardly susceptible of precise measurement in a mathematical sense. Conflicting evidence attests not only to the need for refinement in the definition of terms and for improvement in the measuring instruments, but also to the complexity of the problem involved and the need for additional research.

## Hypothesis 1

It was hypothesized that the librarian is more orderly, meticulous, neat, and compulsive than people in general. Evidence from the first measure used, Questionnaire Item 7B, 4, showed that students perceived themselves to be more orderly than other people. Since the term, "orderliness," carries with it the related meanings of "meticulousness" and "neatness," it may reasonably be assumed that the subjects would also agree that they were more meticulous and neat than people in general. To the extent, then, that self-perceptions may be accepted as valid evidence, it would appear that this part of the hypothesis was supported by the first measure used in testing it.

On the second measure, the Pt (Psychastenia) scale of the MMPI, the men scored significantly lower than the men in the normative group, while the women scored as being the same as the normative women with respect to this particular test measure. The lower score of the men would indicate that they are less compulsive than the normative men as exhibited in such tendencies as orderliness, over-anxiousness, vacillation, lack of self-confidence, and generally ineffectual behavior. In view of the known tendency of college women to deviate less on this scale than college men, it was not surprising that no significant difference was found between the scores of the two groups of women.

A possible explanation of the low scores of the men on this scale may be that the mechanism of orderliness--a trait admittedly possessed by them--was functioning effectively as a defense against anxiety. The lack of evidence of other indications of compulsivity, as shown by the scores on the Pt scale, would thus be largely accounted for.

The stereotype pictures the librarian to be obsessively orderly, so concerned with minutiae, so distracted and inclined toward worry as to be indecisive and very largely ineffectual. Evidence from the measures here used

would indicate that the picture is very much overdrawn, at least so far as the prospective librarian is concerned; the extent to which the prospective librarian's defense against anxiety will continue to serve him well when he gets on the job is not known.

#### Hypothesis 2

Six measures were used in testing the hypothesis that the librarian is more conscientious, scrupulous, conforming, and less innovative and creative than other people. The first of these was Question 7B, Item 5 of the questionnaire, where students were asked to rate themselves, in comparison with other people, as being conscientious to a greater, the same, or a less degree. The second measure was the Responsibility scale (Re) of the MMPI; the third, the Religious Value scale of the Study of Values; the fourth, the Hypomania scale (Ma); the fifth, the Psychopathic Deviate scale (Pd); and the sixth, Questionnaire item 7B, 6, which asked students to rate themselves, in comparison with other people, on the traits of innovation and creativity.

On the first measure both men and women perceived themselves to be more conscientious than people in general. Since conscientiousness is very closely allied with scrupulousness, it may be supposed that the subjects are also more scrupulous than people in general. The conscientious, scrupulous person, according to Eysenck, is characterized by obsessional carefulness, strong self-control, and freedom from instability and emotional thinking.<sup>1</sup>

On the Responsibility scale (Re), the scores of the men were significantly higher than those of the normative men; the scores of the women, on the other hand, were not different from those of the normative group women. The difference between the scores of the experimental group men and women

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<sup>1</sup>E. J. Eysenck, The Structure of Human Personality (New York: John Wiley & Sons, 1953), p. 102.



would seem to be reasonable in view of the difference between the anticipated roles of the groups. As was noted in Chapter III, exactly half of the men expressed preference for administrative and supervisory work, as opposed to only 7.8 per cent of the women.<sup>1</sup>

On the third measure, the Religious Values scale, the scores of the experimental group men did not differ from those of the normative group men. The scores of the experimental group women, however, were significantly higher than those of the normative group women. Strong religious interest, as many writers have pointed out, represents a defense against anxiety; further, according to Symonds, religious belief and affiliation is one of the many superego formations by means of which a culture is perpetuated by being passed on from one generation to another. Most individuals who are thus bound by their superegos do not possess the "capacity for free and elastic adaptation."<sup>2</sup> The high scores of the women, therefore, strongly suggest conservatism, conformity, and rigidity in thought and action.

On the fourth measure, the Ma scale, both men and women scored significantly lower than the normative groups. A high score on this scale, it may be recalled, is characteristic of the out-going, extratensive person, enthusiastic, aggressive, energetic, enterprising and somewhat inclined toward disregard of social conventions. A low score, on the other hand, would be expected from the seclusive, quiet, conventional person who is lacking in enthusiasm, drive, and strong motivational forces. A high score is related to over-production in thought and action in the same way that a low score is related to under-production.

On the fifth measure, the Pd scale, the men scored significantly lower

<sup>1</sup>See Table 16, p. 68.

<sup>2</sup>Symonds, op. cit., pp. 292-93.

than the men in the normative group; and again the women scored about the same as the women in the normative group. An elevated score on the Pd scale is characteristic of the non-conformer, the individualist, the adventurous person, liberal--if not radical--in his views, who is tolerant of non-conformity in others and who is quite receptive to change. The low score of the experimental group men, then, would appear to have considerable significance since it suggests that the librarian is a very conforming and conservative person, somewhat rigid in attitudes and behavior, somewhat defensive, and averse to change.

On the sixth measure, the Questionnaire item relating to innovation and creativity, the men perceived themselves to be more innovative and creative than other people--a response that appears opposed to their low scores on the Ma and Pd scales. At the same time, however, the reactions of the men to this question would seem reasonable since to admit to being less original, less imaginative, less receptive to new ideas and to change would place them in an unfavorable position. The question, then, must have represented to them something of a threat to the ego; consequently, their more positive identification with the trait, i.e. as being more innovative and creative, would seem to be a defense against the threat. At any rate, the low scores on the Ma and Pd scales would doubtless tend to have a neutralizing effect on their contention. The women, again sticking to the middle of the road, reported that they were like other women with respect to these two qualities.

Here, then, is evidence of conservatism, conformity, lack of productivity in bold, imaginative, creative, vigorous thought and action. Conformity, with its attendant qualities and characteristics, is clearly a defense against anxiety and the threat of anxiety. Maintaining the status quo represents safety, security, freedom from the threats that are implicit in change, in the novel,

the unusual, the radical, the conspicuous modes of action and thinking. The more or less fixed beliefs of the conformist tend to ward off or neutralize the emotional pressure of aggressive drive tendencies and thus help to master anxiety.<sup>1</sup> From the evidence that has been presented, it seems certain that the librarian makes use of the mechanisms of conservatism, conformity, and passivity in emotional adaptation to a rather exceptional degree.

In Chapter I, it was noted that in the stereotype, librarians are commonly perceived as "uplifters" and "good" people. At the same time, though, they are rather severely criticized for being too immersed in their work, too conscientious, and so conforming as to render them people without positive opinions, neutral and colorless, lacking in verve, imagination and vigor, and unsympathetic to change. The evidence from the several measures used with this hypothesis would lend considerable support to this conception of the librarian, at least insofar as the prospective librarian is concerned. Whether these qualities are intensified in the practice of the profession later would need to be tested.

#### Hypothesis 3

The three measures used in testing the hypothesis that the librarian is overly deferential, submissive to authority, and respectful to it were the Questionnaire item, 7B, 2, relating to deference; the A-S Reaction study, a test of ascendance-submission; and the Dominance scale of the MFI (Do).

On the first measure, neither the men nor the women perceived themselves as being either more or less deferential than people in general. On the second measure, there was only a slight tendency for the experimental group to score as less dominant than the normative group and on the third

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<sup>1</sup>Ibid., p. 182.

measure, the scores of the experimental group were not significantly different from the scores of the other group.

The results from the three measures, then, furnish little evidence that librarians are more submissive and deferential than other people. At the same time, the very fact that they showed, on these measures, as being no different from the normative group may be considered to assume some additional meaning in view of their scores on the Ma and Pd scales used in testing the previous hypothesis. On these two scales, they were shown seemingly to be lacking in originality and independence of judgment; if it is true, as Barron believes, that these two qualities are positively related to self-assertiveness,<sup>1</sup> it may be reasoned that they perhaps are somewhat more submissive and deferential to authority than the evidence from the test measures used would signify. Too, the high scores on the two tests of masculinity-femininity used with Hypothesis 7, lend further support, in the case of the men, to the belief that librarians are not dominant persons.

In connection with the traits of dominance and submissiveness, it is of interest to note that Bryan found both men and women in her study of public librarians to score below average on the A scale (ascendancy in social situations, as opposed to submissiveness; leadership qualities) of the Guilford-Martin Inventory of Factors GAMIN. She summarized her findings as follows:

We may conclude, therefore, that professional librarians, especially men, show less than average ascendancy in social situations, greater submissiveness, and less dominant leadership qualities than the average university student.<sup>2</sup>

On the basis of the evidence from the three measures used in testing the hypothesis, at least so far as the library school student is concerned, it

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<sup>1</sup>Frank Barron, "The Disposition toward Originality," Journal of Abnormal and Social Psychology, LI (November, 1955), 478-85.

<sup>2</sup>Bryan, op. cit., pp. 41-42.

cannot be deduced that the librarian is as "spineless and non-aggressive" as the stereotype would have him. At the same time, it seems quite clear that the librarian is not an overly dominant person.

#### Hypothesis 4

Five measures were employed in testing the hypothesis that the librarian is more self-contained, self-sufficient, preoccupied with subjective feelings, introspective, introverted, and non-social than people in general. The five measures were these: Question 7B, 1, relating to introspection; the B2-S (Self-sufficiency) scale of the Bernreuter; the F2-S (Sociability) scale of the Bernreuter; the S1 (Social Introversion) scale of the MMPI; and the Social Value scale of the Study of Values.

On the first measure, the experimental group perceived themselves to be introspective to a marked degree. The second measure revealed that while the women were significantly self-sufficient, in the men this trait was much less pronounced. On the third measure, both the men and the women in the experimental group were shown to be significantly more non-social than the men and women in the normative group. On the fourth measure, the S1 scale, neither the men nor the women were shown to be any more socially introverted than the normative group men and women. On the fifth measure, both the men and the women were found to be significantly higher on the Social Value than the men and women in the normative group. Findings on the last three measures, then, appear to be somewhat contradictory. A high score on the F2-S scale is said to be characteristic of the person who is "non-social, independent, and solitary;"<sup>1</sup> on the S1 scale, a high score purports to show a "tendency to

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<sup>1</sup>Robert G. Bernreuter, Manual for the Personality Inventory (Stanford University: Stanford University Press, 1935), p. 1.

withdraw from social contact with others,"<sup>1</sup> while a high score on the Social Value scale denotes a broad, socialized and philanthropic interest in people.<sup>2</sup> It may be that the discrepancies have a semantic basis, but without more precise descriptions of the scales than were obtainable from the literature, it is not possible to explain in an entirely satisfactory manner the seeming contradictions. However, it is suggested that if the F2-S scale is actually a measure of what is commonly thought of as "sociability" and gregariousness, while the other two measures have a less restricted meaning, the scores on the three scales may all have validity.

Of the five measures used to test the hypothesis, the first lends strong support to the part of the statement referring to introspection; the second measure seems to indicate a high degree of self-sufficiency on the part of the women and a clear tendency in that direction on the part of the men; and, on the last three measures, the extent of support seems to hinge on the definition of the terms, "social" and "sociability." It is suggested that though the librarian may not be a "sociable" person, he has, nonetheless, an interest in people and in social problems.

Some additional evidence in support of the hypothesis should be noted. In the first hypothesis, it was shown that the librarian is characterized by orderliness, meticulousness, and neatness--all traits that are linked with carefulness, a quality which, according to Eysenck, is characteristic of the introvert; the extravert, he states, is likely to be careless and slapdash in his behavior.<sup>3</sup> Further, on the Ey scale (Table 21) it may be noted that the

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<sup>1</sup>Kathaway and McKinley, Minnesota Multiphasic Personality Inventory, Manual, p. 21.

<sup>2</sup>Allport and Vernon, A Study of Values, Manual of Directions, p. 10.

<sup>3</sup>Eysenck, op. cit., p. 307.

experimental group women scored significantly low. If it is true, as Eysenck thinks, that a high score on this scale is associated with the extravert,<sup>1</sup> then it may be assumed that a low score would be associated with the introvert. On this scale, the men scored no differently from the normative group men from which it may be inferred that they are less inhibited than the women and more outgoing in their interpersonal relations.

In Chapter I, it was noted that in the stereotype, the librarian is thought to be "preoccupied, bookish, introverted, introspective, withdrawn from practical life, and non-social." If it can be assumed that the prospective librarian carries with him into his professional life the same traits he exhibits as a student in preparation for his work, then it would appear that the stereotype is not too unrealistically drawn. A certain amount of exaggeration, of course, may be taken for granted in the stereotype.

#### Hypothesis 5

Four measures were used in testing the hypothesis that the librarian is more anxious and less self-confident than people in general. The first of these was the Anxiety Index, the second, the Depression scale (D), the third, the Hysteria scale (Hy), all of the MMPI; and the Fourth, was Questionnaire Item 7B, 3, relating to self-confidence. On the first measure, the men and women in the experimental group were shown to be no more anxious than men and women in the normative group; in fact, there was a slight tendency for the men to score as less anxious than the normative men. On the second measure, there was no significant difference between the scores of the experimental and normative groups; there was, however, a slight tendency for the experimental group men to score as somewhat more depressed, which may be an indication of a lack

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<sup>1</sup>Ibid., p. 53.

of self-confidence. On the third measure, the experimental group men scored about the same as the normative group men, but the experimental group women scored significantly lower than the normative group women, which, according to the definition of this scale, would indicate a somewhat greater degree of self-confidence. On the last measure, the experimental group perceived themselves to be equally self-confident as people in general. It may be recalled that on the Pt scale used in the first hypothesis the experimental group men scored significantly low which indicates that they are less inclined toward worry than the average graduate student.

The absence of anxiety in the group would seem to mean that both men and women are normally self-confident, or approximately so.

With respect to the findings from this hypothesis, it is of interest to note quite similar findings in the Bryan study. On Factor N (Lack of nervous tension; irritability) of the Guilford-Martin Inventory of Factors GAMIN, Bryan reported that the score of men librarians was higher than average, while that for the women was average. She concluded, therefore, that "on the whole, librarians show a normal degree of nervous tension and irritability, the men appearing to be somewhat more relaxed than the women."<sup>1</sup>

On Factor I, designed to measure inferiority feelings and self-confidence, Bryan reported that "lower than average scores were made by both men and women librarians, who as a group are considerably older, exhibit less self-confidence and greater feelings of inferiority" than college students. She goes on to say that this finding was a reversal of what might have been expected since, according to the test authors, increasingly favorable scores are expected with maturity.<sup>2</sup>

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<sup>1</sup>Bryan, *op. cit.*, p. 42.

<sup>2</sup>*Ibid.*



Evidence from the two studies, then, does not appear to be sufficiently strong to discredit entirely the stereotype of the librarian as a person who is "chronically worried, nervous, and without confidence in himself." At the same time, it would appear that the stereotype is very considerably overdrawn, especially with respect to anxiety and nervous tension.

#### Hypothesis 6

On the one measure used in testing the hypothesis that the librarian is more neurotic than people in general, the Neuroticism scale of the MMPI (Ne), the experimental group men and women were shown to be no more neurotic than the normative group men and women.<sup>1</sup> That this scale may be less a measure of general neuroticism, however, than of manifest anxiety is suggested by the high positive correlation that has been found between it and the Taylor Manifest Anxiety Scale which itself was largely derived from the MMPI.<sup>2</sup> The Taylor scale, too, according to Eriksen and David, has a high positive correlation with the Psychasthenia scale of the MMPI (Pt).<sup>3</sup> On this scale, the experimental group men were shown in Hypothesis 1 to have scored significantly lower than the normative group men. Assuming then that the Ne scale is more nearly a measure of manifest anxiety than of general neuroticism, the finding here would be in accord with evidence so far noted of the lack of undue anxiety in the experimental group.

<sup>1</sup>Since this scale was derived from the "neurotic triad" of the MMPI (Hs--Hypochondriasis; D--Depression; and Hy--Hysteria scales), there was no need to use the three scales in testing the hypothesis.

<sup>2</sup>Wayne H. Holtzman, Allen D. Calvin, and M. E. Bitterman, "New Evidence for the Validity of Taylor's Manifest Anxiety Scale," Journal of Abnormal and Social Psychology, XLVII (October, 1952), 853-54.

<sup>3</sup>Charles W. Eriksen and A. David, "The Meaning and Clinical Validity of the Taylor Manifest Anxiety Scale and the Hysteria-Psychasthenia Scales from the MMPI," Journal of Abnormal and Social Psychology, L (January, 1955), 135-37.

Throughout the discussion, the recurring themes of anxiety and of defenses against anxiety have been quite obvious. Results of the testing seem to show clearly that the librarian is not a highly anxious person, at least in a quantitative way and insofar as anxiety is measurable by the instruments employed. Instead of a blatant, overt type of neuroticism--frequently associated with the term--there appears instead to be the rather clear picture of a group of persons with a well-structured and effectively functioning system of defenses against anxiety. According to this conception, the librarian is not neurotic; instead, he channels off his anxiety by orderly and systematic behavior in his work and by rather strict adherence to conformity and conservatism.

If the foregoing picture of the prospective librarian is a reasonably drawn one, it is not congruent with the stereotype. Whether his anxiety will become more overtly manifested later on can only be conjectured. From the evidence reported by Bryan, however, it would seem that the stereotype is very considerably exaggerated.

#### Hypothesis 7

In Chapter I, it was noted that the public thinks of the librarian as being a woman, not a man; the stereotype is almost entirely a feminine one and it appears to have been largely derived from the public librarian. However, occasional references such as "old maids, male and female," and "Milquetoasts," bear witness to the fact that men, although greatly in the minority, have not gone by unnoticed. Aside from this, there was another consideration in stating the hypothesis that the "Male librarian is more feminine in his interests than men in general." Since one of the most obvious characteristics of American librarianship is its over-feminization, the question naturally arises as to the nature of the men who are seemingly content to engage in a profession in which

they are so greatly outnumbered. Satisfaction in one's work and congeniality with one's professional associates is based to a large extent on community of interests. Because of this it may be reasoned that the interests of men librarians are highly similar to those of women librarians, that is, that their interests are more feminine in nature than are the interests of men in those occupations in which men are in the majority.

The two measures used to test the hypothesis were the Mf (Interest) scale of the MMPI and the Terman-Miles Attitude-Interest Analysis Test. Results from the two measures showed conclusively that men librarians are more feminine in their interests than are men in general. The hypothesis was, therefore, strongly supported.

Earlier in the chapter, the fact was noted that on the Mf scale, college men characteristically score as more feminine in interests than non-college men in the general population. The authors of the second test reported that feminization of interests in men positively correlates with higher education. At the same time, the factor of selectivity at work here could not alone account for the difference between a score of 74.02 on the Mf test for the men in the experimental group and a score of 63.11 for the normative men (where a high score denotes femininity of interests); or for the difference between a score of 29.94 for the first group and a score of 58.90 for the second group (where a low score denotes femininity of interests) on the Terman-Miles test. In connection with the high Mf score on the MMPI, it should be noted that the test authors emphasize that the scale measures femininity of interests and that homosexual activity must not be assumed on the basis of a high score without confirmatory evidence.<sup>1</sup> The same caution is emphasized by the authors of the Attitude-Interest Analysis Test.

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<sup>1</sup>Kathaway and McKinley, Minnesota Multiphasic Inventory, Manual, p. 20.

Daniels and Hunter, in considering elevated scores on the Mf scale reported that

Statistical evidence and protocols seem to indicate that professions of a so-called highly cultured nature require as a fundamental 'work need' a degree of masculinity-femininity pattern approach a 70 T score on the MMPI.<sup>1</sup>

A high degree of scholarship, which by virtue of library school admission requirements is needed by applicants, appears also to be directly related to femininity of interests. According to Terman and Miles,

High scholarship college men are more feminine, low scholarship men more masculine. . . . The interests of high scholarship men are more cultural, those of low scholarship men more mechanical and athletic.<sup>2</sup>

Conclusions similar to the above have been drawn by a number of research workers. Perhaps the most extensive studies of professional men are those of artists, vertebrate paleontologists, biologists, and physical scientists reported on by Roe. She used a number of different test measures, but apparently placed chief reliance on the Rorschach and the Thematic Apperception Test. Roe reported that her subjects were "feminine" in nature, by which she meant "non-aggressive or passive in nature," which she believes is characteristic in our society of the "sensitive, intelligent man who follows more or less intellectual pursuits." She further emphasized that there was no connotation of homosexuality in her use of the term "feminine."<sup>3</sup>

It is of interest to note here that Bryan found the men in her study of public librarians fell within the normal range on the Factor A (Masculinity of attitudes and interests as opposed to femininity). The fact that they

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<sup>1</sup>E. E. Daniels and W. A. Hunter, "MMPI Personality Patterns for Various Occupations," *Journal of Applied Psychology*, XXXIII (December, 1949), 559-65.

<sup>2</sup>Terman and Miles, *Sex and Personality*, p. 121.

<sup>3</sup>Roe, *op. cit.*, p. 381.

scored one step above the midpoint on the scale of 10 where the low point represents extreme femininity and the high point extreme masculinity, however, indicates that they could not be considered to be strongly masculine in attitude and interests. In conclusion, she noted

It appears, therefore, that while men and women librarians as separate groups fall within the normal range for their respective sexes on the masculinity factor, the two groups score sufficiently close together on the scale to insure a rather high degree of congeniality in their attitudes and interests. This community of interests should make good working relations between men and women librarians easy to maintain.<sup>1</sup>

The only explanations that can be offered for the extremely high scores on the two tests are either that the groups were atypical, or that the 'work need' in library work is such as to require an exceptionally highly feminine pattern of interests. Since the subjects were drawn from four schools for the MMPI and from nine schools for the Attitude-Interest Analysis Test, the second of the two reasons seems the more plausible of the two suggested.

#### Hypothesis 8

It was hypothesized that the value system of the librarian is characterized by over-emphasis on the theoretical and the aesthetic values, and by under-emphasis on the economic and the political values. Accordingly, the four appropriate scales of the Allport-Vernon Study of Values were used in testing the hypothesis. As previously noted, the scores on the subtests are relative, not absolute measures; hence, a high score on one of the subtests necessarily results in a lowered score on one or more of the remaining five.

The experimental group men scored significantly high on the theoretical and the aesthetic values, and correspondingly low on the economic and the political values. In the case of the men, therefore, the hypothesis was strongly supported. The women scored significantly low on the economic and

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<sup>1</sup>Bryan, *op. cit.*, p. 42.

the political values, and there was a slight tendency for them to score high on the theoretical value--that is, in comparison with women in the normative group; but on the aesthetic value, their scores, while still high, were not significantly higher than the scores of the normative group women. In the case of the women, then, the hypothesis was only partially confirmed.

Though the social and the religious values were not included in this particular hypothesis, the scores on these scales made by the experimental group men and women will here be reviewed since it is necessary to refer to them in order to compare the total scores on this test with those of other groups. A second reason for mentioning them again is that the cultural and humanitarian factors associated with the social and religious values affect scores on the economic and political values.

As was mentioned at the start of the present chapter, men characteristically score higher on the theoretical, the economic, and the political values than they do on the aesthetic, the social, and the religious values. This normal trend was largely reversed here; the experimental group men scored high on the aesthetic, the theoretical, and the social, and low on the economic, the political, and the religious scales. The scores of the women in the experimental group were somewhat more in accord with known tendencies: high scores on the social and religious and low scores on the economic and the political.

The higher theoretical scores of the men as compared with the scores of the women could be expected; their higher scores on the theoretical scale, as compared with those of the normative group, however, are somewhat puzzling. It might be assumed that an elevated score on this scale would logically follow from "bookish" interests and a reflective and inward-turning nature. Other research studies have not shown this to be the case; "bookish" and literary in-

terests are not necessarily, or even commonly, associated with high theoretical scores. An illustration is found in Sternberg's study of nine groups of male college students, each majoring in a different subject.<sup>1</sup> His English group, which would doubtless be labelled as "bookish" and literary, scored lowest among the nine groups on the theoretical scale. Similar findings for literature majors, both men and women, have been reported by a number of writers.<sup>2</sup> It may be recalled that the undergraduate majors of the experimental group men were, for the most part, in literature and languages and to a lesser extent in history and the social sciences, not in the natural sciences where high scores on this scale are normally found.

Elevated scores on the aesthetic scale ordinarily do not accompany high scores on the theoretical scale. In view of other test findings discussed in this chapter, however, the high scores on the aesthetic value, in the case of both men and women, appear reasonable. In the immediately preceding hypothesis, for instance, interests of the men were shown to be quite feminine, in fact to the extent of being more like the interests of women than of men in general, i.e. oriented more toward the "cultural" than toward the "practical and utilitarian." Further, in Hypothesis 4, evidence was produced to show a strong tendency toward introversion in the group, a tendency which has been reported to be associated with elevated scores on the aesthetic scale.<sup>3</sup>

The test authors furnish in their Manual what appears to be an explanation of the low scores of the men on the economic and political values in

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<sup>1</sup>Sternberg, op. cit.

<sup>2</sup>Schaeffer, op. cit.; Charles L. Stone, "The Personality Factor in Vocational Guidance," Journal of Abnormal and Social Psychology, XXVIII (April-June, 1933), 274-75; Whitley, op. cit.

<sup>3</sup>Donald B. Sisson and Bette Sisson, "Introversion and the Aesthetic Attitude," Journal of General Psychology, XXII (January, 1940), 203-08.

their descriptions of these values. The economic man is "characteristically interested in what is useful. . . . This type is thoroughly 'practical' and 'conforms well to the prevailing stereotype of the average American business man.'<sup>1</sup> The political man, on the other hand, is the person whose primary interest is in power. "Whatever his vocation, he betrays himself as a Machtmenach. Leaders in any field generally have a high power value."<sup>2</sup>

Evidence provided in support of several of the preceding hypotheses would seem to leave little doubt that men librarians are markedly different in their make-up from either that of the 'typical business man' or of the individual strongly motivated by the desire for power. While the librarian may seek security, financial and otherwise, and he may desire a modicum of recognition for his work, he clearly does not possess the driving, aggressive, and highly competitive disposition of either the business man or the seeker after 'personal power, influence, and renown.'

A somewhat more meaningful explanation of the rather unusual combination of high scores (in the case of men) on the theoretical, aesthetic and social values, on the one hand, and their low scores on the economic, political and religious scales, on the other hand, is suggested by Brogden's report of a factor analysis study of the Study of Values. As one reason for the analysis, he pointed out that the six subtests are not factorially pure and, in consequence, the overlapping results in confusion and difficulty in interpreting the test scores. The eleven first-order factors and the three second-order factors he was able to extract would seem to indicate that the six terms used to describe the values are inadequate. So far as application of his findings to the present discussion is concerned, the crux of his report lies in

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<sup>1</sup>Allport, Vernon, and Lindzey, op. cit., p. 13.

<sup>2</sup>Ibid., p. 14.



his contention that the aesthetic, the social, and the theoretical values, despite their apparently different types of content, have certain common components. He hypothesizes that

The first two of these three types of contents suggest idealism with respect to cultural development of the individual, and with respect to human relations and structure of society. Idealism, as we use the term, is logically related to high evaluation of theoretic items, since speculation, contemplation, or theorizing is a necessary activity of individuals who concern themselves with 'how things should be.' There is the further suggestion that individuals scoring high on Factor B (Idealism vs. Practicality) may evaluate more highly what they have acquired through the schools, through reading, and through contact with what might be termed cultural influences. They appear, in other words, to have been more heavily influenced by such aspects of our present-day culture than by the everyday world of practical affairs.<sup>1</sup>

A possible explanation, then, of the scores of the experimental group on the several value scales may lie in the fact that they are strongly inclined toward intellectualism--particularly the men--and that this inclination is reflected not only in the theoretical value, but in the aesthetic and social values as well.

A brief comment is needed on the high scores of the experimental group on the social values scale, men and women, and on the significantly high score of the women on the religious scale. In the discussion of Hypothesis 4, contradictory results from the Bernreuter F2-S scale (Sociability) and from the S1 scale of the MMPI (Social Introversion) were reported. On the first measure they scored as highly non-social; on the second measure their scores were not significantly different from the scores of the normative group. In view of their high scores on the social scale of the Study of Values, it may be suggested that the F2-S scale and the S1 scale are measuring different things, the first perhaps having reference to "sociability" and the second to a some-

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<sup>1</sup>Hubert E. Brogden, The Primary Personal Values Measured by the Allport-Vernon Test, "A Study of Values" (Psychological Monographs, No. 348; Washington, D.C.: American Psychological Association, 1952), p. 25.

what impersonal and intellectual--as opposed to an emotional and personal--interest in people and their welfare. This would tend to account for the strong inclination of librarians to think of their profession as a "service" profession.

With respect to the high scores of the women on the religious values and the significant difference between their scores and the scores of the normative women, it is suggested that this may represent something in the way of a mechanism against anxiety. According to Symonds, "religion as we know it today serves as an institutionalized defense against anxiety,"<sup>1</sup> and further, "that it is one of the 'antidotes against feelings of inferiority.'"<sup>2</sup> On the other hand, it may simply represent verbal conformity resulting from training in traditionally religious homes.<sup>3</sup>

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<sup>1</sup>Symonds, *op. cit.*, p. 187.

<sup>2</sup>*Ibid.*, p. 402.

<sup>3</sup>Donald E. Super, Appraising Vocational Fitness by Means of Psychological Tests (New York: Harper & Brothers, 1949), pp. 466-67.

## CHAPTER VI

### SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

#### Summary

##### Purposes of the Study

General purpose.--The general purpose of this study was to attempt to ascertain the extent to which the library profession "selects" members with a characteristic personality configuration. As was suggested in Chapter II, this represents the first of three assumptions upon which occupational choice, in its relation to personality, appears to be based. The second of the assumptions is that participation in an occupation is a major determinant of personality structure in that it may foster the development of certain characteristics and retard the development of others; and the third is that the occupation may not only "select" its members, but may also affect the personality structure of those engaged in it.

Specific purposes.--The more specific objectives of the study were stated in the form of eight hypotheses which are listed in a following section under the heading, "Results Obtained from the Testing."

##### The Group Studied

Number, sex, age, marital status.--The original group of library school students, designated in the study as the experimental group, consisted of 125 men and 400 women enrolled in 1947-1948 in seventeen of the thirty-six library schools accredited at the time by the American Library Association. An addi-

tional twenty men from another accredited school were later added as subjects for one of the personality tests employed in the study.

The mean age of the men in the group was 29.7 (S.D., 4.80), and the median age, 30.0; the mean age of the women was 28.0 (S.D., 7.80), and the median age, 25.0. Of the 123 men supplying the information, approximately 57 per cent were single; 39 per cent, married; and the remaining 4 per cent, separated or divorced. Of the 395 women, about 85 per cent were single, 10 per cent, married; and the remaining 5 per cent, separated, divorced, or widowed.

Educational background.--The group consisted mainly of graduate students, only 8 per cent reporting junior or senior status. Of those remaining, 84 per cent held the bachelor's degree, and 8 per cent, the master's or the doctor's degree. In addition to degrees in academic subjects, thirty-two of the men and seventeen of the women held degrees in library science, almost exclusively fifth-year bachelor's degrees. Slightly over three-fourths of the entire group had attended, or were attending at the time, a liberal arts college or a university for their undergraduate study.

Of the 514 supplying the requested information, approximately 38 per cent reported literature as the major field in undergraduate study; 14 per cent, history; 11 per cent, foreign languages; 8 per cent, education; 8 per cent, other social sciences; 7 per cent, library science (most of these were enrolled at the time in undergraduate programs); 4 per cent, biological sciences; 4 per cent, physical sciences; and the remaining 8 per cent reported majors in various other subjects. Over-emphasis on literature, history and foreign languages, and under-emphasis on the natural sciences and the fine arts found in this group represents a pattern quite similar to the patterns reported in previous studies of library school groups, although there appears to be a slight

115

trend away from concentration in the traditional subject areas.

The median interval between college graduation and library school attendance for the men in the group was from four to six years, and for the women, from one to three years. For around 20 per cent of the men and 21 per cent of the women, a period of from seven to ten years, or even longer, intervened. These findings are substantially in agreement with those reported by Bryan for her public library sample.

Socio-economic background.--Relatively little information about the socio-economic background of the students was secured. This was unfortunate since such factors as education of parents, father's occupation, family income, size of the home community, and other similar indices of status are thought to be correlated with personality structure. While information about some of these factors was deducible from various other data supplied by the students, only two of these factors--occupation of father and size of home town or city--were incorporated in the items for which students were requested to furnish information.

Of the 502 students supplying information, slightly over a fourth (26 per cent) reported fathers' occupations that could be classified as professional; about 14 per cent, managerial and executive; 13 per cent small owners; 13 per cent, clerical, sales, etc.; 16 per cent, skilled occupations; 13 per cent, farming and kindred occupations; 4 per cent, semi-skilled; and 1 per cent, unskilled. Groupings of the above would seem to indicate that around 40 per cent of the group came from what might be called the upper strata of middle-class society; approximately 42 per cent from the middle strata; and most of the remaining 18 per cent from what might be considered the lower strata of the middle class. In other words, something over three-fourths of the group probably came from homes where such middle-class attitudes and values as propriety, conformity,

conservatism, thrift, and esteem for status and prestige obtained; and from a fourth to a half probably came from homes where education and "culture" were prized for their own sake, and where intellectualization of interests and values was fostered.

On the theory that the students who held degrees in library science at the time of the study would report as their home communities the communities where they held positions, this group was eliminated in making comparisons with the population at large. Of the 458 students remaining, 26.4 per cent came from communities with less than 5,000 population, as compared with 44.7 per cent for the general population; 55.9 per cent reported cities with less than 500,000 population, as compared with 37.7 per cent for the population as a whole; and 17.7 per cent reported home cities of over 500,000, as compared with 17.6 per cent for the general population. These figures suggest the possibility that librarians may be drawn from medium size and moderately large communities to a greater extent than from small or rural communities, or from large cities.

Work preferences.--Students were requested to indicate their work preferences, both by type of library and by type of work. The degree of correspondence between expressed preferences and the positions accepted by the students upon completion of the training program was not known. The questionnaire, however, was administered in the late spring when conceivably the students would have decided on the type of work they desired; too, the number of available positions was probably sufficiently large to permit some choice. Thus it may be reasoned that a high percentage of the group were able to secure the kind of work for which they had expressed preference--except, of course, for those who in stating preferences obviously were thinking in terms of future, rather than immediate goals.

The college or university library was the first choice of about 57 per cent of the men, as contrasted with 32 per cent of the women. The public library was chosen by around 26 per cent of the men and 35 per cent of the women; the special library, by something over 10 per cent of the men and 18 per cent of the women; the school library, by 11 per cent of the women, and none of the men. The remaining 5 per cent of the men and 3 per cent of the women expressed preference for government libraries, or other types. Obviously, the above percentages do not agree with those actually obtaining in the field. Reasons to explain the discrepancies, however, would not be difficult to find. For example, a large proportion of school librarians receive their training in non-A.L.A. accredited library science departments; special librarians very frequently are not required to have degrees in library science; and so on.

Exactly 50 per cent of the men listed administrative or supervisory work as first choice, as compared with 8 per cent of the women. Reference and bibliography was chosen by 34 per cent of the men and 29 per cent of the women; technical processes, by 5 per cent of the men, and 11 per cent of the women; work with children and young people, by 23 per cent of the women and none of the men. The remaining preferences were thinly distributed in various other categories.

The high percentage of preferences of the men for college and university libraries and for administrative or supervisory positions may be explained by the fact that men seemingly are preferred to women for administrative positions where salaries are higher than for other types of positions, and by the fact, also, that advanced professional training is more likely to "pay off" in administrative positions in academic libraries. A large majority of the men seeking advanced degrees expressed preference for administrative work in college or university libraries.

## Test Instruments

A questionnaire and five personality inventories were used to secure the data upon which the study was based. Most of the information obtained by means of the questionnaire was of a factual nature dealing with such items as age, sex, marital status, educational background, etc., of the subjects. In addition, subjective impressions of the students about personality traits, reasons for choosing library work, etc., were also obtained by the questionnaire.

Of the personality tests, two were considered major, and three, minor. The first two were the Minnesota Multiphasic Personality Inventory and the Allport-Vernon Study of Values; the last three were the Allport-Allport A-8 Reaction Study, the Terman-Miles Attitude-Interest Analysis Test, and the Berureuter Personality Inventory. The number of tests taken by the students varied according to the amount of time that was allowed for the testing by the library schools.

## Organization and Analysis of Data

Factual data from the questionnaire were organized into tables for use in describing the experimental group. For the data derived from the various tests, means and standard deviations were computed and from these, through use of a  $t$ -test, the significance of the differences found between scores of the experimental and normative groups was ascertained. The significance of impressionistic ratings of personality traits by the students was determined by use of Chi-square.

Each of the eight hypotheses, with the exception of Hypothesis 6, was tested by from two to six previously selected appropriate measures, which were, for the most part, subtests or scales of the various inventories used.



### Limitations

Methodology and instruments.--The survey or exploratory nature of the investigation necessitated the use of "paper-and-pencil" tests that could be easily administered and scored and quickly completed by the students. Even had other circumstances permitted, the size of the group and the wide dispersion of its members would have precluded the use of projective techniques, clinical interviews, detailed biographical histories, and other means for the more intensive study of the subjects. Reliance on the mean score as a measure of comparison necessarily resulted in disregard for individual differences existing in the group.

Comparisons.--The study was concerned with the modal librarian as represented by the library school student. It was not concerned with attempting to distinguish between the "successful" and the "unsuccessful," with comparing differences that might be related to age, motivation for choosing library work, work preferences or previous experience, etc., nor with comparing library school students with practicing librarians or with students in preparation for other professions.

The investigator.--The conduct of the study, the findings, and the interpretation of these findings are necessarily limited by the qualifications of the investigator.

### Results Obtained from the Testing

Hypothesis 1.--The librarian is more orderly, meticulous, neat, and compulsive in behavior than people in general.

The hypothesis was substantially confirmed by test results.

Hypothesis 2.--The librarian is more conscientious, scrupulous, and conforming, and less innovative and creative than people in general.

On the whole, the hypothesis was supported.

Hypothesis 3.--The librarian is more deferential, submissive, and respectful of authority than people in general.

This hypothesis was not confirmed by the three measures used in testing it. However, results obtained from other measures, particularly those used in testing Hypothesis 2, provided evidence in support of the hypothesis.

Hypothesis 4.--The librarian is more self-contained, self-sufficient, preoccupied with subjective feelings, introspective, introverted, and non-social than people in general.

In general, the evidence from the five measures used supported the hypothesis. What appeared to be contradictory results from two of the measures was possibly due to the fact that the two were not measuring the same trait.

Hypothesis 5.--The librarian is more anxious and less self-confident than people in general.

The hypothesis was not supported by the four measures used in testing it.

Hypothesis 6.--The librarian is more neurotic than people in general.

The hypothesis was not confirmed by the one measure used in testing it.

Hypothesis 7.--The male librarian is more feminine in his interests than men in general.

The hypothesis was strongly supported by both of the measures used.

Hypothesis 8.--The value system of the librarian is characterized by over-emphasis on the theoretical and the aesthetic values, and by under-emphasis on the economic and political values.

In the case of the men in the group, the hypothesis was strongly supported. In the case of the women, it was supported only for the second half

of the statement, i.e., under-emphasis on the economic and political values.

Though not used in testing the hypothesis, findings on the two remaining scales of the Study of Values are of interest. Both men and women scored significantly higher than the normative groups on the social value scale; and the women also scored significantly high on the religious value scale.

### Conclusions

#### General

It is generally conceded that the characteristic pattern of behavior of an individual is essentially formed fairly early in life. Thus it may be assumed that the student subjects of this study had established certain patterns of behavior or of personality structure by the time they entered library school and that they did not acquire these patterns during the relatively brief period of time concerned with formal, professional education. If this is true, and if these personality patterns are uniquely different from those possessed in a general graduate group of college students comparable in age, sex, etc., it may then be reasoned that the library profession does exercise a selective influence in recruiting its members. That such is the case is suggested by the findings of this investigation.

Two general conclusions should first be noted. The first of these is that, in general, the men in the library school group differed more distinctively from the men in the normative group in their personality structure than the library school women differed from the normative group women. In the second place, there was a more marked over-all similarity between the profiles of the men and the women in the library school group than there was between the profiles of the two groups of men or between those of the two groups of women. Because of this second conclusion, it has seemed more feasible to con-

sider in the following paragraphs the library school students as one group rather than to deal with the men and women separately. Such differences as were found, however, will be noted.

#### Specific

The modal librarian appears to be characterized by the following traits.

Orderliness.--The librarian is characterized to a significant degree by the trait of orderliness and its accompanying traits of meticulousness and neatness. Further, there is some evidence to support the view that these traits are somewhat more pronounced in the women than in the men.

Conscientiousness.--The librarian is a highly conscientious person, considerably more so than is the average graduate student. This trait appears to be equally accentuated in both men and women.

Sense of responsibility.--The male librarian is characterized by a strong sense of responsibility. The female librarian, while deeming this trait an essential one for the librarian, appears not to possess it to a greater degree than the average female graduate student.

Conservatism and conformity.--The two complementary qualities of conservatism and conformity are possessed by the librarian to a rather exceptional degree. The librarian appears to be conventional and traditional in his thinking, inclined toward stereotyped opinions and attitudes, somewhat averse to change, and perhaps overly concerned with the impressions he makes on other people.

The qualities of orderliness, meticulousness, neatness, conscientiousness, strong sense of responsibility, conservatism and conformity, all tend to label the librarian as a perfectionist, as a somewhat overly critical person, and as one inclined toward rigidity in attitudes, modes of thinking and of behavior.

Ascendence, motivation, and drive.--The librarian is not a dominant person. On the contrary, he is inclined toward apathy, passiveness, detachment, and a lack of strong convictions; too, he seems to lack vigor, decisiveness, strong motivational drives, and imaginative thinking. In short, he appears to be weak in the dynamic qualities associated with social ascendence and leadership.

Introspection, self-sufficiency.--The librarian has strong tendencies toward introspection, preoccupation with subjective feelings, and self-sufficiency. The women appear to be more self-sufficient than the men.

Sociability and interest in people.--The librarian appears not to be a "sociable" person in the usual meaning of this term; mere sociability seems to have little appeal for either the men or the women. At the same time, however, the librarian is not lacking in interest in people and their problems, but his interest is of a special kind in that it tends to be idealized and intellectual, rather than of the emotional or spontaneous "out-going" sort.

The librarian's inward-turning disposition, his tendency toward aloofness, his somewhat impersonal orientation with respect to people, his self-consciousness, all point to the possibility of ambivalences and difficulties in his relations with other people.

Interests and values.--The interests of the male librarian are definitely more feminine than masculine in the sense that they are concerned with the literary, the aesthetic, and the otherwise "cultural" aspects of life, which in our society tend to be considered as typically feminine rather than as typically masculine.<sup>1</sup> These interests suggest that the male librarian is

<sup>1</sup>Some writers have noted the fairly orderly progression in masculinity-femininity of interests in men from the lower to the higher occupational levels, the higher being the more feminine. The paradox lies in the fact that the higher levels require greater intelligence, a keener sense of social responsibility, and more independence in thought and action since it is to these levels that society looks for leadership. This fact suggests the inadequacy of the phrase, "masculinity-femininity."

more sensitive and more passive in his emotional adaptation than are men in general.

The value system of the male librarian, in comparison with that of the average male graduate student, is more strongly oriented toward the theoretical, the aesthetic, and the social, and more weakly oriented toward the economic, the political, and the religious values.

The value system of the female librarian, in comparison with that of the average female graduate student, is overly strong in the social and the religious values, and more definitely weak in the economic and political values. In this system there is a slight tendency toward strength in the theoretical value; and while the aesthetic value is quite strong, it is not significantly different from that of the average graduate student.

As was suggested above, it is likely that the emphasis on the social value in the case of both men and women represents a theoretical and a somewhat "distant," though no less real, interest in people and in social problems. It appears, also, that the strong aesthetic value--perhaps to a greater extent in the case of the men than of the women--represents not so much an interest in the fine arts per se as to an appreciation of all aesthetic manifestations of what is commonly referred to as "culture."

Anxiousness and neuroticism.---Anxiety is said to be either an overt or a covert component of nearly all neurotic reactions. Since the evidence from this study seems to indicate that the librarian is not an unduly anxious person, it may be inferred that neither is he a neurotic person. Apparently, the librarian has evolved an effective system of defenses as a means of warding off anxiety, a system consisting of the elements of passiveness, conservatism, conformity, conscientiousness, asceticism, meticulousness, and orderliness perhaps to a point approaching perfectionism. His is a patterning of

interests, values, attitudes, modes of behavior and of thinking of such a nature as to divert or largely to neutralize tensions stemming from conflicting impulses, goals and relationships.

\* \* \*

If the findings of this investigation have validity, the traits that seem to describe the modal librarian (assuming a reasonably high level of intelligence on his part) would appear to equip him well for the type of work he will most likely find himself engaged in, that is, work that requires close and persistent attention to details, regular, regulated and systematic performance, conscientiousness, dependability, and a strong sense of responsibility. Many of the traits which characterize the modal librarian, however, are not those most closely associated with or predictive of forceful leadership, distinguished scholarship, imaginative research, or other highly creative attainments.

Attention should again be called to the fact that the traits that were enumerated in the preceding paragraphs are those which appear to describe the "average" student in the group studied. In most of its essential features the description that has been given would doubtless be applicable to a majority of the students in the group. Obviously, however, some individuals did not conform to the typical pattern; toward one end of the continuum were those in whom there was stronger accentuation of the traits; toward the other end, those in whom the traits were less strongly accentuated; and throughout the group, those in whom various combinations of deviations from the group norms were found. It is possible that it is the relatively small percentage of library school students who do not conform too rigidly to the typical pattern who later will furnish the leadership, the scholarship and the research required for progress in and of the profession.

### Suggestions for Further Research

This study has raised some interesting questions, questions which are doubtless of greater significance than those which it has attempted to answer. A few of these questions, or problems, will be mentioned here with the thought that some of them may suggest areas for further research.

Library school students.--To test the reliability and the validity of the findings of the present study, similar studies are needed. The studies would serve another purpose, also. As the demands made upon a profession or occupation undergo change, it is reasonable to hypothesize that these changes are reflected in the personality make-up of recruits. The data in this study are now approximately ten years old and it is possible that the type of student entering library school at that time may have been different from the type entering now. Though it is hardly probable that any marked change would have occurred in so brief a period, still in view of the drastic shortages that have existed during that period and in view of the strenuous (and in some instances, dubious) methods that have been employed to attract recruits such a change is possible.

Studies might compare the personality make-up of students who have been admitted to library school but who drop out before completing degree requirements with students who go on to the degree. If suitable tests are administered as part of the admission program or early in the year, the data would then be available for analysis. It may be that the able students who drop out because of dissatisfaction with the curriculum, teaching methods used, personality of the teachers, or similar reasons represent a very real loss.

Comparison of students adjudged by faculty members as "most promising" with those considered to be marginal or of "doubtful promise" would provide better insight into the values of library school faculties and the qualities



which they consider important and seek to promote.

Longitudinal studies, starting with library school students and following them into the field with periodic testing might provide some evidence, or at least a clue, in answer to the question as to whether participation in the profession tends to foster the development of certain personality characteristics. It would seem reasonable to believe that some modification does take place with experience.

Comparison of representative samples of students in A.L.A. accredited schools and of those in non-A.L.A. accredited library education departments might provide data that would be useful in appraising the possible effects on the profession of recruits receiving their training in the latter agencies.

Comparison of library school students with comparable samples from other professional schools on the campus would perhaps furnish information for more realistic recruiting.

Library school faculty members.--It is recognized that the professional school occupies a crucial position in connection with advancement and change in a profession. For this reason, studies of library school faculty members would seem to be of particular importance. It may be hypothesized, for instance, that library schools tend to perpetuate the stereotype through their admission practices, through their curriculums, through their teaching methods, through retention of students who conform to the pattern and elimination of those who do not conform. Library school faculty members themselves may possess many of the qualities ascribed to the stereotype; hence they may tend unconsciously to encourage students who have these qualities.

Practicing librarians.--Obvious studies of practicing librarians would be by types of libraries and by types of work engaged in. It is possible, for example, that school librarians are different from college, public, or special

librarians. Further, it is possible that librarians engaged in the technical processes are different from those in public services. Accurate descriptions of these groups might furnish some basis for the study of personality characteristics needed for the most effective performance of different kinds of work in different kinds of libraries. In this connection, it may be hypothesized that some of the operations performed in libraries, as for example the maintenance of elaborate records in certain types of libraries, though they may satisfy certain needs of the individuals performing them, are in actuality without a rational basis.

Studies of staff members, perhaps in a large system or in a series of similar systems, who are rated in terms of reasonable criteria as "most" and as "least" successful would seem to be both feasible and worthwhile.

Case studies of acknowledged leaders in the profession--leaders by virtue of positions, by virtue of holding important offices in professional associations, by virtue of productive scholarship, high competence in teaching, or some other criterion--would be both enlightening and valuable.

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Scattered, unrelated, and superficial studies serve no particularly useful purpose; on the other hand, an organized, systematic, logically conceived and flexible plan for continuing research on the problems of personality in relation to librarianship would perhaps not only dispel much of the present uncertainty and uneasiness in the profession, but what is more important, should in time provide the factual data with which to resolve some of the most pressing problems with which the profession is confronted; these problems relate to personnel, the key factor in any profession.

**APPENDIX I**

**EXCERPTS DESCRIPTIVE OF THE LIBRARIAN STEREOTYPE**

## EXCERPTS DESCRIPTIVE OF THE LIBRARIAN STEREOTYPE

The following list of excerpts describing the librarian stereotype is designed to be a representative selection. For purposes of emphasis and brevity the excerpts, in many instances, have been abbreviated or paraphrased. Actual quotations are indicated. The complete citation for each of the excerpts is given in the Bibliography.

Laymen

- |                             |  |
|-----------------------------|--|
| 1911<br>Editor              | Constantly compiling, revising codes of rules; fearful of the public; overcautious, conservative; loth to make errors, to experiment.--"Library Machinery v. Human Nature."  |
| 1923<br>College professor   | Wise as serpents, harmless as doves; "No librarian ever killed a man or robbed a church or stole an automobile;" "undoubtedly the most harmless of all people;" "perhaps our most highly civilized class;" "extremely happy people."--Phelps, "Extremely Happy People."                        |
| 1925<br>Government official | The cooperativeness of librarians is without precedent; intellectually, library workers are a highly selected group; librarians "stick to their guns."--Telford, "As Others See Us."   |
| 1933<br>College student     | "Her enthusiasm is for cataloging and her aim is circulation. She doth not exist outside the library."--"Librarians."  |
| 1934<br>Patron              | "... the solicitousness, kindness, refinement and other such desirable qualities of personality which it is generally conceded are exemplified by librarians to an extent not surpassed by the members of no other occupational or professional group."--Jettrick, "In Defence of Librarians." |
| 1934<br>College professor   | "The typical college librarian, so far as my experience goes, is of the introvert type, usually with little taste for the activities involved in executive service."--Russell, "The College Library as Viewed by the Administrator."   |
| 1937<br>Newspaper reporter  | "If a woman has snooty characteristics, nothing will bring same out of her like making her a librarian."--"As Others See Us from Coast to Coast?"  |
| 1939<br>College professor   | "As a class, they are consumed with their records, their budgets, and their precious books;" "The librarian today is chained to routine quite as much as the books in medieval libraries were chained to their shelves;" "patient, saintly lot."--Kinneman, "Library as Seen by the Users."    |

- 1943  
Patron "I am afraid of the old maids, male and female;" "Librarians aren't people; they think no thoughts, do no things, live no lives. . . . They live only vicariously, gaining their experience and their life only from the printed page."--"Why I Don't Like Libraries."
- 1945  
College professor Defensive; possessive; "the pursed lips, the tone of suspicion, the pouncing manner. "Is there no time for librarians to learn about the insides of the treasures they hoard?"--Barzun, Teacher in America.
- 1945  
Patron Too modest and retiring; non-aggressive; "exist passively and primarily for the culturally sophisticated."--Torbet, "Layman Looks at Libraries."
- 1946  
College professor Inattentive; worried look; the frown; excessive modesty; lack of general knowledge.--"Scholar Looks at the Library."
- 1946  
College students; laymen Intelligent, educated, good speech, cultured, intellectual, well-read, cooperative, helpful, patient, friendly, nice people; conventional, unadventurous, dogmatic, pedantic, serious. "Intelligent, educated women, quiet and self-possessed on the surface, underneath, inhibited, introverted, slightly neurotic, conservative."--Form, "Popular Images of Librarians."
- 1947  
State Rural Supervisor Courteous, zealous, solicitous, sacrificing, uncomplaining.--Green, "Librarians Are a Different Breed of People."
- 1948  
Patron Frozen look; averted eyes; acid in the breath--those who are otherwise, get out, get married; "pinched oldsters" left.--Shuman, "What's Wrong with the Libraries?"
- 1949  
Journalist Cloistered introverts; grim and unhelpful guardians; bookish, retiring; need entry into the profession of more rugged males; "There is probably no other body of public servants so immolated in their thankless task, so conscious of their shortcomings, and so determined to improve."--Zeisler, "Morgues of Culture?"
- 1950  
College professor "Librarians, at every level of service, are notably patient;" "Librarians as individuals are possessed by social idealism equal to that of any other profession."--Duff, "The Need for Library Leadership."
- 1952  
Journalist "Librarians should stop acting like servants;" worry less about housekeeping and organization; majority unusually pleasant, obliging, with a sense of humor.--Fenton, "A Layman Asks: Are Librarians Necessary?"

1954  
College  
professor

Quiet; patient; methodical; efficient; general air of detachment and dignified aloofness; "Is there an oath which requires them to forswear any evidence of an alert, trained mind and an awareness of ideas which are the stuff of their trade and profession?" "Are they so enamored of their mascot, the wee, sleekit, cowrin' tim'rous beastie, that they must needs forever play the part?"--Williston, "On the Librarian."

1955  
Journalist

"... librarians are inclined to serve, not fight. Service is a fine thing. But unless librarians develop more fighting spirit, their services will suffer even more than it has." (Referring to meekness) "Those who shall inherit the earth will include virtually every librarian;" "The only way to attract daring youngsters is by doing daring deeds."--Crosby, "To Speed up Recruiting."

#### Librarians

1922

Too secluded; no contact with active life; spineless, without belief or enthusiasm; a nonentity.--Leete, "Our Appeal as a Profession?"

1922

"We would esteem ourselves more if a stronger tinge of pugnacious spirit were instilled into our gentle temperament."--Kirkwood, "Life and the Librarian."

1923

Thrifty; perfectionists; dour; boarders.--Parham, "As Others See Us."

1933

"But the lack of respect for librarianship is not confined, unfortunately, to the public. Some librarians seem to apologize for their choice of a profession in every word and gesture. . . . Heaven help us if we don't even respect ourselves! No wonder the popular conception of the librarian persists." "Too many of us are content to have pedestrian lives."--Coleman, "The Existence of a Librarian."

1934

Absorbed with daily routines; deadened enthusiasm.--Turner, "Librarian Looks at Himself."

1935

"Up until the last few years they have never been known to complain;" thrifty; unusual devotion to their work.--Compton, "Ourselves and Other People."

1935

Need more aggressiveness and less timidity.--Hill, "Speaking for the Younger Generation."

1936

Satisfied; unwilling to change; individuality lost in the crowd.--Sykes, "Personality and the Librarian."

1937

"Direct clashes of opinion are rare;" "It is not in the public community alone that we are discounted. In the college community, professors are apt to think of us as earnest super-clerks when

- they think of us at all;" "We find it difficult to recruit adventurous people into the work. We get intelligence, loyalty, even enthusiasm, yet these are only secondarily adventurous qualities;" "In conclusion, it seems probable that people fail adequately to understand what we are doing because we are not quite sure ourselves."--Scandrett, "Studs Lonigan and the Library."
- 1939 "It seems to me that librarians as a class have a tendency toward becoming absorbed in the red tape of the profession and are perhaps too serious minded."--Sherman, "Let's Be Human!"
- 1940 "Librarians are accused of being ungracious, dictatorial, unsympathetic, unwilling, disinterested, inaccurate . . ." High ideals, unselfish, charm, character.--Young, "What's Right with the Librarians?"
- 1943 Lacking in vigor, human sympathy; irritable; rule-of-thumb.--Boldstroke, "Sweetiepies for Sourpusses."
- 1944 Too passive; seemingly lacking in some vital spark; watchers by the wayside; inarticulate, retiring, timid; never take sides.--Heathcote, "Watchers by the Wayside?"
- 1946 "There is a popular notion that as a whole, librarians are devoid of personality and graciousness; a group of 'sour-pusses' or frustrated old women."--Wheeler, Progress and Problems in Education for Librarianship.
- 1948 Grim, prim, pedantic.--Bruce, "Librarians a la Hollywood."
- 1950 Inarticulate; introvert; shy, bookish, cloistered, withdrawn.--Gorman, "Librarians Are People, Too."
- 1951 "Undoubtedly there is something happening to librarians while in the profession which is part of the trouble;" "The layman's mental images of librarians have long proved an occupational hazard."--Scott, "Conditions Take Their Toll."
- 1951 Prim, bespectacled introverts; meek, mild, forgotten; no ideas of their own; indecisive, unsure of role; lack aggressiveness.--Issacs, "Ridebound and Shelved."
- 1952 "Good" people; uplifters; well-behaved; overly conscientious; serene, mild dispositions; not feverish; non-argumentative.--Bloss, "Librarian Writes How to Tell a Librarian."
- 1952 "Librarians are usually pictured as inhibited old maids, zealously guarding their precious books against mutilation, loss and over-long use, while sternly enforcing a tomb-like silence. . . ."--Bryan, The Public Librarian.
- 1953 "Civil without ever being quite polite; intelligent and knowledgeable without any real interest in anything." Trade life for existence, ambition for security.--Huntley, "Christmas Crackers--A Composite Portrait."

- 1953 Middle-of-the-roadsers; fence-straddlers; take no sides in controversial issues; followers, not leaders; imitators, not innovators; pedestrian; do not think creatively.--Baretski, "Don't Stop! Don't Look! Don't Listen!"
- 1953 Recluses, introverts; old maids, male and female; old scur-pusses; unchanging; perfectionists; censorious.--Downs, "Some Current Delusions, or Horsefeathers in Librarianship."
- 1954 Scholars suspicious of librarianship as a profession; ". . . how are we to defend, as we are called upon to defend, the freedom of inquiry, the freedom of information, so long as we ourselves do not inquire and are not informed?"--Mearns, "In the Presence of the Scholars."
- 1955 Clannish, proprietary, crabby, unfriendly.--Bauer, "As Others See Us: A Panel."
- 1956 "Librarians on the whole like to see themselves as fairly competent, intelligent, and enthusiastic people."--Frame, "Learned 'Fish' or Clerical 'Fowl.'"
- 1956 "Ours is not a glamorous calling . . . far too many people still think of librarians as drab, frustrated old ladies, as quaint curious crack-pots."--Lightfoot, "Wanted, Librarians with Courage."
- 1957 "According to this stereotype, the librarian is a grim-faced middle-aged maiden whose main purpose in life is to keep as many books as possible on the shelves at all times."--Feinstein, "Your Librarian Talks Back."
- 1957 "There is a prevalent opinion which holds that librarianship is a sort of Casper Milquetoast profession . . ."--Boole, "The True End of Knowledge."



**APPENDIX II**

**FORMS**

PRELIMINARY LETTER SENT TO DEANS AND DIRECTORS OF THE  
LIBRARY SCHOOLS INVITED TO PARTICIPATE IN THE STUDY

The study which Dean Faust has called to your attention is an analysis of the personality structure of the librarian, in terms of several personality traits which are often assumed to distinguish librarians.

The whole field of personality measurement has been considerably advanced in recent years, but there are still relatively few studies which relate personality characteristics to occupation. The choice of an occupation can have two relations to personality structure: (1) the occupation may exercise a selective influence, in that persons of certain personality characteristics may typically be attracted to it, and (2) the occupation may actually affect personality structure in that it fosters certain characteristics and retards others. This study centers principally upon the first of these, i.e., the extent to which the library profession "selects" members with particular personality traits.

The study may have important implications for recruitment to the profession in that (1) it may suggest certain desirable personality structures which the profession does not "automatically" select and which might be made the object of recruitment policies, and (2) it may help to guide prospective librarians to the most satisfactory positions within the profession. It may also reveal irrational bases for some library activities, that is, it may suggest a source in personality structure of certain "housekeeping" functions of the profession which have been over-emphasized. In any case, the study represents the first intensive scientific study of the librarian, about which stereotypes currently exist both within and outside the profession.

The purpose of this letter is to ask if you and your student group will be willing to participate in the study. At this point, I wish to emphasize that all testing will have reference to personality, not to achievement; consequently, the matter of adequacy of training is in no way concerned. In the following paragraphs I have attempted to anticipate questions, but should you need additional information before you can reach a decision, I will be glad to furnish it very promptly.

Time required.--In the ideal situation, the entire series of tests would be administered to each participating group, but for various reasons, this will not be possible. Each cooperating school is asked to specify the amount of time, between April 20 and the end of the quarter or semester, that it will be able to set aside for the testing, that is, one, two, three or four hours, etc. Appropriate tests will then be selected to fit this time allotment.

Students.--For obvious reasons, if testing is placed on a completely voluntary basis, test results may be biased. On the other hand, some students may resent being required to take the tests and may, in consequence, deliberately attempt to distort their answers. I am of the opinion that the cooperation of students will in large measure depend upon the manner in which the matter is presented to them. If they sense the fact that the study may have

considerable significance, that test scores can in no way affect their status in the school, and that there will be no identification of individuals in the study, I believe that a majority will be willing to serve as subjects. Because of the relatively small number of men enrolled in library schools, I am especially interested in having all men students participate. Part-time and special students who do not expect to become librarians need not take the tests.

Testing materials.--Testing materials will be supplied, of course, and return shipment charges will be paid. Until I know the amount of time that can be allowed for the testing, I cannot specify titles of tests to be used. It may be, of course, that your group has already taken one or more of the tests to be used and if the scores are available for my use, other tests can be substituted.

Administering the tests.--Because of the time, distance, and expense involved, I will be able to visit only a very small number of schools to administer the tests. Other schools interested in cooperating are asked to consider the possibility of having some volunteer faculty member, or perhaps some person from the psychology department or counseling office give the tests. Explicit directions will accompany the tests.

Following this page is a question sheet. I will greatly appreciate it if you will return it to me as soon as possible. A stamped, addressed envelope is enclosed for your convenience.

Sincerely yours,

Robert R. Douglass

## LIBRARY SCHOOL INFORMATION SHEET

1. Name of School \_\_\_\_\_
  2. Will your School be able to cooperate in the study \_\_\_\_\_  
 If your answer to 2 is YES, please answer the following questions; if NO, please answer questions 9, 10, 11.
  3. How many students will take the test? \_\_\_\_\_ How many men? \_\_\_\_\_  
 Women? \_\_\_\_\_
  4. How much time will be available for testing? \_\_\_\_\_ Hours  
 How many sessions? \_\_\_\_\_
  5. What date or dates between April 20 and the end of your quarter or semester will be most convenient for the testing? \_\_\_\_\_  
 \_\_\_\_\_
  6. Will you or some other qualified person in your school be willing to administer the tests? \_\_\_\_\_
  7. If so, what is the name of the person selected? \_\_\_\_\_  
 \_\_\_\_\_
  8. Official position of this person \_\_\_\_\_
  9. Have students had any personality or related tests (except intelligence) during the current academic year? \_\_\_\_\_ If so, please list titles below:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  10. If I find that scores on any of the above tests could be used in this study, will they be available for my use? \_\_\_\_\_
  11. If so, from whom can they be obtained? \_\_\_\_\_
  12. Questions, comments, etc: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- Date: \_\_\_\_\_ Signed: \_\_\_\_\_
- Official position: \_\_\_\_\_

PERSONAL DATA SHEET

You will note that your name is not asked for on this blank; all information given will be considered strictly confidential. The value of the data you supply for this study will depend on your accuracy and frankness. When you have completed this form and the tests, please insert them in the envelope provided and seal, being sure that the numbers written in red pencil on the data sheet, the tests and the envelope agree. Thank you for your cooperation.

1. Your age \_\_\_\_\_ Sex \_\_\_\_\_
2. Home address: City (only) \_\_\_\_\_ State \_\_\_\_\_
3. Marital status (Check the one that applies) Single \_\_\_\_\_ Married \_\_\_\_\_  
Widowed \_\_\_\_\_ Divorced \_\_\_\_\_ Separated \_\_\_\_\_
4. Your father's last main occupation \_\_\_\_\_
5. Your education (above high school)  

| Name of college<br>or university | Degree(s), if any,<br>and year awarded | Major subject(s) |
|----------------------------------|--|------------------|
|                                  |  |                  |
|                                  |  |                  |
6. Degree toward which you are now working \_\_\_\_\_
7. In each of the following, please underline the one term in parentheses which most accurately expressed your opinion.

A. In comparison with people generally, librarians as a group are inclined to be

- 1). introspective to a (greater, same, less) degree.
- 2). deferential to authority to a (greater, same, less) degree.
- 3). self-confident to a (greater, same, less) degree.
- 4). orderly to a (greater, same, less) degree.
- 5). conscientious to a (greater, same, less) degree.
- 6). innovative, creative to a (greater, same, less) degree.

B. In comparison with people generally, I think I am inclined to be

- 1). introspective to a (greater, same, less) degree.
- 2). deferential to authority to a (greater, same, less) degree.
- 3). self-confident to a (greater, same, less) degree.
- 4). orderly to a (greater, same, less) degree.
- 5). conscientious to a (greater, same, less) degree.
- 6). innovative, creative to a (greater, same, less) degree.

8. Type of library work in which you are most interested. (Underline. For instance, if you wish to do reference work in a liberal arts college, underline both Liberal arts college and Reference. In libraries where you would do all types of work, underline the type of library only, e.g. High school. Place the figure 1 in front of your first choice, 2 in front of your second choice, etc.)

| <u>Type of library</u>   | <u>Type of work</u>           |
|--------------------------|-------------------------------|
| University               | Acquisitions                  |
| Liberal arts college     | Administration                |
| Teachers college         | Bibliographer                 |
| Junior College           | Bookmobile                    |
| High school              | Cataloging and classification |
| Elementary school        | Circulation                   |
| Private school           | Clerical                      |
| Municipal public library | General assistant             |
| County                   | Personnel                     |
| Regional                 | Public relations              |
| State                    | Readers' advisory             |
| Government (U.S.)        | Reference                     |
| Special (specify kind)   | Supervisory                   |
| Other (specify)          | Teacher of library science    |
|                          | (subject _____)               |
|                          | Work with children            |
|                          | Work with young people        |
|                          | Other (specify)               |

9. Professional and non-professional library work experience you have had--before, during, and following professional training. (Use verso of this sheet if additional space is required.)

| <u>Type of work:</u> | <u>Type of library:</u> | <u>Dates:</u> |
|----------------------|-------------------------|---------------|
| _____                | _____                   | _____         |
| _____                | _____                   | _____         |
| _____                | _____                   | _____         |

10. Sometimes when librarians are asked why they chose librarianship as a profession, they give such answers as "I love books," "I always liked to read," etc.; however, the real reasons probably lie much deeper than that. Now I am asking you that question: Think back: just what were the factors which caused you to choose library work? If there were more than one--and there certainly may have been--rank them in what you consider their order of importance, 1, 2, 3, etc.

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11. (a) If you were starting over, would your preference still be for library work as a profession? \_\_\_\_\_

(b) If your answer to (a) is No, what profession would you choose? \_\_\_\_\_

(c) State briefly your reason(s) for not having gone into the type of work named in (b) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

12. Do you feel that you are particularly fitted, temperamentally, for library work? \_\_\_\_\_ Why do you think so? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

13. Below is a list of twelve common personality traits.

(1) You are asked to select the three traits which you consider are the ones most useful for a practicing librarian to have and to write their numbers in the spaces opposite the phrase "most useful."

(2) Then select the three traits you consider the least useful for librarians to have and write their numbers in the spaces provided.

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Aggressiveness         | 7. Introspection            |
| 2. Conscientiousness      | 8. Orderliness              |
| 3. Deference to authority | 9. Reserve                  |
| 4. Enthusiasm             | 10. Self-confidence         |
| 5. Sociability            | 11. Self-control            |
| 6. Innovation, creativity | 12. Sense of responsibility |

Most useful (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_

Least useful (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_

APPENDIX III

SUPPLEMENTARY TABLES AND ILLUSTRATIONS



TABLE 25

## GEOGRAPHICAL ORIGIN OF STUDENTS IN THE EXPERIMENTAL GROUP

| State                 | Men | Women | Both | State            | Men | Women | Both |
|-----------------------|-----|-------|------|------------------|-----|-------|------|
| Alabama . . . . .     | 3   | 3     | 6    | N. Carolina . .  | 6   | 12    | 18   |
| Arizona . . . . .     | 0   | 1     | 1    | N. Dakota . . .  | 0   | 2     | 2    |
| Arkansas . . . . .    | 0   | 1     | 1    | Ohio . . . . .   | 4   | 27    | 31   |
| California . . . . .  | 2   | 22    | 24   | Oklahoma . . .   | 0   | 3     | 3    |
| Colorado . . . . .    | 0   | 8     | 8    | Oregon . . . . . | 1   | 2     | 3    |
| Connecticut . . . .   | 3   | 3     | 6    | Pennsylvania . . | 8   | 24    | 32   |
| District of Columbia  | 3   | 1     | 4    | Rhode Island . . | 0   | 1     | 1    |
| Delaware . . . . .    | 0   | 2     | 2    | S. Carolina . .  | 3   | 6     | 9    |
| Florida . . . . .     | 1   | 3     | 4    | S. Dakota . . .  | 0   | 3     | 3    |
| Georgia . . . . .     | 4   | 10    | 14   | Tennessee . . .  | 1   | 10    | 11   |
| Idaho . . . . .       | 1   | 0     | 1    | Texas . . . . .  | 2   | 13    | 15   |
| Illinois . . . . .    | 10  | 13    | 23   | Utah . . . . .   | 0   | 0     | 0    |
| Indiana . . . . .     | 5   | 9     | 14   | Vermont . . . .  | 0   | 1     | 1    |
| Iowa . . . . .        | 3   | 10    | 13   | Virginia . . . . | 0   | 10    | 10   |
| Kansas . . . . .      | 2   | 5     | 7    | Washington . . . | 1   | 1     | 2    |
| Kentucky . . . . .    | 2   | 17    | 19   | W. Virginia . .  | 2   | 5     | 7    |
| Louisiana . . . . .   | 1   | 22    | 23   | Wisconsin . . .  | 6   | 28    | 34   |
| Maine . . . . .       | 1   | 0     | 1    | Wyoming . . . .  | 0   | 1     | 1    |
| Maryland . . . . .    | 4   | 4     | 8    |                  |     |       |      |
| Massachusetts . . .   | 2   | 4     | 6    | Outside U.S. . . | 3   | 7     | 10   |
| Michigan . . . . .    | 10  | 11    | 21   | Canada . . . .   | (1) | (3)   | (4)  |
| Minnesota . . . . .   | 3   | 24    | 27   | Hawaii . . . . . | (0) | (1)   | (1)  |
| Mississippi . . . . . | 3   | 7     | 10   | Italy . . . . .  | (0) | (1)   | (1)  |
| Missouri . . . . .    | 3   | 2     | 5    | Mexico . . . . . | (1) | (0)   | (1)  |
| Montana . . . . .     | 0   | 2     | 2    | Norway . . . . . | (1) | (2)   | (3)  |
| Nebraska . . . . .    | 1   | 3     | 4    |                  |     |       |      |
| Nevada . . . . .      | 0   | 0     | 0    | Total . . . . .  | 121 | 394   | 515  |
| New Hampshire . . .   | 0   | 1     | 1    |                  |     |       |      |
| New Jersey . . . . .  | 2   | 14    | 16   | No information . | 4   | 6     | 10   |
| New Mexico . . . . .  | 0   | 0     | 0    |                  |     |       |      |
| New York . . . . .    | 15  | 36    | 51   | Total . . . . .  | 125 | 400   | 525  |

TABLE 26

NUMBER OF SUBJECTS IN EXPERIMENTAL GROUP, BY UNDERGRADUATE  
MAJOR FIELD OF STUDY, TAKING EACH OF THE FIVE TESTS  
USED IN THE INVESTIGATION

| Undergraduate<br>Major Field<br>of Study | Tests and Number Taking Each |     |                 |     |      |    |                       |     |                                   |     |
|--|------------------------------|-----|-----------------|-----|------|----|-----------------------|-----|-----------------------------------|-----|
|  | A-S Re-<br>action            |     | Bern-<br>reuter |     | MMPI |    | Study<br>of<br>Values |     | Attitude-<br>Interest<br>Analysis |     |
|  | M                            | F   | M               | F   | M    | F  | M                     | F   | M                                 | F   |
| Physical sciences                        | 8                            | 8   | 7               | 7   | 5    | 2  | 7                     | 7   | 8                                 | 4   |
| Biological sciences                      | 2                            | 17  | 1               | 18  | 1    | 2  | 2                     | 15  | 1                                 | 6   |
| Social sciences                          | 15                           | 19  | 10              | 22  | 2    | 5  | 11                    | 19  | 10                                | 12  |
| History                                  | 17                           | 44  | 18              | 50  | 8    | 3  | 18                    | 43  | 17                                | 11  |
| Foreign language                         | 12                           | 32  | 10              | 39  | 7    | 3  | 10                    | 29  | 9                                 | 12  |
| Literature                               | 23                           | 120 | 15              | 147 | 18   | 25 | 18                    | 116 | 19                                | 40  |
| Library science                          | 3                            | 24  | 3               | 34  | 0    | 11 | 3                     | 23  | 3                                 | 14  |
| Fine arts                                | 0                            | 6   | 0               | 9   | 3    | 3  | 0                     | 6   | 0                                 | 2   |
| Education                                | 8                            | 23  | 5               | 33  | 1    | 4  | 6                     | 25  | 5                                 | 9   |
| Business                                 |                              |     |                 |     |      |    |                       |     |                                   |     |
| administration                           | 3                            | 4   | 3               | 4   | 2    | 0  | 3                     | 3   | 2                                 | 3   |
| Other                                    | 9                            | 12  | 8               | 15  | 3    | 2  | 6                     | 12  | 5                                 | 7   |
| No information                           | 4                            | 7   | 3               | 7   | 0    | 2  | 4                     | 7   | 9                                 | 2   |
| Total                                    | 104                          | 316 | 83              | 385 | 50   | 62 | 88                    | 305 | 88                                | 122 |

TABLE 27

FACTORS LISTED BY 124 MEN AND 393 WOMEN IN THE EXPERIMENTAL  
GROUP AS DETERMINING THEIR CHOICE OF LIBRARY WORK

| Factors  | Men |       | Women |      | Both Groups |       |
|--|-----|-------|-------|------|-------------|-------|
|  | No. | Rank  | No.   | Rank | No.         | Rank  |
| Library work experience . . . . .                      | 25  | 20.16 | 2     | 75   | 19.09       | 1     |
| Student assistant in college                           | (7) |       | (9)   |      | (16)        |       |
| Student assistant in high school . . . . .             | (4) |       | (19)  |      | (23)        |       |
| Page in public library . . . . .                       | (2) |       | (2)   |      | (4)         |       |
| Other than as page or assistant . . . . .              | (6) |       | (33)  |      | (39)        |       |
| Resulting from accidental appointment . . . . .        | (6) |       | (12)  |      | (18)        |       |
| Characteristics attributed to the profession . . . . . | 28  | 22.58 | 1     | 55   | 13.99       | 2     |
| Job opportunities . . . . .                            | (9) |       | (12)  |      | (21)        |       |
| Non-restricted pre-professional preparation . . . . .  | (6) |       | (13)  |      | (19)        |       |
| Opportunity for self development . . . . .             | (2) |       | (10)  |      | (12)        |       |
| Academic, scholarly . . . . .                          | (4) |       | (7)   |      | (11)        |       |
| Opportunity for research, writing . . . . .            | (5) |       | (3)   |      | (8)         |       |
| Social importance of work . . . . .                    | (2) |       | (5)   |      | (7)         |       |
| "Cultured," "Refined" . . . . .                        | (0) |       | (5)   |      | (5)         |       |
| Liking for books and reading . . . . .                 | 16  | 12.91 | 4     | 50   | 12.72       | 3     |
|  |     |       |       |      | 66          | 12.77 |

TABLE 27--Continued

|   |      |       |     |      |       |    |      |       |     |
|---|------|-------|-----|------|-------|----|------|-------|-----|
| Influence of others . . . . .   | 19   | 15.32 | 3   | 36   | 9.26  | 6  | 55   | 10.64 | 4   |
| Librarians . . . . .  | (11) |       |     | (21) |       |    | (32) |       |     |
| Counselors, teachers, etc. . . . .  | (5)  |       |     | (3)  |       |    | (8)  |       |     |
| Parents, friends . . . . .  | (3)  |       |     | (12) |       |    | (15) |       |     |
| Liking for people . . . . .   | 3    | 2.42  | 10  | 48   | 12.82 | 4  | 51   | 9.86  | 5.5 |
| In general . . . . .  | (0)  |       |     | (35) |       |    | (38) |       |     |
| Children and young people . . . . .   | (0)  |       |     | (13) |       |    | (13) |       |     |
| Dislike for, failure in, or inability to enter another profession . . . . . | 8    | 6.45  | 6   | 43   | 10.94 | 5  | 51   | 9.86  | 5.5 |
| Teaching . . . . .  | (3)  |       |     | (32) |       |    | (35) |       |     |
| Other . . . . .   | (5)  |       |     | (11) |       |    | (16) |       |     |
| Liking for work with books and people . . . . .                             | 5    | 4.03  | 7.5 | 35   | 8.91  | 7  | 40   | 7.74  | 7   |
| Desire to serve . . . . .   | 11   | 8.87  | 5   | 20   | 5.09  | 6  | 31   | 6.00  | 8   |
| Experience as a library user . . . . .                                      | 5    | 4.03  | 7.5 | 15   | 3.82  | 10 | 20   | 3.87  | 9.5 |
| Other . . . . .   | 4    | 3.23  | 9   | 16   | 4.07  | 9  | 20   | 3.87  | 9.5 |

TABLE 28

SATISFACTION OF STUDENTS IN THE EXPERIMENTAL  
GROUP WITH VOCATIONAL CHOICE

| Item               | Men |        | Women |        | Both Groups |        |
|--------------------|-----|--------|-------|--------|-------------|--------|
|                    | No. | %      | No.   | %      | No.         | %      |
| Satisfied . . . .  | 101 | 81.45  | 311   | 78.54  | 412         | 79.23  |
| Dissatisfied . . . | 17  | 13.71  | 63    | 15.91  | 80          | 15.39  |
| Undecided . . . .  | 6   | 4.84   | 22    | 5.55   | 28          | 5.38   |
| Total . . . . .    | 124 | 100.00 | 396   | 100.00 | 520         | 100.00 |
| No information . . | 1   | . . .  | 4     | . . .  | 5           | . . .  |
| Total . . . . .    | 125 | . . .  | 400   | . . .  | 525         | . . .  |

TABLE 29

RESPONSE OF EXPERIMENTAL GROUP TO THE QUESTION,  
"DO YOU THINK YOU ARE TEMPERAMENTALLY  
SUITED FOR LIBRARY WORK?"

| Response                         | Men |        | Women |        | Both Groups |        |
|----------------------------------|-----|--------|-------|--------|-------------|--------|
|                                  | No. | %      | No.   | %      | No.         | %      |
| Yes . . . . .                    | 107 | 86.29  | 348   | 89.23  | 455         | 88.52  |
| No . . . . .                     | 5   | 4.03   | 14    | 3.59   | 19          | 3.70   |
| Doubtful or<br>undecided . . . . | 12  | 9.68   | 28    | 7.18   | 40          | 7.78   |
| Total . . . . .                  | 124 | 100.00 | 390   | 100.00 | 514         | 100.00 |
| No information . .               | 1   | . . .  | 10    | . . .  | 11          | . . .  |
| Total . . . . .                  | 125 | . . .  | 400   | . . .  | 525         | . . .  |

TABLE 30

SIGNIFICANCE LEVELS OF EXPERIMENTAL GROUP PERCEPTIONS  
OF ASSOCIATION OF SIX PERSONALITY TRAITS WITH  
OTHER LIBRARIANS AND WITH THEMSELVES

| Traits                          | Men      |                    |                   | Women    |       |                   |
|---------------------------------|----------|--------------------|-------------------|----------|-------|-------------------|
|                                 | $\chi^2$ | p                  | Sig. <sup>a</sup> | $\chi^2$ | p     | Sig. <sup>a</sup> |
| Perceptions of Other Librarians |          |                    |                   |          |       |                   |
| Introspection                   | 31.30    | <.001              | ***               | 69.00    | <.001 | ***               |
| Deference to authority          | 18.56    | <.001              | ***               | 14.44    | <.001 | ***               |
| Self-confidence                 | 4.64     | <.05               | *                 | 1.68     | >.20  | ..                |
| Orderliness                     | 93.00    | <.001              | ***               | 247.00   | <.001 | ***               |
| Conscientiousness               | 56.00    | <.001              | ***               | 192.00   | <.001 | ***               |
| Innovation, creativity          | 5.54     | <.02               | **                | .46      | ...   | ..                |
| Self Perceptions                |          |                    |                   |          |       |                   |
| Introspection                   | 26.52    | <.001              | ***               | 78.80    | <.001 | ***               |
| Deference to authority          | .04      | ...                | ..                | .08      | ...   | ..                |
| Self-confidence                 | .42      | ...                | ..                | 2.59     | <.10  | ..                |
| Orderliness                     | 8.98     | <.001              | ***               | 28.00    | <.001 | ***               |
| Conscientiousness               | 37.00    | <.001              | ***               | 146.00   | <.001 | ***               |
| Innovation, creativity          | 12.66    | <.001 <sup>b</sup> | ***               | .86      | ...   | ..                |

<sup>a</sup>Under the abbreviation, Sig., \* indicates the probability of the difference being due to chance is 5 times in 100; \*\*, 2 times in 100; \*\*\*, 1 time in 1000.

<sup>b</sup>In direction opposite from prediction.

TABLE 31

RANKING BY THE EXPERIMENTAL GROUP OF TWELVE PERSONALITY TRAITS  
FROM THE MOST TO THE LEAST USEFUL FOR LIBRARIANS

| Trait                        | Men |        |      | Women |        |      | Both Groups |        |      |
|------------------------------|-----|--------|------|-------|--------|------|-------------|--------|------|
|                              | No. | %      | Rank | No.   | %      | Rank | No.         | %      | Rank |
| Enthusiasm . . .             | 30  | 26.32  | 1    | 171   | 45.36  | 1    | 201         | 40.94  | 1    |
| Conscientiousness            | 16  | 14.03  | 3    | 57    | 15.12  | 2    | 73          | 14.87  | 2    |
| Sociability . . .            | 10  | 8.77   | 5.5  | 49    | 12.99  | 3    | 59          | 12.02  | 3    |
| Sense of responsibility      | 17  | 14.91  | 2    | 40    | 10.61  | 4    | 57          | 11.61  | 4    |
| Self-confidence .            | 10  | 8.77   | 5.5  | 22    | 5.84   | 5    | 32          | 6.52   | 5    |
| Innovation, creativity . .   | 11  | 9.65   | 4    | 14    | 3.71   | 6    | 25          | 5.09   | 6    |
| Orderliness . . .            | 8   | 7.02   | 7    | 7     | 1.86   | 8.5  | 15          | 3.05   | 7.5  |
| Aggressiveness . .           | 7   | 6.14   | 8    | 8     | 2.12   | 7    | 15          | 3.05   | 7.5  |
| Self-control . . .           | 4   | 3.51   | 9    | 7     | 1.86   | 8.5  | 11          | 2.24   | 9    |
| Deference to authority . . . | 0   | . . .  | 11.5 | 2     | .53    | 10   | 2           | .41    | 10   |
| Reserve . . . . .            | 1   | .88    | 10   | 0     | . . .  | 11.5 | 1           | .20    | 11   |
| Introspection . .            | 0   | . . .  | 11.5 | 0     | . . .  | 11.5 | 0           | . . .  | 12   |
| Total . . . . .              | 114 | 100.00 | . .  | 377   | 100.00 | . .  | 491         | 100.00 | . .  |
| No information . .           | 11  | . . .  | . .  | 23    | . . .  | . .  | 34          | . . .  | . .  |
| Total . . . . .              | 125 | . . .  | . .  | 400   | . . .  | . .  | 525         | . . .  | . .  |

TABLE 32

CHI-SQUARES AND SIGNIFICANCE LEVELS OF RATINGS BY  
EXPERIMENTAL GROUP MEN AND WOMEN OF MOST  
AND LEAST USEFUL TRAITS FOR THE LIBRARIAN

| Trait                           | Men (N=114) |       | Women (N=377) |       |
|---------------------------------|-------------|-------|---------------|-------|
|                                 | $\chi^2$    | p     | $\chi^2$      | p     |
| Most Useful                     |             |       |               |       |
| Enthusiasm . . .                | 45.9        | <.001 | 672.0         | <.001 |
| Conscientiousness               | 4.13        | <.05  | 21.9          | <.001 |
| Sociability . . .               | 0           | . .   | 10.16         | <.01  |
| Sense of<br>responsibility      | 5.63        | <.02  | 2.28          | >.30  |
| Least Useful                    |             |       |               |       |
| Aggressiveness . .              | 38.0        | <.001 | 441.0         | <.001 |
| Introspection . .               | 1.43        | <.001 | 99.4          | <.001 |
| Reserve . . . . .               | 23.09       | <.001 | 59.7          | <.001 |
| Deference to<br>authority . . . | 67.4        | <.001 | 15.9          | <.001 |



TABLE 33

MMPI SCORES AND STANDARD DEVIATIONS FOR THE TWO GROUPS  
COMBINED IN TABLE 34 TO CONSTITUTE THE NORMATIVE GROUPS

| MMPI<br>Scales | Men                   |       |                                    |      | Women                 |       |                                   |      |
|----------------|-----------------------|-------|------------------------------------|------|-----------------------|-------|-----------------------------------|------|
|                | U. of Texas<br>(N=46) |       | U. of N.M. <sup>a</sup><br>(N=149) |      | U. of Texas<br>(N=37) |       | U. of Pa. <sup>b</sup><br>(N=115) |      |
|                | Mean                  | S.D.  | Mean                               | S.D. | Mean                  | S.D.  | Mean                              | S.D. |
| Es . .         | 51.42                 | 8.39  | 54.1                               | 8.7  | 50.42                 | 7.73  | 50.8                              | 8.2  |
| D . . .        | 54.24                 | 12.40 | 53.9                               | 10.5 | 50.39                 | 7.13  | 50.8                              | 10.2 |
| Hy . . .       | 56.96                 | 7.07  | 57.8                               | 7.8  | 54.35                 | 8.22  | 56.1                              | 8.5  |
| Pa . . .       | 58.22                 | 11.97 | 58.2                               | 10.4 | 53.53                 | 8.66  | 54.6                              | 11.0 |
| Mf . . .       | 64.43                 | 10.35 | 62.7                               | 9.9  | 45.92                 | 6.54  | 48.4                              | 8.4  |
| Fa . . .       | 52.24                 | 8.93  | 53.4                               | 7.8  | 54.14                 | 8.63  | 53.5                              | 9.4  |
| Pt . . .       | 58.00                 | 12.01 | 56.8                               | 10.2 | 52.67                 | 8.65  | 54.6                              | 10.5 |
| Sc . . .       | 57.67                 | 10.40 | 57.2                               | 10.5 | 54.32                 | 8.43  | 56.2                              | 10.8 |
| Ma . . .       | 60.39                 | 7.21  | 59.0                               | 10.0 | 54.70                 | 10.71 | 59.0                              | 11.9 |

<sup>a</sup>Ralph D. Norman and Miriam Reddo, "MMPI Personality Patterns of Various College Major Groups," *Journal of Applied Psychology*, XXXVI (December, 1952), 404-409.

<sup>b</sup>Franklin D. Fry, "A Study of the Personality Traits of College Students and of State Prison Inmates as Measured by the MMPI," *Journal of Psychology*, XXVIII (October, 1949), 439-449.

TABLE 3A

MEAN SCORES AND STANDARD DEVIATIONS ON THE MINNESOTA MULTIPHASIC  
PERSONALITY INVENTORY FOR EXPERIMENTAL AND NORMATIVE GROUPS

| Scale             | Men                    |       |                                      |       | Women                  |       |                                      |       |
|-------------------|------------------------|-------|--------------------------------------|-------|------------------------|-------|--------------------------------------|-------|
|                   | Experimental<br>(N=50) |       | Normative<br>(N=46;195) <sup>a</sup> |       | Experimental<br>(N=62) |       | Normative<br>(N=37;152) <sup>b</sup> |       |
|                   | Mean                   | S.D.  | Mean                                 | S.D.  | Mean                   | S.D.  | Mean                                 | S.D.  |
| L . .             | 54.14                  | 5.15  | 51.11                                | 1.79  | 54.56                  | 5.57  | 51.78                                | 3.56  |
| F . .             | 54.40                  | 5.15  | 54.57                                | 6.03  | 52.66                  | 4.29  | 52.78                                | 4.17  |
| K . .             | 56.42                  | 8.02  | 55.63                                | 7.37  | 56.35                  | 6.24  | 56.24                                | 9.74  |
| Ha . .            | 50.02                  | 12.13 | 53.47                                | 8.69  | 49.94                  | 6.70  | 50.71                                | 8.07  |
| D . .             | 56.40                  | 10.58 | 53.98                                | 10.98 | 51.89                  | 9.13  | 50.70                                | 9.55  |
| Hy . .            | 57.74                  | 9.54  | 57.60                                | 7.66  | 53.56                  | 7.39  | 55.67                                | 8.49  |
| Pd . .            | 50.22                  | 12.31 | 58.13                                | 10.78 | 52.92                  | 9.36  | 54.34                                | 10.49 |
| Mr . .            | 74.02                  | 11.12 | 63.11                                | 10.02 | 42.55                  | 8.48  | 47.80                                | 8.04  |
| Pa . .            | 52.42                  | 8.42  | 53.13                                | 8.07  | 52.01                  | 9.11  | 53.66                                | 9.20  |
| Pt . .            | 49.08                  | 11.63 | 57.08                                | 10.68 | 52.65                  | 8.64  | 54.13                                | 10.12 |
| Sc . .            | 49.84                  | 12.57 | 57.31                                | 10.48 | 53.56                  | 7.52  | 55.74                                | 10.32 |
| Ma . .            | 54.62                  | 10.66 | 59.33                                | 9.42  | 52.76                  | 9.22  | 57.97                                | 11.68 |
| Si . .            | 49.60                  | 11.68 | 50.02                                | 9.33  | 53.19                  | 9.59  | 53.08                                | 10.34 |
| Do <sup>c</sup> . | 17.36                  | 3.47  | 17.57                                | 3.07  | 17.61                  | 2.61  | 17.32                                | 3.03  |
| Re <sup>c</sup> . | 22.48                  | 2.46  | 21.04                                | 3.15  | 23.10                  | 2.54  | 22.97                                | 3.04  |
| Ne <sup>c</sup> . | 4.06                   | 3.06  | 4.56                                 | 3.24  | 4.06                   | 3.22  | 4.32                                 | 3.36  |
| AI . .            | 51.82                  | 18.70 | 58.70                                | 24.46 | 53.27                  | 16.05 | 49.63                                | 13.38 |

<sup>a</sup>For eight scales (L, F, K, Si, Do, Re, Ne, AI), N was 46; for the remaining nine scales N was 195.

<sup>b</sup>For eight scales (L, F, K, Si, Do, Re, Ne, AI), N was 37; for the remaining nine scales N was 152.

<sup>c</sup>Raw scores.

TABLE 35

t-RATIOS AND SIGNIFICANCE OF DIFFERENCES  
BETWEEN MEAN SCORES OF THE EXPERIMENTAL  
AND NORMATIVE GROUPS ON THE MINNESOTA  
MULTIPHASIC PERSONALITY INVENTORY

| Scale    | Men <sup>a</sup> |                    | Women <sup>b</sup> |       |
|----------|------------------|--------------------|--------------------|-------|
|          | t                | p                  | t                  | p     |
| L . . .  | 3.94             | <.001 <sup>c</sup> | 3.02               | <.01  |
| F . . .  | .15              | . . .              | 1.36               | . . . |
| K . . .  | .50              | . . .              | .06                | . . . |
| Ha . . . | 1.90             | <.05 <sup>c</sup>  | .72                | . . . |
| D . . .  | 1.43             | <.20               | .66                | . . . |
| Hy . . . | .10              | . . .              | 1.82               | <.05  |
| Pa . . . | 4.14             | <.001              | .97                | . . . |
| Ma . . . | 6.31             | <.001              | 4.17               | <.001 |
| Pa . . . | .54              | . . .              | 1.22               | . . . |
| Pt . . . | 4.42             | <.001              | 1.07               | . . . |
| Sc . . . | 3.89             | <.001              | 1.72               | <.10  |
| Ma . . . | 2.85             | <.01               | 3.45               | <.001 |
| Si . . . | .20              | . . .              | .05                | . . . |
| Do . . . | .31              | . . .              | .48                | . . . |
| Re . . . | 2.48             | <.01               | .22                | . . . |
| Ne . . . | .77              | . . .              | .38                | . . . |
| AI . . . | 1.54             | <.20 <sup>c</sup>  | 1.21               | . . . |

<sup>a</sup>N for the experimental group was 50; for the normative group, N was 46 for scales L, F, K, Si, Do, Re, Ne and AI, and 195 for the remaining scales.

<sup>b</sup>N for the experimental group was 62; for the normative group, N was 37 for scales L, F, K, Si, Do, Re, Ne and AI; and 152 for the remaining scales.

<sup>c</sup>In opposite direction.

TABLE 36

FREQUENCY DISTRIBUTION OF T-SCORES ON FOURTEEN SCALES OF  
THE MINNESOTA MULTIPLASIC PERSONALITY INVENTORY FOR MEN  
IN THE EXPERIMENTAL AND NORMATIVE GROUPS<sup>a</sup>

| T-Scores | Frequencies <sup>b</sup> |    |    |    |    |    |    |
|----------|--------------------------|----|----|----|----|----|----|
|          | L                        | P  | K  | Hs | D  | Hy | Pd |
| Below 19 | ..                       | .. | .. | .. | .. | .. | .. |
| 20-21    | ..                       | .. | .. | .. | 1  | .. | 1  |
| 22-23    | ..                       | .. | .. | .. | .. | .. | 1  |
| 24-25    | ..                       | .. | .. | .. | .. | .. | .. |
| 26-27    | ..                       | .. | .. | 2  | .. | .. | 1  |
| 28-29    | ..                       | .. | .. | 2  | .. | 2  | 2  |
| 30-31    | ..                       | .. | .. | .. | .. | .. | .. |
| 32-33    | ..                       | .. | .. | .. | 1  | .. | .. |
| 34-35    | ..                       | .. | .. | .. | 2  | .. | 2  |
| 36-37    | ..                       | .. | 1  | 1  | 1  | .. | 2  |
| 38-39    | ..                       | .. | .. | 2  | 3  | .. | 1  |
| 40-41    | ..                       | .. | .. | 5  | 2  | 1  | 5  |
| 42-43    | ..                       | .. | 2  | 3  | .. | 1  | 1  |
| 44-45    | ..                       | .. | 2  | 1  | 5  | 5  | 2  |
| 46-47    | ..                       | .. | 1  | 1  | 5  | 8  | 3  |
| 48-49    | ..                       | 1  | 6  | 6  | 5  | 9  | 2  |
| 50-51    | 25                       | 38 | 22 | 23 | 2  | 4  | 7  |
| 52-53    | 5                        | 3  | 5  | 8  | 3  | 9  | 1  |
| 54-55    | ..                       | 1  | 6  | .. | 4  | 6  | 8  |
| 56-57    | 9                        | 3  | .. | 3  | 5  | 5  | 5  |
| 58-59    | ..                       | .. | 5  | 4  | 3  | 2  | 6  |
| 60-61    | 6                        | .. | 4  | 2  | 8  | 3  | 3  |
| 62-63    | 2                        | 1  | 2  | 2  | 1  | 1  | 3  |
| 64-65    | ..                       | .. | 4  | 4  | 6  | 1  | 2  |
| 66-67    | 2                        | .. | 1  | 1  | 3  | 1  | 1  |
| 68-69    | ..                       | .. | 1  | 1  | 2  | .. | 3  |
| 70-71    | 1                        | .. | .. | 1  | 3  | 1  | 2  |
| 72-73    | ..                       | .. | .. | .. | 1  | .. | 3  |
| 74-75    | ..                       | .. | .. | 1  | .. | 1  | 2  |
| 76-77    | ..                       | .. | .. | .. | .. | 1  | 1  |
| 78-79    | ..                       | .. | .. | .. | .. | .. | .. |
| 80-81    | ..                       | .. | .. | .. | 2  | .. | 1  |
| 82-83    | ..                       | .. | .. | .. | .. | .. | .. |
| 84-85    | ..                       | .. | .. | .. | .. | .. | .. |
| 86-87    | ..                       | .. | .. | .. | .. | .. | .. |
| 88-89    | ..                       | .. | .. | .. | 1  | 1  | 1  |
| 90-91    | ..                       | .. | .. | .. | .. | 1  | .. |
| 92-93    | ..                       | .. | .. | .. | .. | .. | .. |
| 94-95    | ..                       | .. | .. | .. | .. | .. | 1  |
| 96-97    | ..                       | .. | .. | .. | .. | .. | .. |
| 98-99    | ..                       | .. | .. | .. | .. | .. | .. |
| Over 100 | ..                       | .. | .. | .. | .. | .. | .. |

<sup>a</sup>N for the experimental group was 50; for the normative group, 46.

<sup>b</sup>The first entry under each scale is the frequency for the experimental group, the second for the normative group.

TABLE 36--Continued

| Frequencies |    |    |    |    |    |    | T-Scores |
|-------------|----|----|----|----|----|----|----------|
| Mf          | Pa | Pt | Sc | Ma | Sl | AI |          |
| ..          | .. | .. | .. | .. | .. | 2  | Below 19 |
| ..          | .. | .. | 2  | .. | .. | 3  | 20-21    |
| ..          | .. | 2  | .. | .. | .. | .. | 22-23    |
| ..          | .. | .. | 1  | .. | .. | .. | 24-25    |
| ..          | .. | 1  | .. | .. | 1  | 1  | 26-27    |
| ..          | 2  | .. | 2  | .. | .. | 2  | 28-29    |
| ..          | .. | 1  | .. | .. | 1  | .. | 30-31    |
| ..          | .. | 1  | 1  | 1  | 3  | 2  | 32-33    |
| ..          | 1  | .. | 1  | 1  | 1  | .. | 34-35    |
| ..          | .. | 2  | .. | .. | 3  | 2  | 36-37    |
| ..          | 2  | 1  | 2  | 2  | 1  | 4  | 38-39    |
| ..          | 4  | 3  | 2  | 2  | 4  | 3  | 40-41    |
| 1           | 1  | 3  | 2  | 3  | 1  | 1  | 42-43    |
| ..          | 2  | 4  | 3  | 5  | 2  | 2  | 44-45    |
| ..          | 7  | 4  | 2  | 1  | .. | 3  | 46-47    |
| ..          | 2  | 3  | 2  | 3  | 4  | 2  | 48-49    |
| ..          | 5  | 4  | 1  | 3  | 5  | 5  | 50-51    |
| ..          | 3  | 5  | 3  | 1  | 4  | 1  | 52-53    |
| 1           | 2  | 7  | 2  | 7  | 4  | 2  | 54-55    |
| 2           | 1  | 5  | 9  | 1  | 1  | 1  | 56-57    |
| ..          | 3  | 4  | 2  | 5  | 1  | 1  | 58-59    |
| 3           | 5  | .. | 3  | 2  | 4  | 2  | 60-61    |
| 3           | 3  | 6  | 3  | 3  | 6  | 1  | 62-63    |
| 2           | 3  | 3  | 1  | 2  | 3  | 3  | 64-65    |
| 2           | 6  | 1  | 1  | 2  | .. | 1  | 66-67    |
| 2           | 1  | .. | 1  | 1  | 2  | 1  | 68-69    |
| 2           | 3  | 1  | 1  | 2  | 1  | 1  | 70-71    |
| 7           | 2  | .. | 1  | .. | 3  | 2  | 72-73    |
| 4           | 2  | .. | 1  | 2  | 1  | 1  | 74-75    |
| 2           | 2  | .. | 1  | .. | .. | 1  | 76-77    |
| 3           | 2  | .. | .. | 1  | 2  | 2  | 78-79    |
| 1           | .. | .. | .. | .. | .. | .. | 80-81    |
| 5           | 2  | .. | 2  | 1  | 1  | 1  | 82-83    |
| 3           | .. | .. | .. | .. | .. | 1  | 84-85    |
| 2           | .. | .. | 1  | .. | .. | 1  | 86-87    |
| 2           | .. | .. | .. | .. | .. | .. | 88-89    |
| 2           | 1  | .. | .. | .. | .. | .. | 90-91    |
| ..          | .. | .. | .. | .. | .. | .. | 92-93    |
| ..          | .. | .. | .. | .. | .. | .. | 94-95    |
| ..          | .. | .. | .. | .. | .. | .. | 96-97    |
| ..          | .. | .. | .. | .. | .. | .. | 98-99    |
| 1           | .. | .. | .. | .. | .. | 1  | Over 100 |

TABLE 37

FREQUENCY DISTRIBUTION OF RAW SCORES ON THREE  
 SCALES OF THE MINNESOTA MULTIPHASIC  
 PERSONALITY INVENTORY FOR MEN IN THE  
 EXPERIMENTAL AND NORMATIVE GROUPS<sup>a</sup>

| Raw Scores  | Frequencies <sup>b</sup> |    |    |    |    |    |
|-------------|--------------------------|----|----|----|----|----|
|             | Do                       |    | Re |    | Nm |    |
| 0-1 . . .   | ..                       | .. | .. | .. | 10 | 7  |
| 2-3 . . .   | ..                       | .. | .. | .. | 17 | 13 |
| 4-5 . . .   | ..                       | .. | .. | .. | 6  | 10 |
| 6-7 . . .   | ..                       | 1  | .. | .. | 10 | 7  |
| 8-9 . . .   | 1                        | .. | .. | .. | 2  | 5  |
| 10-11 . . . | 1                        | 1  | .. | .. | 4  | 3  |
| 12-13 . . . | 5                        | 3  | .. | .. | 1  | .. |
| 14-15 . . . | 8                        | 6  | .. | 4  | .. | 1  |
| 16-17 . . . | 10                       | 7  | .. | 4  | .. | .. |
| 18-19 . . . | 11                       | 12 | 8  | 5  | .. | .. |
| 20-21 . . . | 9                        | 15 | 10 | 10 | .. | .. |
| 22-23 . . . | 4                        | 1  | 13 | 10 | .. | .. |
| 24-25 . . . | 1                        | .. | 13 | 13 | .. | .. |
| 26-27 . . . | ..                       | .. | 5  | .. | .. | .. |
| 28-29 . . . | ..                       | .. | .. | .. | .. | .. |

<sup>a</sup>N for the experimental group was 50; for the normative group, 46.

<sup>b</sup>The first entry under each scale is the frequency for the experimental group, the second for the normative group.

TABLE 38

FREQUENCY DISTRIBUTION OF T-SCORES ON FOURTEEN SCALES OF THE  
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY FOR WOMEN  
IN THE EXPERIMENTAL AND NORMATIVE GROUPS<sup>a</sup>

| T-Scores | Frequencies <sup>b</sup> |    |    |    |    |    |    |
|----------|--------------------------|----|----|----|----|----|----|
|          | L                        | P  | K  | Ha | D  | Ky | Pa |
| 22-23    | ..                       | .. | .. | .. | .. | .. | 1  |
| 24-25    | ..                       | .. | .. | .. | .. | .. | .. |
| 26-27    | ..                       | .. | .. | .. | .. | .. | .. |
| 28-29    | ..                       | .. | .. | .. | 1  | .. | .. |
| 30-31    | ..                       | .. | .. | .. | 1  | .. | .. |
| 32-33    | ..                       | .. | .. | 1  | .. | .. | .. |
| 34-35    | ..                       | .. | .. | 1  | .. | .. | 1  |
| 36-37    | ..                       | .. | .. | 2  | 1  | 1  | 1  |
| 38-39    | ..                       | .. | .. | 1  | 2  | 1  | 3  |
| 40-41    | ..                       | .. | 1  | 1  | 1  | 1  | 4  |
| 42-43    | ..                       | .. | .. | 6  | 4  | 3  | 5  |
| 44-45    | ..                       | .. | 1  | 7  | 4  | 5  | .. |
| 46-47    | ..                       | .. | 3  | 5  | 4  | 13 | 8  |
| 48-49    | ..                       | .. | 6  | 6  | 7  | 5  | 4  |
| 50-51    | 30                       | 24 | 40 | 20 | 4  | 2  | 9  |
| 52-53    | 8                        | 9  | 5  | 6  | 4  | 1  | 8  |
| 54-55    | ..                       | .. | 6  | 7  | 11 | 2  | 7  |
| 56-57    | 6                        | .. | .. | 8  | 3  | 5  | 3  |
| 58-59    | ..                       | .. | 4  | 1  | 5  | 3  | 2  |
| 60-61    | 9                        | 2  | 3  | 1  | 3  | 5  | .. |
| 62-63    | 6                        | .. | .. | 9  | 1  | 1  | 1  |
| 64-65    | ..                       | .. | 3  | 1  | 4  | 2  | 1  |
| 66-67    | 1                        | 2  | 1  | .. | 2  | .. | 1  |
| 68-69    | ..                       | .. | .. | 1  | 5  | 1  | 1  |
| 70-71    | 2                        | .. | .. | 1  | 1  | 1  | .. |
| 72-73    | ..                       | .. | .. | .. | 1  | 1  | .. |
| 74-75    | ..                       | .. | .. | 1  | .. | .. | 1  |
| 76-77    | ..                       | .. | .. | .. | .. | .. | .. |
| 78-79    | ..                       | .. | .. | .. | .. | .. | .. |
| 80-81    | ..                       | .. | .. | .. | .. | .. | .. |
| 82-83    | ..                       | .. | .. | .. | .. | .. | .. |
| 84-85    | ..                       | .. | .. | .. | .. | .. | .. |
| 86-87    | ..                       | .. | .. | .. | 1  | .. | .. |
| 88-89    | ..                       | .. | .. | .. | .. | .. | .. |
| 90-91    | ..                       | .. | .. | .. | .. | .. | .. |
| 92-93    | ..                       | .. | .. | .. | .. | .. | .. |
| 94-95    | ..                       | .. | .. | .. | .. | .. | .. |
| 96-97    | ..                       | .. | .. | .. | .. | .. | .. |

<sup>a</sup>N for the experimental group was 62; for the normative group, 37.

<sup>b</sup>The first entry under each scale is the frequency for the experimental group, the second for the normative group.

TABLE 38--Continued

| Frequencies |    |    |    |    |    |    | T-Scores |
|-------------|----|----|----|----|----|----|----------|
| Mf          | Pa | Pt | Sc | Mz | Sl | Al |          |
| ..          | .. | .. | .. | .. | .. | 1  | 22-23    |
| 2           | .. | .. | .. | .. | .. | 1  | 24-25    |
| ..          | .. | 1  | 1  | .. | .. | 1  | 26-27    |
| 3           | .. | .. | .. | .. | .. | 1  | 28-29    |
| 5           | 1  | .. | .. | .. | .. | 2  | 30-31    |
| ..          | 1  | .. | .. | 1  | .. | 1  | 32-33    |
| 2           | 1  | 2  | 1  | 1  | 1  | .. | 34-35    |
| 3           | 2  | .. | .. | .. | 1  | 3  | 36-37    |
| 7           | 3  | 4  | 2  | 2  | 3  | 1  | 38-39    |
| 3           | .. | 2  | 1  | 5  | 2  | 3  | 40-41    |
| 10          | 3  | .. | 4  | 2  | 1  | 2  | 42-43    |
| 6           | 6  | 7  | 3  | 2  | 5  | 2  | 44-45    |
| 4           | 4  | 6  | 3  | 4  | .. | 5  | 46-47    |
| 7           | 8  | .. | 5  | 3  | 6  | 7  | 48-49    |
| 2           | 4  | 6  | 2  | 8  | 5  | 10 | 50-51    |
| 1           | 1  | 3  | 4  | 1  | 3  | 3  | 52-53    |
| 3           | 1  | .. | 5  | 2  | 7  | 5  | 54-55    |
| 3           | 2  | 16 | 9  | 5  | 3  | 4  | 56-57    |
| 1           | .. | 7  | 3  | 7  | 2  | 6  | 58-59    |
| ..          | .. | .. | 3  | 2  | 5  | 1  | 60-61    |
| ..          | 1  | 4  | 2  | 2  | 3  | 5  | 62-63    |
| ..          | .. | 2  | 4  | 2  | 1  | 1  | 64-65    |
| ..          | .. | .. | 3  | 2  | .. | 1  | 66-67    |
| ..          | .. | .. | 1  | 1  | .. | 1  | 68-69    |
| ..          | .. | 1  | .. | 2  | 1  | 1  | 70-71    |
| ..          | .. | .. | 1  | .. | 1  | 2  | 72-73    |
| ..          | .. | .. | .. | 2  | 1  | 2  | 74-75    |
| ..          | .. | .. | .. | .. | 1  | .. | 76-77    |
| ..          | .. | .. | 1  | .. | 1  | 3  | 78-79    |
| ..          | .. | .. | .. | .. | .. | .. | 80-81    |
| ..          | 1  | .. | .. | .. | .. | .. | 82-83    |
| ..          | .. | .. | .. | .. | .. | 1  | 84-85    |
| ..          | .. | .. | .. | .. | .. | .. | 86-87    |
| ..          | .. | .. | .. | .. | .. | 1  | 88-89    |
| ..          | .. | .. | .. | .. | .. | .. | 90-91    |
| ..          | .. | .. | .. | .. | .. | .. | 92-93    |
| ..          | .. | .. | .. | .. | .. | 1  | 94-95    |
| ..          | .. | .. | .. | .. | .. | .. | 96-97    |



TABLE 39

FREQUENCY DISTRIBUTION OF RAW SCORES ON THREE SCALES  
OF THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY  
FOR WOMEN IN THE EXPERIMENTAL AND NORMATIVE GROUPS<sup>a</sup>

| Raw Scores      | Frequencies <sup>b</sup> |    |    |    |    |    |
|-----------------|--------------------------|----|----|----|----|----|
|                 | Do                       |    | Re |    | Rm |    |
| 0-1 . . . . .   | ..                       | .. | .. | .. | 8  | 7  |
| 2-3 . . . . .   | ..                       | .. | .. | .. | 16 | 12 |
| 4-5 . . . . .   | ..                       | .. | .. | .. | 25 | 7  |
| 6-7 . . . . .   | ..                       | .. | .. | .. | 6  | 3  |
| 8-9 . . . . .   | ..                       | .. | .. | .. | 4  | 5  |
| 10-11 . . . . . | 1                        | 1  | .. | .. | 2  | 2  |
| 12-13 . . . . . | 3                        | 2  | .. | .. | 1  | 1  |
| 14-15 . . . . . | 8                        | 8  | .. | 1  | .. | .. |
| 16-17 . . . . . | 17                       | 11 | 1  | 1  | .. | .. |
| 18-19 . . . . . | 15                       | 4  | 4  | 3  | 1  | .. |
| 20-21 . . . . . | 16                       | 9  | 13 | 4  | .. | .. |
| 22-23 . . . . . | 1                        | 1  | 14 | 12 | .. | .. |
| 24-25 . . . . . | 1                        | 1  | 16 | 7  | .. | .. |
| 26-27 . . . . . | ..                       | .. | 14 | 8  | .. | .. |
| 28-29 . . . . . | ..                       | .. | .. | .. | .. | .. |
| 30-31 . . . . . | ..                       | .. | .. | 1  | .. | .. |

<sup>a</sup>N for the experimental group was 62; for the normative group, 37.

<sup>b</sup>The first entry under each scale is the frequency for the experimental group, the second for the normative group.

TABLE 40

MEAN SCORES AND STANDARD DEVIATIONS ON THE MINNESOTA  
MULTIPHASIC PERSONALITY INVENTORY FOR MEN AND  
WOMEN IN THE EXPERIMENTAL GROUP

| Scales     | Men (N=50) |       | Women (N=62) |       |
|------------|------------|-------|--------------|-------|
|            | Mean       | S. D. | Mean         | S. D. |
| L . . . .  | 54.14      | 5.15  | 54.56        | 5.57  |
| F . . . .  | 54.40      | 5.15  | 52.66        | 4.29  |
| K . . . .  | 56.42      | 8.02  | 56.35        | 6.24  |
| Hs . . . . | 50.02      | 12.13 | 49.94        | 6.70  |
| D . . . .  | 56.40      | 10.58 | 51.89        | 9.13  |
| Hy . . . . | 57.74      | 9.54  | 53.56        | 7.39  |
| Pd . . . . | 50.22      | 12.31 | 52.92        | 9.36  |
| Pa . . . . | 52.42      | 8.42  | 52.01        | 9.11  |
| Pt . . . . | 49.08      | 11.63 | 52.66        | 8.64  |
| Sc . . . . | 49.84      | 12.57 | 53.56        | 7.52  |
| Ma . . . . | 54.62      | 10.66 | 52.76        | 9.22  |
| Bi . . . . | 49.60      | 11.68 | 53.19        | 9.59  |
| Do . . . . | 17.36      | 3.47  | 17.61        | 2.61  |
| Re . . . . | 22.48      | 2.46  | 23.01        | 2.54  |
| Ne . . . . | 4.06       | 3.06  | 4.06         | 3.22  |
| AI . . . . | 51.82      | 18.70 | 53.27        | 16.05 |

TABLE 41

t-RATIOS AND SIGNIFICANCE OF THE  
DIFFERENCE BETWEEN MEAN SCORES  
OF EXPERIMENTAL GROUP MEN AND  
WOMEN ON THE MINNESOTA MULTI-  
PHASIC PERSONALITY INVENTORY\*

| Scale    | t    | P          |
|----------|------|------------|
| L . . .  | .41  | . . .      |
| F . . .  | .91  | . . .      |
| K . . .  | .05  | . . .      |
| Hs . . . | .04  | . . .      |
| D . . .  | 2.39 | >.02 < .05 |
| Hy . . . | 2.55 | <.02       |
| Pa . . . | 1.27 | . . .      |
| Pa . . . | .25  | . . .      |
| Pt . . . | 1.82 | . . .      |
| Sc . . . | 1.84 | . . .      |
| Ma . . . | .97  | . . .      |
| Si . . . | 1.75 | . . .      |
| Do . . . | .42  | . . .      |
| Pc . . . | 1.32 | . . .      |
| Ne . . . | 0    | . . .      |
| AI . . . | .43  | . . .      |

\*N for men, 50; for women, 62.

TABLE 42

MEAN SCORES AND STANDARD DEVIATIONS ON THE ALLPORT-VERNON STUDY  
OF VALUES FOR THE EXPERIMENTAL AND NORMATIVE GROUPS

| Value       | Men                    |      |                       |      | Women                   |      |                       |      |
|-------------|------------------------|------|-----------------------|------|-------------------------|------|-----------------------|------|
|             | Experimental<br>(N=88) |      | Normative<br>(N=1163) |      | Experimental<br>(N=305) |      | Normative<br>(N=1522) |      |
|             | Mean                   | S.D. | Mean                  | S.D. | Mean                    | S.D. | Mean                  | S.D. |
| Theoretical | 33.70                  | 6.80 | 30.83                 | 6.20 | 28.32                   | 6.48 | 27.69                 | 6.55 |
| Economic    | 24.92                  | 7.36 | 32.02                 | 6.15 | 23.80                   | 6.63 | 27.04                 | 5.95 |
| Aesthetic   | 33.84                  | 8.55 | 27.04                 | 7.20 | 33.61                   | 7.64 | 33.03                 | 7.45 |
| Social      | 31.25                  | 5.37 | 29.74                 | 5.40 | 32.34                   | 5.55 | 31.65                 | 5.80 |
| Political   | 26.47                  | 6.48 | 32.08                 | 6.35 | 25.19                   | 5.78 | 27.87                 | 5.90 |
| Religious   | 29.50                  | 9.92 | 27.96                 | 7.85 | 36.77                   | 9.90 | 33.31                 | 8.40 |

TABLE 43

t-RATIOS AND SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN  
SCORES OF THE EXPERIMENTAL AND NORMATIVE GROUPS  
ON THE ALLPORT-VERNON STUDY OF VALUES

| Scale       | Men  |                    | Women <sup>b</sup> |                    |
|-------------|------|--------------------|--------------------|--------------------|
|             | t    | p                  | t                  | p                  |
| Theoretical | 3.83 | <.001              | 1.54               | <.07               |
| Economic    | 8.77 | <.001 <sup>c</sup> | 8.10               | <.001 <sup>c</sup> |
| Aesthetic   | 7.31 | <.001              | 1.23               | . . . .            |
| Social      | 2.52 | <.02               | 1.97               | <.05               |
| Political   | 7.90 | <.001 <sup>c</sup> | 7.44               | <.001 <sup>c</sup> |
| Religious   | 1.43 | . . . .            | 5.77               | <.001              |

<sup>a</sup>N for the experimental group was 88; for the normative group, 1163.

<sup>b</sup>N for the experimental group was 305; for the normative group, 1592.

<sup>c</sup>Experimental group significantly lower than the normative group.

TABLE 44

MEANS AND STANDARD DEVIATIONS OF SCORES OF  
EXPERIMENTAL GROUP MEN AND WOMEN ON THE  
ALLPORT-VERNON STUDY OF VALUES

| Scales      | Men (N=88) |      | Women (N=305) |      |
|-------------|------------|------|---------------|------|
|             | Mean       | S.D. | Mean          | S.D. |
| Theoretical | 33.70      | 6.80 | 28.32         | 6.48 |
| Economic    | 24.92      | 7.36 | 23.80         | 6.63 |
| Aesthetic   | 33.84      | 8.55 | 33.61         | 7.64 |
| Social      | 31.25      | 5.37 | 32.34         | 5.55 |
| Political   | 26.47      | 6.48 | 25.19         | 5.78 |
| Religious   | 29.50      | 9.92 | 36.77         | 9.90 |

TABLE 45

t-RATIOS AND SIGNIFICANCE OF DIFFERENCES  
BETWEEN MEAN SCORES OF EXPERIMENTAL  
GROUP MEN AND WOMEN ON THE ALLPORT-  
VERNON STUDY OF VALUES<sup>a</sup>

| Scales      | t    | p     |
|-------------|------|-------|
| Theoretical | 6.64 | <.01  |
| Economic    | 1.28 | . . . |
| Aesthetic   | .23  | . . . |
| Social      | 1.67 | . . . |
| Political   | 1.66 | . . . |
| Religious   | 6.11 | <.01  |

<sup>a</sup>N for men, 88; for women, 305.

TABLE 46

MEAN SCORES AND STANDARD DEVIATIONS ON THE  
ALLPORT-ALLPORT A-S REACTION STUDY FOR THE  
EXPERIMENTAL AND NORMATIVE GROUPS

| Group                | Number | Mean  | S.D.  |
|----------------------|--------|-------|-------|
| Experimental (Men)   | 104    | -2.54 | 17.64 |
| Normative (Men)      | 2578   | -0.01 | 19.40 |
| Experimental (Women) | 316    | 3.00  | 16.99 |
| Normative (Women)    | 600    | 4.75  | 19.91 |

TABLE 47

t-RATIOS AND SIGNIFICANCE OF DIFFERENCES  
BETWEEN MEAN SCORES OF THE EXPERIMENTAL  
AND NORMATIVE GROUPS ON THE A-S  
REACTION STUDY

| Men <sup>a</sup> |      | Women <sup>b</sup> |      |
|------------------|------|--------------------|------|
| t                | p    | t                  | p    |
| 1.43             | >.07 | 1.40               | >.09 |

<sup>a</sup>N for the Experimental group:  
104; for the Normative group: 2578.

<sup>b</sup>N for the Experimental group:  
316; for the Normative group: 600.

TABLE 48

MEAN SCORES AND STANDARD DEVIATIONS ON THE  
TERMAN-MILES ATTITUDE-INTEREST ANALYSIS  
TEST FOR THE EXPERIMENTAL AND  
NORMATIVE GROUPS

| Group                | Number | Mean   | S. D. |
|----------------------|--------|--------|-------|
| Experimental (Men)   | 88     | 29.94  | 45.47 |
| Normative (Men)      | 368    | 58.90  | 51.43 |
| Experimental (Women) | 122    | -51.44 | 43.16 |
| Normative (Women)    | 523    | -73.60 | 44.35 |

TABLE 49

t-RATIOS AND SIGNIFICANCE OF DIFFERENCES  
BETWEEN MEAN SCORES OF THE EXPERIMENTAL  
AND NORMATIVE GROUPS ON THE TERMAN-  
MILES ATTITUDE-INTEREST  
ANALYSIS TEST

| Men <sup>a</sup> |       | Women <sup>b</sup> |                    |
|------------------|-------|--------------------|--------------------|
| t                | p     | t                  | p                  |
| 5.23             | <.001 | 5.98               | <.001 <sup>c</sup> |

<sup>a</sup>N for the Experimental group:  
88; for the Normative group: 368.

<sup>b</sup>N for the Experimental group:  
122; for the Normative group: 523.

<sup>c</sup>In opposite direction, i.e., as  
more masculine.

TABLE 50

MEANS AND STANDARD DEVIATIONS ON THE BERNESE PERSONALITY INVENTORY  
FOR THE EXPERIMENTAL AND NORMATIVE GROUPS

| Scales                               | Men                       |      |                        |      | Women                     |      |           |      |
|--------------------------------------|---------------------------|------|------------------------|------|---------------------------|------|-----------|------|
|                                      | Experimental <sup>a</sup> |      | Normative <sup>c</sup> |      | Experimental <sup>b</sup> |      | Normative |      |
|                                      | Mean                      | S.D. | Mean                   | S.D. | Mean                      | S.D. | Mean      | S.D. |
|                                      |                           |      | N                      |      |                           |      | N         |      |
| E1-N (Neuroticism)                   | -70.24                    | 76.4 | 656                    | 82.2 | -50.87                    | 74.4 | 544       | 42.8 |
| E2-S (Self-sufficiency)              | 36.61                     | 50.8 | 658                    | 52.8 | 16.32                     | 51.6 | 391       | 6.8  |
| E3-I (Introversion-<br>extroversion) | -40.13                    | 47.9 | 651                    | 49.6 | -31.88                    | 50.0 | 386       | 14.7 |
| E4-D (Dominance)                     | 45.57                     | 66.5 | 631                    | 65.6 | 31.96                     | 60.7 | 396       | 30.6 |
| F1-C (Self-confidence)               | -42.04                    | 93.0 | 273                    | 83.6 | -15.18                    | 82.8 | 144       | 8.7  |
| F2-S (Responsibility)                | 3.47                      | 56.2 | 273                    | 58.4 | 17.61                     | 57.4 | 144       | 31.1 |
|                                      |                           |      |                        |      |                           |      |           | 46.4 |

<sup>a</sup>N for experimental group men = 83.

<sup>b</sup>N for experimental group women = 395.

<sup>c</sup>N varied with each scale; see following table.



TABLE 51

t-RATIOS AND SIGNIFICANCE OF DIFFERENCES BETWEEN  
MEAN SCORES OF EXPERIMENTAL AND NORMATIVE GROUPS  
ON THE BERNEUTER PERSONALITY INVENTORY

| Scales | Men <sup>a, b</sup> |                    | Women <sup>c, d</sup> |                    |
|--------|---------------------|--------------------|-----------------------|--------------------|
|        | t                   | p                  | t                     | p                  |
| B1-N   | 1.35                | . . .              | 1.61                  | . . .              |
| B2-S   | 1.62                | <.06               | 2.51                  | <.02 <sup>e</sup>  |
| B3-I   | 2.41                | <.05 <sup>f</sup>  | 4.88                  | <.001 <sup>f</sup> |
| B4-D   | .04                 | . . .              | .31                   | . . .              |
| F1-C   | .53                 | . . .              | 3.16                  | <.01 <sup>g</sup>  |
| F2-S   | 4.11                | <.001 <sup>h</sup> | 8.79                  | <.001 <sup>h</sup> |

<sup>a, b</sup>N for experimental group men = 83; N for normative group men: B1-N, 656; B2-S, 658; B3-I, 651; B4-D, 631; F1-C and F2-S, 273.

<sup>c, d</sup>N for experimental group women = 385; N for normative group women: B1-N, 544; B2-S, 391; B3-I, 386; B4-D, 396; F1-C and F2-S, 144.

<sup>e</sup>Experimental group women more self-sufficient.

<sup>f</sup>Experimental group less introverted.

<sup>g</sup>Experimental group women more self-confident.

<sup>h</sup>Experimental group more non-social.

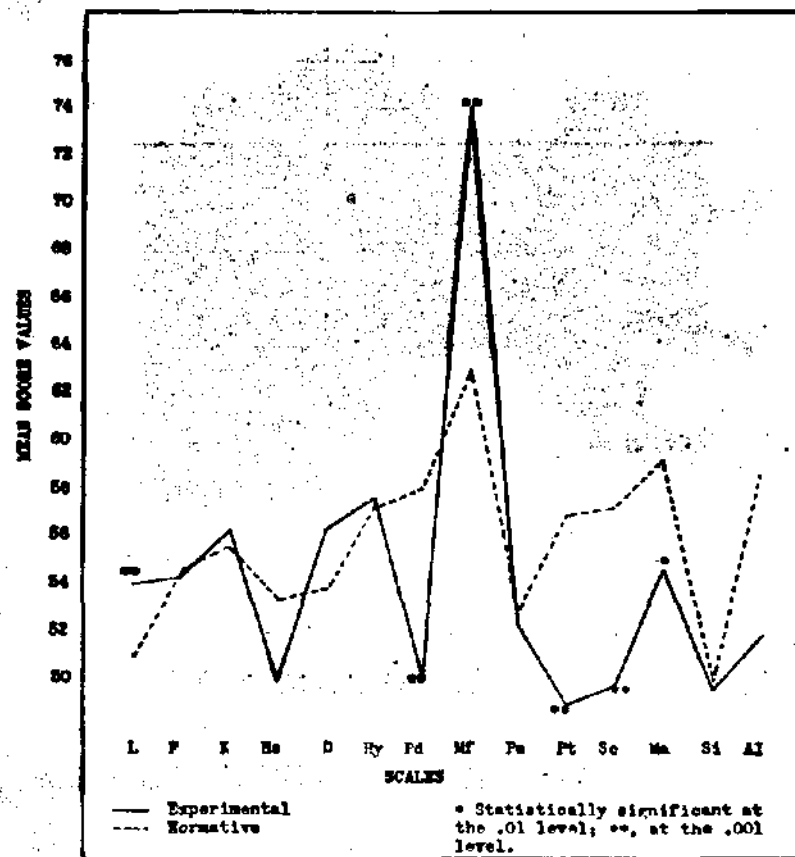


Fig. 1 -- Mean T-score profiles of experimental and normative group men on 14 scales of the MMPI.

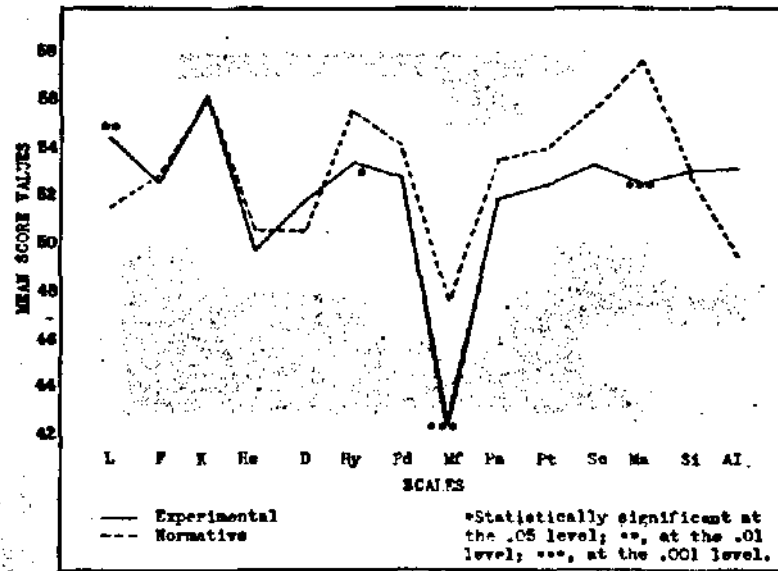


Fig. 2.-- Mean T-score profiles of the experimental and normative group women on 14 scales of the MMPI.

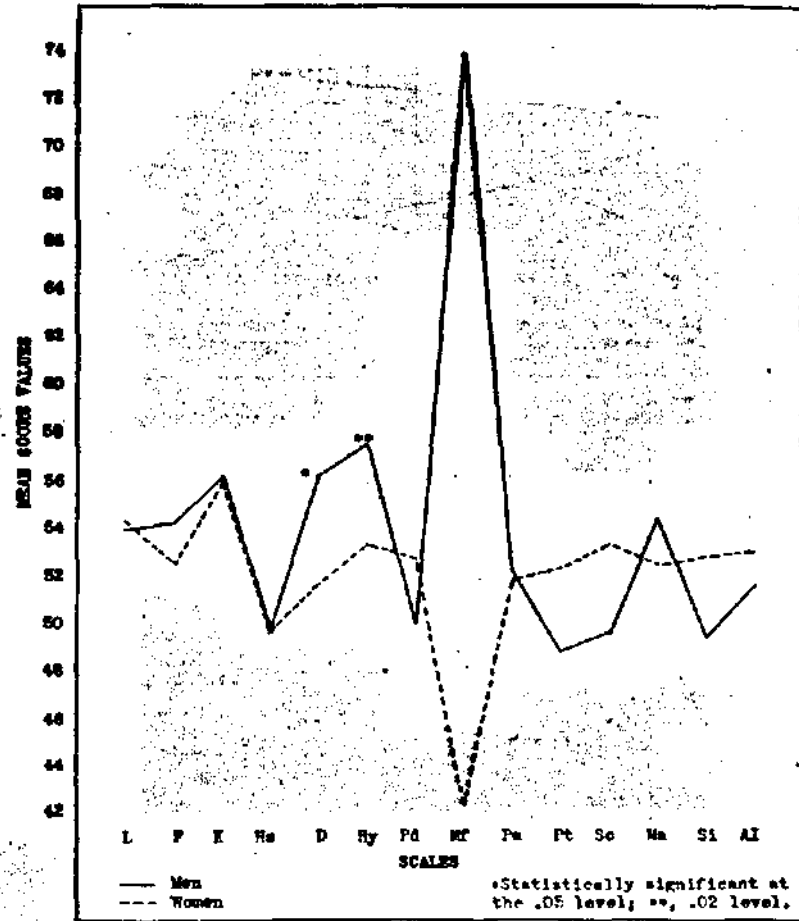


Fig. 3.-- Mean T-score profiles of the experimental group men and women on 14 scales of the MMPI.

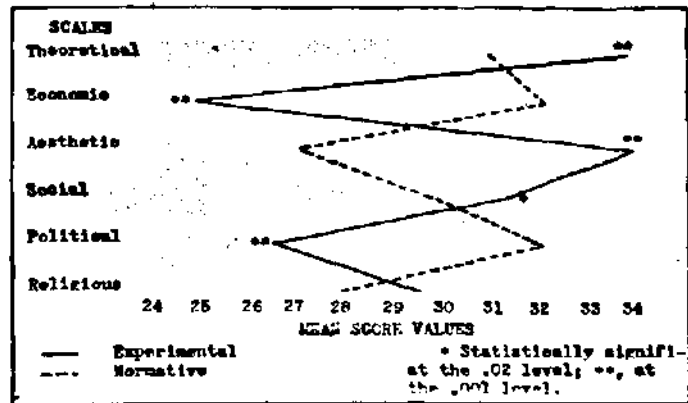


Fig. 4.— Mean score profiles of the men in the experimental and normative groups on the Study of Values.

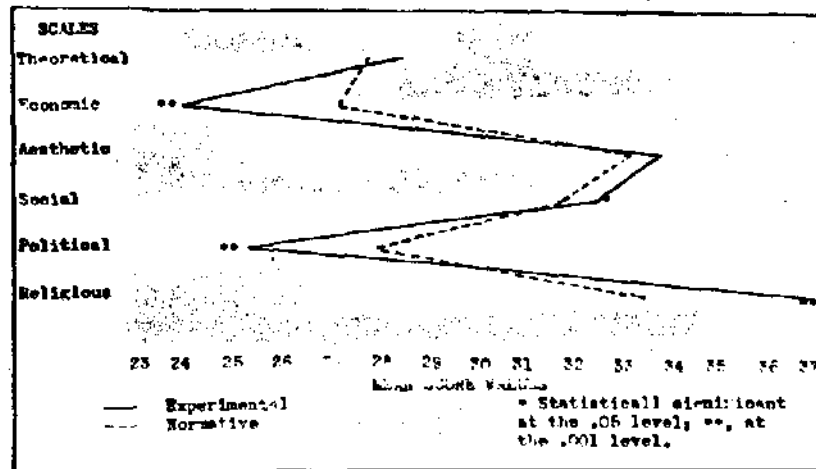


Fig. 5.— Mean score profiles of women in the experimental and normative groups on the Study of Values.

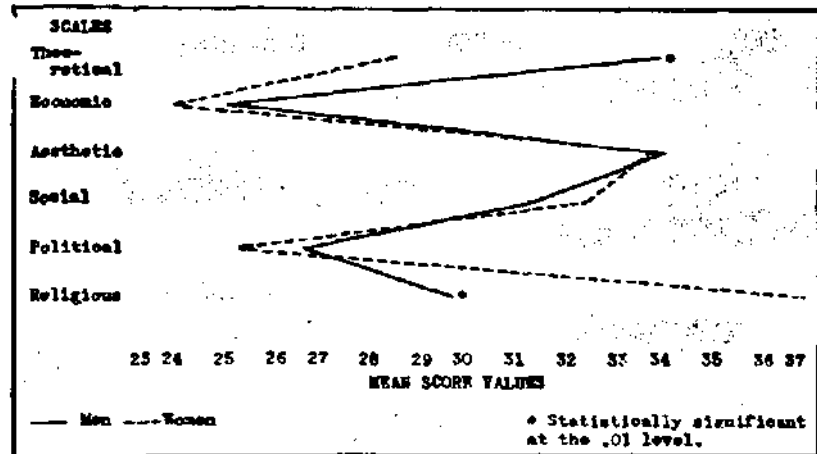


Fig. 6.— Mean score profiles of men and women in the experimental group on the study of values.

APPENDIX IV

DATA ON TWO PUBLIC LIBRARY GROUPS

## EXPLANATORY STATEMENT

As was noted on p. 35, Chapter III, two public libraries provided test subjects for this study, but the results of the testing were not incorporated in the report. The reasons for the omission are explained in the following paragraphs.

In the first place, it became necessary to re-orient the study and to focus attention on library school students. From the large mass of data that had been assembled, only the information bearing directly on the central problem was selected for use in the study.

In the second place, one volume of the Public Library Inquiry dealt specifically with the public librarian, and though emphasis in it was not on the personality of the librarian, at least some attention was given the subject.<sup>1</sup>

And in the third place, it was the hope of the investigator that the study of library school students might encourage similar or related studies dealing with particular groups of practicing librarians, including, of course, those employed in public libraries. Each group would seem to warrant separate and detailed study.

Acknowledgment is here made of the generous cooperation of the administration and staff members of the Gary Public Library and the Newark Public Library. Some of the information supplied by the two groups is included in this appendix with the hope that it may be of some interest and perhaps of possible use to others concerned with investigations similar to the present one.

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<sup>1</sup>Alice I. Bryan, The Public Librarian, A Report of the Public Library Inquiry (New York: Columbia University Press, 1952).



TABLE 52

AGE OF STAFF MEMBERS OF THE GARY PUBLIC LIBRARY  
AND THE NEWARK PUBLIC LIBRARY

| Age Groups      | Men |        | Women |        | Both Groups |        |
|-----------------|-----|--------|-------|--------|-------------|--------|
|                 | No. | %      | No.   | %      | No.         | %      |
| 25-29 . . . . . | 2   | 25.00  | 8     | 21.05  | 10          | 21.73  |
| 30-34 . . . . . | 3   | 37.50  | 8     | 21.05  | 11          | 23.91  |
| 35-39 . . . . . | 2   | 25.00  | 9     | 23.68  | 11          | 23.91  |
| 40-44 . . . . . | 0   | .00    | 8     | 21.05  | 8           | 17.39  |
| 45-49 . . . . . | 1   | 12.50  | 3     | 7.89   | 4           | 8.70   |
| 50-54 . . . . . | 0   | .00    | 1     | 2.64   | 1           | 2.18   |
| 55-59 . . . . . | 0   | .00    | 0     | .00    | 0           | .00    |
| 60-64 . . . . . | 0   | .00    | 1     | 2.64   | 1           | 2.18   |
| Total . . . . . | 8   | 100.00 | 38    | 100.00 | 46          | 100.00 |
| No information  | 0   |        | 2     |        | 2           |        |
| Total . . . . . | 8   |        | 40    |        | 48          |        |

TABLE 53

MARITAL STATUS OF STAFF MEMBERS OF THE GARY PUBLIC LIBRARY  
AND THE NEWARK PUBLIC LIBRARY

| Status    | Men |        | Women |        | Both Groups |        |
|-----------|-----|--------|-------|--------|-------------|--------|
|           | No. | %      | No.   | %      | No.         | %      |
| Single    | 4   | 50.00  | 32    | 80.00  | 36          | 75.00  |
| Married   | 4   | 50.00  | 8     | 20.00  | 12          | 25.00  |
| Divorced  | 0   | .00    | 0     | .00    | 0           | .00    |
| Widowed   | 0   | .00    | 0     | .00    | 0           | .00    |
| Separated | 0   | .00    | 0     | .00    | 0           | .00    |
| Total     | 8   | 100.00 | 40    | 100.00 | 48          | 100.00 |

TABLE 54

HIGHEST NON-PROFESSIONAL DEGREE HELD BY STAFF MEMBERS OF THE GARY  
PUBLIC LIBRARY AND THE NEWARK PUBLIC LIBRARY

| Degree Held          | Men |        | Women |        | Both Groups |        |
|----------------------|-----|--------|-------|--------|-------------|--------|
|                      | No. | %      | No.   | %      | No.         | %      |
| None . . . . .       | 0   | .00    | 6     | 19.36  | 6           | 15.39  |
| Bachelor's . . . . . | 4   | 50.00  | 9     | 29.03  | 13          | 33.33  |
| Master's . . . . .   | 3   | 37.50  | 16    | 51.61  | 19          | 48.72  |
| Doctor's . . . . .   | 1   | 12.50  | 0     | .00    | 1           | 2.56   |
| Total . . . . .      | 8   | 100.00 | 31    | 100.00 | 39          | 100.00 |
| No information       | 0   |        | 9     |        | 9           |        |
| Total . . . . .      | 8   |        | 40    |        | 48          |        |

TABLE 55

TYPE OF COLLEGE ATTENDED BY STAFF MEMBERS OF THE GARY PUBLIC  
LIBRARY AND THE NEWARK PUBLIC LIBRARY

| Type of College  | Men |        | Women |        | Both Groups |        |
|------------------|-----|--------|-------|--------|-------------|--------|
|                  | No. | %      | No.   | %      | No.         | %      |
| Liberal arts     | 4   | 50.00  | 11    | 31.42  | 15          | 34.89  |
| University       | 2   | 25.00  | 14    | 40.00  | 16          | 37.20  |
| Teachers college | 2   | 25.00  | 10    | 28.58  | 12          | 27.91  |
| Technical        | 0   | .00    | 0     | .00    | 0           | .00    |
| Total            | 8   | 100.00 | 35    | 100.00 | 43          | 100.00 |
| No information   | 0   |        | 5     |        | 5           |        |
| Total            | 8   |        | 40    |        | 48          |        |

TABLE 56

UNDERGRADUATE DEGREE MAJOR FOR STAFF MEMBERS OF THE GARY PUBLIC  
LIBRARY AND THE NEWARK PUBLIC LIBRARY

| Subject                 | Men |        | Women |        | Both Groups |        |
|-------------------------|-----|--------|-------|--------|-------------|--------|
|                         | No. | %      | No.   | %      | No.         | %      |
| Literature . . . . .    | 3   | 37.50  | 13    | 36.11  | 16          | 36.37  |
| History . . . . .       | 0   | .00    | 5     | 13.89  | 5           | 11.37  |
| Foreign languages . . . | 0   | .00    | 4     | 11.11  | 4           | 9.09   |
| Education . . . . .     | 2   | 25.00  | 3     | 8.33   | 5           | 11.36  |
| Social sciences . . . . | 3   | 37.50  | 2     | 5.56   | 5           | 11.36  |
| Library science . . . . | 0   | .00    | 8     | 22.22  | 8           | 18.18  |
| Biological sciences . . | 0   | .00    | 0     | .00    | 0           | .00    |
| Physical sciences . . . | 0   | .00    | 0     | .00    | 0           | .00    |
| Fine arts . . . . .     | 0   | .00    | 1     | 2.78   | 1           | 2.27   |
| Business administration | 0   | .00    | 0     | .00    | 0           | .00    |
| Other . . . . .         | 0   | .00    | 0     | .00    | 0           | .00    |
| Total . . . . .         | 8   | 100.00 | 36    | 100.00 | 44          | 100.00 |
| No information . . . .  | 0   |        | 4     |        | 4           |        |
| Total . . . . .         | 8   |        | 40    |        | 48          |        |

TABLE 57

OCCUPATION OF FATHERS OF LIBRARIANS IN THE GARY PUBLIC LIBRARY  
AND THE NEWARK PUBLIC LIBRARY

| Occupational Group        | Men |        | Women |        | Both Groups |        |
|---------------------------|-----|--------|-------|--------|-------------|--------|
|                           | No. | %      | No.   | %      | No.         | %      |
| Professional . . . . .    | 1   | 12.50  | 17    | 31.57  | 13          | 28.26  |
| Managerial Executive . .  | 2   | 25.00  | 2     | 5.26   | 4           | 8.70   |
| Small Owner . . . . .     | 0   | .00    | 9     | 23.69  | 9           | 19.57  |
| Clerical, Sales, etc. . . | 3   | 37.50  | 6     | 15.79  | 9           | 19.57  |
| Skilled Occupations . .   | 0   | .00    | 5     | 13.15  | 5           | 10.86  |
| Semi-skilled Occupations  | 0   | .00    | 2     | 5.27   | 2           | 4.34   |
| Unskilled Occupations .   | 0   | .00    | 0     | .00    | 0           | .00    |
| Farming, etc. . . . .     | 2   | 25.00  | 2     | 5.27   | 4           | 8.70   |
| Other . . . . .           | 0   | .00    | 0     | .00    | 0           | .00    |
| Total . . . . .           | 8   | 100.00 | 38    | 100.00 | 46          | 100.00 |
| No information . . . .    | 0   |        | 2     |        | 2           |        |
| Total . . . . .           | 8   |        | 40    |        | 48          |        |

TABLE 58

SATISFACTION WITH VOCATIONAL CHOICE, GARY PUBLIC LIBRARIANS  
AND NEWARK PUBLIC LIBRARIANS

| Item         | Men |        | Women |        | Both Groups |        |
|--------------|-----|--------|-------|--------|-------------|--------|
|              | No. | %      | No.   | %      | No.         | %      |
| Satisfied    | 6   | 75.00  | 32    | 80.00  | 38          | 79.16  |
| Dissatisfied | 1   | 12.50  | 5     | 12.50  | 6           | 12.50  |
| Undecided    | 1   | 12.50  | 3     | 7.50   | 4           | 8.34   |
| Total        | 8   | 100.00 | 40    | 100.00 | 48          | 100.00 |

TABLE 59

RESPONSE OF GARY PUBLIC LIBRARIANS AND NEWARK  
PUBLIC LIBRARIANS TO THE QUESTION "DO YOU  
THINK YOU ARE TEMPERAMENTALLY SUITED  
FOR LIBRARY WORK?"

| Response              | No. | %      |
|-----------------------|-----|--------|
| Yes . . . . .         | 42  | 93.33  |
| No . . . . .          | 3   | 6.67   |
| Doubtful or undecided | 0   | .00    |
| Total . . . . .       | 45  | 100.00 |
| No information . .    | 3   |        |
| Total . . . . .       | 48  |        |

TABLE 60

PERCEPTION OF ASSOCIATION BY GARY PUBLIC AND NEWARK PUBLIC STAFFS OF SIX  
PERSONALITY TRAITS WITH LIBRARIANS IN GENERAL AND WITH THEMSELVES

| Trait<br>Tendencies             | % Men (N=8) |      |      | % Women (N=40) |      |      | % Both Groups (N=48) |      |      |
|---------------------------------|-------------|------|------|----------------|------|------|----------------------|------|------|
|                                 | More        | Same | Less | More           | Same | Less | More                 | Same | Less |
| Perceptions of Other Librarians |             |      |      |                |      |      |                      |      |      |
| Introspective                   | 37.5        | 62.5 | .0   | 60.0           | 32.5 | 7.5  | 56.2                 | 37.5 | 6.2  |
| Deference to<br>Authority       | 50.0        | 25.0 | 25.0 | 59.0           | 38.5 | 2.5  | 57.4                 | 36.2 | 6.4  |
| Self-confi-<br>dence            | .0          | 62.5 | 37.5 | 17.5           | 47.5 | 35.0 | 14.6                 | 50.0 | 35.4 |
| Orderliness                     | 100.0       | .0   | .0   | 85.0           | 15.0 | .0   | 87.5                 | 12.5 | .0   |
| Conscien-<br>tiousness          | 62.5        | 37.5 | .0   | 77.5           | 22.5 | .0   | 75.0                 | 25.0 | .0   |
| Innovation,<br>creativity       | .0          | 50.0 | 50.0 | 25.0           | 47.5 | 27.5 | 20.8                 | 47.9 | 31.2 |
| Perceptions of Self             |             |      |      |                |      |      |                      |      |      |
| Introspective                   | 12.5        | 75.0 | 12.5 | 47.5           | 42.5 | 10.0 | 41.7                 | 47.9 | 10.4 |
| Deference to<br>Authority       | 12.5        | 62.5 | 25.0 | 40.0           | 40.0 | 20.0 | 35.4                 | 43.7 | 20.8 |
| Self-confi-<br>dence            | 50.0        | 25.0 | 25.0 | 15.0           | 60.0 | 25.0 | 20.8                 | 54.1 | 25.0 |
| Orderliness                     | 50.0        | 50.0 | .0   | 32.5           | 57.5 | 10.0 | 35.4                 | 26.2 | 8.3  |
| Conscien-<br>tiousness          | 50.0        | 50.0 | .0   | 72.5           | 27.5 | .0   | 68.7                 | 31.2 | .0   |
| Innovation,<br>creativity       | 50.0        | 37.5 | 12.5 | 27.5           | 55.0 | 17.5 | 31.2                 | 52.1 | 16.7 |

TABLE 61

MEANS AND STANDARD DEVIATIONS OF TEST SCORES FOR STAFF MEMBERS  
OF THE GARY PUBLIC LIBRARY AND THE NEWARK PUBLIC LIBRARY

| Tests                          | Men |         |       | Women |        |       |
|--------------------------------|-----|---------|-------|-------|--------|-------|
|                                | No. | Mean    | S.D.  | No.   | Mean   | S. D. |
| Attitude Interest Analysis .   | 8   | 21.12   | 41.51 | 45    | -65.92 | 34.37 |
| A-S Reaction Study . . . . .   | 8   | 17.62   | 21.33 | 39    | 7.38   | 18.02 |
| Bernreuter                     |     |         |       |       |        |       |
| B1-N (Neuroticism) . . . . .   | 8   | -136.73 | 38.73 | 40    | -73.07 | 73.03 |
| B2-S (Self-sufficiency) . . .  | 8   | 52.51   | 50.01 | 40    | 18.82  | 46.40 |
| B4-D (Dominance) . . . . .     | 8   | 78.49   | 58.37 | 40    | 34.92  | 62.14 |
| Allport-Vernon Study of Values |     |         |       |       |        |       |
| Theoretical . . . . .          | 8   | 35.75   | 5.80  | 39    | 29.18  | 5.21  |
| Economic . . . . .             | 8   | 23.51   | 5.94  | 39    | 25.56  | 7.46  |
| Aesthetic . . . . .            | 8   | 29.63   | 7.98  | 39    | 32.90  | 6.56  |
| Social . . . . .               | 8   | 35.75   | 5.93  | 39    | 34.56  | 7.07  |
| Political . . . . .            | 8   | 23.25   | 6.56  | 39    | 25.18  | 5.97  |
| Religious . . . . .            | 8   | 32.00   | 9.13  | 39    | 32.38  | 9.39  |

## BIBLIOGRAPHY

### Books

- Allport, Gordon W. Personality, A Psychological Interpretation. New York: Henry Holt & Co., 1937.
- Angyal, Andras. Foundations for a Science of Personality. New York: The Commonwealth Fund, 1941.
- Billings, Harold Wayne. The Education of Librarians in Texas, 1955. "Texas Papers on Library Topics," No. 1. Austin, Texas: Graduate School of Library Science, The University of Texas, 1956.
- Brogden, Hubert E. The Primary Personal Values Measured by the Allport-Vernon Test, "A Study of Values." "Psychological Monographs," No. 348. Washington, D.C.: American Psychological Association, 1952.
- Bryan, Alice I. The Public Librarian. New York: Columbia University Press, 1952.
- Buros, Oscar K. (ed.) Third Mental Measurements Yearbook. New Brunswick, N.J.: Rutgers University Press, 1949.
- Darley, John G. Clinical Aspects and Interpretation of the Strong Vocational Interest Blank. New York: The Psychological Corporation, 1941.
- Darley, John G., and Hagenah, Theda. Vocational Interest Measurement. Minneapolis: University of Minnesota Press, 1955.
- Dreaver, James. A Dictionary of Psychology. Baltimore: Penguin Books, Inc., 1952.
- Eysenck, Hans Jurgen. The Structure of Human Personality. New York: John Wiley & Sons, 1953.
- Ginzberg, Eli, Ginsburg, Sol W., Axelrad, Sidney, and Herma, John L. Occupational Choice: An Approach to a General Theory. New York: Columbia University Press, 1951.
- Guilford, Joy P. Fundamental Statistics in Psychology and Education. 2d ed. New York: McGraw-Hill Book Company, 1950.
- Honigsmann, John J. Culture and Personality. New York: Harper & Brothers, 1954.
- Kelley, T. L. Scientific Method. Columbus, Ohio: Ohio State University Press, 1932.

Wheeler, Joseph L. Progress and Problems in Education for Librarianship, p. 21. New York: Carnegie Corporation of New York, 1946.

"Why I Don't Like Libraries," ALA Bulletin, XXXVII (June, 1943), 154-55.

Williston, Frank G. "On the Librarian," ALA Bulletin, XLVIII (September, 1954), 432-33.

Young, A. Beatrice, and others. "What's Right with Librarians?" Wilson Bulletin, XIV (May, 1940), 665-66.

Zeisler, Karl F. "Morgues of Culture?" Survey, LXXIV (February, 1949), 98-100.

#### Unpublished Material

Goulding, Charles Wheelock. "A Study of the Distribution of Minnesota Multiphasic Inventory Profiles in a College Population." Unpublished Master's dissertation, University of Minnesota, 1951.

Letter from Dr. Gordon W. Allport, Department of Social Relations, Harvard University, dated July 17, 1951.

Milczewski, Marion Anthony. "Personality Rating of Library School Students." Unpublished Master's dissertation, University of Illinois, 1940.

Redlo, Miriam. "MMPI Patterns for Several Academic Major Groups." Unpublished Master's dissertation, University of New Mexico, 1951.

Sternberg, Carl. "The Relation of Interests, Values, and Personality to the Major Field of Study in College." Unpublished Ph.D. dissertation, New York University, 1953.

Taylor, Gerry M. "Vocational Interests of Male Librarians in the United States." Unpublished Master's dissertation, Graduate School of Library Science, The University of Texas, 1955.

Whitlock, John M. "Study of the Interests of the Female Students Enrolled in the School of Library Science, Drexel Institute of Technology, as Measured by the Strong Vocational Interest Blank and the Kuder Preference Record." Unpublished Master's dissertation, Drexel Institute of Technology, 1952.

Wilson, Eugene Holt. "Pre-Professional Background of Students in a Library School." Unpublished Ph.D. dissertation, University of Illinois, 1937.

Wiseclood, Edward. "The Cooperative General Culture Test as a Predictor of Scholastic Success in The University of Texas Graduate School of Library Science." Unpublished Master's dissertation, Graduate School of Library Science, The University of Texas, 1953.



- Kelly, E. Lowell, and Fiske, Donald W. The Prediction of Performance in Clinical Psychology. Ann Arbor: University of Michigan Press, 1951.
- Masserman, Jules H. The Practice of Dynamic Psychiatry. Philadelphia: W. B. Saunders Company, 1955.
- Sargent, S. Stensfeld. Social Psychology. New York: Ronald Press, 1950.
- Strong, Edward K. Vocational Interests of Men and Women. Stanford, Calif.: Stanford University Press, 1943.
- Super, Donald E. Appraising Vocational Fitness by Means of Psychological Tests. New York: Harper & Brothers, 1949.
- \_\_\_\_\_. The Psychology of Careers. New York: Harper & Brothers, 1957.
- Symonds, Percival M. The Dynamics of Human Adjustment. New York: D. Appleton-Century Company, 1946.
- Terman, Lewis M., and Miles, Catharine C. Sex and Personality. New York: McGraw-Hill Book Company, 1936.
- U.S. Employment Service. Dictionary of Occupational Titles. Vol. I: Definitions of Titles. Washington, D.C.: Government Printing Office, 1949.
- Warren, Howard C. (ed.) A Dictionary of Psychology. New York: Houghton Mifflin Company, 1934.
- Wulfeck, Joseph W., and Bennett, Edward M. The Language of Dynamic Psychology. New York: McGraw-Hill Book Company, 1954.
- Young, Kimball. Social Psychology. 2d ed. New York: F. S. Crofts & Company, 1946.

#### Pamphlets

- Allport, Gordon W., and Allport, Floyd H. A-S Reaction Study. New York: Houghton Mifflin Company, 1931.
- \_\_\_\_\_. A-S Reaction Study, Manual of Directions. New York: Houghton Mifflin Company, 1939.
- Allport, Gordon W., and Vernon, Philip E. A Study of Values. New York: Houghton Mifflin Company, 1928.
- \_\_\_\_\_. A Study of Values, Manual of Directions. New York: Houghton Mifflin Company, 1939.
- Allport, Gordon W., Vernon, Philip E., and Lindsey, Gardner. Study of Values, Manual. Rev. ed. New York: Houghton Mifflin Company, 1951.
- Bernreuter, Robert G. Manual for the Personality Inventory. Stanford, Calif.: Stanford University Press, 1935.

- \_\_\_\_\_. The Personality Inventory. Stanford, Calif.: Stanford University Press, 1935.
- \_\_\_\_\_. The Personality Inventory, Tentative Percentile Norms. Stanford, Calif.: Stanford University Press, 1938.
- Danton, J. Perle, and Merritt, LeRoy C. Characteristics of the Graduates of the University of California School of Librarianship. "Occasional Papers," No. 22. Urbana: University of Illinois Library School, 1951.
- Hathaway, Starke R., and McKinley, J. Charnley. The Minnesota Multiphasic Personality Inventory. New York: The Psychological Corporation, 1943.
- \_\_\_\_\_. Minnesota Multiphasic Personality Inventory, Manual. Rev. ed. New York: The Psychological Corporation, 1951.
- Terman, Lewis M., and Miles, Catharine Cox. Attitude-Interest Analysis Test. New York: McGraw-Hill Book Company, 1936.

#### Articles

##### General

- Baron, Frank. "The Disposition toward Originality," Journal of Abnormal and Social Psychology, LI (November, 1955), 478-85.
- Berg, Irwin A. "Personality Structure and Occupational Choice," Personnel and Guidance Journal, XXXII (November, 1953), 151-54.
- Black, J. D. "MMPI Results for Fifteen Groups of Female College Students," Basic Readings on the MMPI in Psychology and Medicine, ed. George Schlager Welch and W. Grant Dahlstrom, pp. 562-73. Minneapolis: University of Minnesota Press, 1956.
- Blum, Lawrence Philip. "A Comparative Study of Students Preparing for Five Selected Professions, Including Teaching," Journal of Experimental Education, XVI (September, 1947), 31-65.
- Broom, M. E. "A Study of the Test of Ascendancy-Submission," Journal of Applied Psychology, XIV (July-August, 1930), 405-13.
- Brown, E. W. "Similarities and Differences in College Populations on the MMPI," Journal of Applied Psychology, XXXII (October, 1946), 541-49.
- Daniels, E. E., and Hunter, W. A. "MMPI Personality Patterns for Various Occupations," Journal of Applied Psychology, XXXIII (December, 1949), 559-65.
- Davis, Allison. "Socialization and Adolescent Personality," Adolescence, Forty-Third Yearbook, Pt. 1, pp. 198-216. Chicago: National Society for the Study of Education, 1944.

- Drake, L. E. "Scale O (Social Introversion)," Basic Readings on the MMPI in Psychology and Medicine, ed. George Schlager Welsh and W. Grant Dahlstrom, pp. 181-83. Minneapolis: University of Minnesota Press, 1956.
- \_\_\_\_\_. "A Social I. E. Scale for the Minnesota Multiphasic Personality Inventory," Journal of Applied Psychology, XXX (February, 1946), 51-54.
- Duffy, Elizabeth. "A Critical Review of Investigations Employing the Allport-Vernon Study of Values and Other Tests," Psychological Bulletin, XXXVIII (October, 1940), 597-612.
- Dukes, William F. "Psychological Studies of Values," Psychological Bulletin, LII (January, 1955), 24-50.
- Ellis, Albert. "The Validity of Personality Questionnaires," Psychological Bulletin, XLIII (September, 1946), 385-440.
- Eriksen, Charles W., and David, A. "The Meaning and Clinical Validity of the Taylor Manifest Anxiety Scale and the Hysteria-Psychastenia Scales from the MMPI," Journal of Abnormal and Social Psychology, L (January, 1955), 135-37.
- Feather, Don B. "The Relation of Personality Maledjustments of 503 University of Michigan Students to Their Occupational Interests," Journal of Social Psychology, XXIII (August, 1950), 71-78.
- Forer, Bertram R. "Personality Factors in Occupational Choice," Educational and Psychological Measurements, XIII (Autumn, 1953), 361-66.
- Franklin, Robert M. "The Prestige and Status of Women's Occupations: A Liberal Arts College Student Evaluation," Alpha Kappa Delta, XXVI (Spring, 1956), 34-37.
- Fry, Franklin D. "A Study of the Personality Traits of College Students and of State Prison Inmates as Measured by the Minnesota Multiphasic Personality Inventory," Journal of Psychology, XXVIII (October, 1949), 439-49.
- Ginsberg, Eli. "Toward a Theory of Occupational Choice," Occupations, XXX (April, 1952), 491-94.
- Gleser, Edward M., and Maller, Julius B. "The Measurement of Values," Character and Personality, IX (September, 1940), 67-81.
- Goodstein, L. D. "Regional Differences in MMPI Responses among Male College Students," Basic Readings on the MMPI in Psychology and Medicine, ed. George Schlager Welsh and W. Grant Dahlstrom, pp. 584-78. Minneapolis: University of Minnesota Press, 1956.
- Gough, Harrison G., McCloskey, Hubert, and Meehl, Paul E. "A Personality Scale for Dominance," Journal of Abnormal and Social Psychology, XLVI (July, 1951), 359-66.
- \_\_\_\_\_. "A Personality Scale for Social Responsibility," Journal of Abnormal and Social Psychology, XLVII (January, 1952), 73-80.

- Harris, Daniel. "Group Differences in Values within a University," Journal of Abnormal and Social Psychology, XXIX (April-June, 1934), 95-102.
- Holtzman, Wayne H., Calvin, Allen D., and Bitterman, M. E. "New Evidence for the Validity of Taylor's Manifest Anxiety Scale," Journal of Abnormal and Social Psychology, XLVII (October, 1952), 853-54.
- Horn, Daniel. "A Study of Personality Syndromes," Character and Personality, XII (June, 1944), 257-74.
- Howe, Harriet E. "Study of the University of Denver School of Librarianship Graduates, 1928-1938," Library Quarterly, I (October, 1940), 532-44.
- Hughes, Everett. "Discussion" [of Alice Bryan's The Public Librarian], Chicago, University, Graduate Library School, A Forum on the Public Library Inquiry, ed. Lester Asheim, p. 107. Chicago: University of Chicago Press, 1950.
- Levin, Max A. "Status Anxiety and Occupational Choice," Educational and Psychological Measurements, IX (Spring, 1949), 29-37.
- Levinsky, Hilde. "Occupation and Obsession," British Journal of Medical Psychology, XIX (1943), 388-93.
- McCrum, Blanche P. "New Uses of Librarianship," Medical Library Association Bulletin, XLII (October, 1954), 412-20.
- MacKinnon, Donald W. "Applications of Clinical Psychology to Assessment," Progress in Clinical Psychology, Vol. II, Pt. 1, pp. 425-29. New York: Grune & Stratton, 1952.
- . "Personality," Annual Review of Psychology, Vol. II, pp. 113-36. Stanford, Calif.: Annual Reviews, Inc., 1951.
- Noe, Anne. "Personality and Vocation," The Study of Personality, ed. Howard Brand, pp. 377-86. New York: John Wiley & Sons, 1954.
- Ruggles, Richard, and Allport, Gordon W. "Recent Applications of the A-B Reaction Study," Journal of Abnormal and Social Psychology, XXXIV (October, 1939), 518-28.
- Schaeffer, Benjamin R. "The Validity and Utility of the Allport-Vernon Study of Values Test," Journal of Abnormal and Social Psychology, XXI (January-March, 1936), 419-22.
- Sisson, E. Donald, and Sisson, Bette. "Introversion and the Aesthetic Attitude," Journal of General Psychology, XXII (January, 1940), 203-06.
- Stone, Charles Leonard. "The Personality Factor in Vocational Guidance," Journal of Abnormal and Social Psychology, XLVIII (October-December, 1933), 274-75.
- Super, Donald E. "The Bernreuter Personality Inventory: A Review of Research," Psychological Bulletin, XXXIX (February, 1942), 95-125.

- \_\_\_\_\_. "A Theory of Vocational Development," American Psychologist, VIII (May, 1953), 185-90.
- Tiedman, David V., and Bryan, Joseph G. "Prediction of College Field of Concentration," Harvard Educational Review, XXIV (Spring, 1954), 123-39.
- Warnath, Charles F. "Vocational Selection," Review of Educational Research, XXVI (October, 1956), 349-58.
- Walsh, George S. "An Anxiety Index and Internalization Ratio for the MMPI," Journal of Consulting Psychology, XVI (February, 1952), 65-72.
- Whitley, Paul L. "A Study of the Allport-Vernon Test for Personal Values," Journal of Abnormal and Social Psychology, XXIX (April-June, 1934), 95-102.
- Winne, John F. "A Scale of Neuroticism: An Adaptation of the Minnesota Multiphasic Inventory," Journal of Clinical Psychology, VII (Spring, 1951), 117-32.

#### With Reference to the Librarian Stereotype

- "As Others See Us from Coast to Coast?" ALA Bulletin, XXXI (February, 1937), 131.
- Baretaki, Charles A. "Don't Stop! Don't Look! Don't Listen!" Wilson Library Bulletin, XXVII (March, 1953), 536-37.
- Bartun, Jacques. "Scholar Looks at the Library," College and Research Libraries, VII (April, 1946), 113-17.
- \_\_\_\_\_. Teacher in America, p. 74. Boston: Little, Brown & Company, 1945.
- Bauer, Henry Charles, and others. "As Others See Us: A Panel," Law Library Journal, XLVIII (November, 1955), 350-69.
- Bierman, June Adams. "Recipe for Respect," ALA Bulletin, LVII (June, 1953), 243.
- Bloss, Meredith. "A Librarian Writes--How To Tell a Librarian," ALA Bulletin, XLVI (July-August, 1952), 221-24.
- Boldstroke, Gracie, pseud. "Sweetiepies for Sourpusses," Wilson Library Bulletin, XVIII (December, 1943), 312-14.
- Bruce, Margaret Buchan. "Librarians a la Hollywood," Wilson Library Bulletin, XXII (May, 1948), 592-93.
- Bryan, Alice I. The Public Librarian, p. 27. New York: Columbia University Press, 1952.
- Coleman, Margaret P. "The Existence of a Librarian," Wilson Bulletin, VIII (December, 1933), 235-36.

- Compton, Charles H. "Ourselves and Other People," ALA Bulletin, LXXI (July, 1935), 404-11.
- Crosby, Alexander L. "To Speed Up Recruiting," Library Journal, LXXI (January 15, 1955), 165-67.
- Downs, Robert B. "Some Current Delusions, or Horsefeathers in Librarianship," Southeastern Librarian, III (Spring, 1953), 20-27.
- Duff, John Carr. "The Need for Library Leadership," Wilson Library Bulletin, XXIV (February, 1950), 426-27.
- Feinstein, Leonore. "Your Librarian Talks Back," American Mercury, LXXXIV (January, 1957), 125-27.
- Fenton, Alfred H. "A Layman Asks: Are Librarians Necessary?" ALA Bulletin, XLVI (July-August, 1952), 220, 242.
- Form, William E. "Popular Images of Librarians," Library Journal, LXXI (June 15, 1946), 851-55.
- Frame, Paul W., and Frame, Florence E. "Learned 'Fish' or Clerical 'Fowl,'" Library Journal, LXXI (February 15, 1956), 485-87.
- Gorman, Edith. "Librarians Are People, Too," Journal of Education, CXXXIII (November, 1950), 236-37.
- Green, Ivah. "Librarians Are a Different Breed of Humans," Library Journal, LXXII (March 15, 1947), 439-40.
- Heathcote, Lesley M. "Watchers by the Wayside!" PMLA Quarterly, VIII (January, 1944), 60-62.
- Hill, Aubry Lee. "Speaking for the Younger Generation," ALA Bulletin, LXXI (September, 1935), 523-25.
- Hoole, W. Stanley. "The True End of Knowledge," Saturday Review, XL (June 8, 1957), 22.
- Huntley, Brian. "Christmas Crackers, 1951--A Composite Portrait," Wilson Library Bulletin, XXVII (March, 1953), 520.
- Isaacs, Ruth M. "Hidebound and Shelved," California Librarian, XIII (September, 1951), 20.
- Jettrick, T. "In Defence of Librarians," Wilson Bulletin, VIII (May-June, 1934), 520-21.
- Kinneman, John A. "Library as Seen by the Users," Illinois Libraries, XXI (December, 1939), 55-57.
- Kirkwood, Elizabeth T. "Life and the Librarian," Scribner's Magazine, LXXI (June, 1922), 737-40.

- Leete, John B. "Our Appeal as a Profession?" Public Libraries, XVII (June, 1922), 317-22.
- Leffingwell, Albert. [Reply to] "Why I Don't Like Libraries," ALA Bulletin, XXVII (July, 1943), 239.
- "Librarians," Wilson Bulletin, VIII (September, 1933), 6.
- "Library Machinery v. Human Nature," Dial, L (February 1, 1911), 75-77.
- Lightfoote, Robert M. "Wanted: Librarians with Courage," Wilson Library Bulletin, XCI (September, 1956), 61-62.
- McCann, Eleanor. "It Is Really More or Less a Gift," Catholic Library World, XXVI (May, 1955), 272-73.
- Mearns, David C. "In the Presence of Scholars," College and Research Libraries, XV (April, 1954), 135-39.
- Parham, Nellie E. "As Others See Us," ALA Bulletin, XVII (July, 1923), 139-42.
- Phelps, William Lyon. "Extremely Happy People," Library Journal, XLVIII (August, 1923), 668. [Extract.]
- Powell, Mrs. A. Scott. "Conditions Take Their Toll," Library Journal, LXXVI (May 1, 1951), 751-54.
- Russell, John Dale. "The College Library as Viewed by the Administrator," Library Journal, LX (February 1, 1935), 89-94.
- Saunders, Allen. "No Pictorial Cliches," Library Journal, LXXIX (January 15, 1954), 97-102.
- Scandrett, Marian Satterthwaite. "Mr. Berelson's Lost Cause," Wilson Bulletin, XIII (February, 1939), 398-400.
- \_\_\_\_\_. "Studs Lonigan and the Library," Library Journal, LXII (April 15, 1937), 327-29.
- Sherman, Sara Eno. "Let's Be Human!" Library Journal, LXIV (July, 1939), 546-47.
- Shuman, Mrs. S. M. "What's Wrong with the Librarian?" Library Journal, LXXI (May 1, 1948), 649-51.
- Sykes, Mrs. J. D. "Personality and the Librarian," Library Journal, LXI (June 1, 1936), 428.
- Telford, Fred. "As Others See Us," Library Journal, L (June 15, 1925), 531.
- Torbet, Mrs. Elsie D. "Layman Looks at Libraries," PNLA Quarterly, IX (July, 1945), 144-46.
- Turner, Beth. "Librarian Looks at Himself," Library Journal, LIX (February 15, 1934), 156.