

THE QUESTIONNAIRE IN EDUCATION

A CRITIQUE AND MANUAL

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PREFACE

Except for an occasional article or chapter, one who looks for literature dealing with the questionnaire method in education will find little to his use. This is true notwithstanding the fact that this method is one of those most frequently drawn upon as a source of data in educational investigation. Of several other methods of research we are not without extended treatment in book form—witness experimentation, measurement, statistics, and that composite method, the survey. But he who must take recourse to the questionnaire has largely been left to grope without light other than his intuitions.

Having repeatedly experienced, in common with others who make use of the questionnaire, the dearth of helpful literature in the field, the writer has indulged an interest of long standing by undertaking the analysis of a large number of articles and monographs reporting questionnaire investigations and comparing them with an even larger number made by other methods of investigation. The results of the analysis and comparison constitute the core of this book, the conclusions and recommendations being for the most part founded on them. The product is what the writer hopes may serve, until

more exhaustive studies have been made, as a sort of combined critique and manual of the questionnaire in education—a manual except with respect to issues of sampling, reliability, and the like, which are left for the most part for consideration in treatises on educational statistics. The aim has been to prepare a book of compact proportions that will be of interest and value to students of educational research and to that large body of educational workers who undertake questionnaire studies.

The writer is under obligation to Dr. John K. Norton for access to and permission to draw upon materials of a study (at this writing unpublished) of questionnaire investigation, a study being made in the Research Division of the National Education Association under Dr. Norton's direction. He desires also to acknowledge permission to quote in the following pages from issues of *The American Journal of Psychology*, *Educational Administration and Supervision*, *The Elementary School Journal*, *The Journal of Educational Psychology*, *Journal of Educational Research*, *School and Society*, and *The School Review*; and from certain of their publications by The Macmillan Company and the Bureau of Publications of Teachers College, Columbia University.

L.V.K.

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THE QUESTIONNAIRE IN EDUCATION

I

SOME ISSUES IN QUESTIONNAIRE INVESTIGATION

ONE who undertakes serious and well-considered investigations by questionnaire is typically rewarded by an acceptable proportion of sincere and well-intended responses. But there are occasional exceptions, of which the three quotations to follow may be looked upon as illustrative, even if somewhat striking. The first is almost the whole of a letter written to an investigator in the field of the social studies in the high school, who had requested teachers' judgments relating to content to be taught:

"Since you are the only person, with the possible exception of Mr. — [director of the bureau of research represented] and a few minor assistants, who will be benefited by this report, I suggest that you fill in the balance of it yourself. Your conscience need not bother you in this matter for almost any person can fill those blanks and the report will have just as much value no matter who fills them. The only questionnaires I take time to fill are those sent us by the State Department. These reports are just as valueless as the one you

are making, but it would probably mean our commission [accreditation] if we attempted to enlighten them."

The second excerpt is from a letter referring to a blank used by another investigator and aimed at securing data descriptive of college courses in the history of English literature:

"I find it impossible to answer all the questionnaires that are constantly pouring in upon me. Although this flood is distressing for all of us engaged in educational work it is particularly so for those not blessed with robust health. I am quite sure that my somewhat limited margin of time and strength need not go to your questionnaire. The book is yours, not mine, including both money and glory, if you're writing a book; and the same thing is true if it's some doctor's thesis. . . ."

Another letter in rather similar vein with the second, but somewhat more emphatic, is the following from a superintendent of schools, written in response to an inquiry concerning pupil and teacher coöperation in the evaluation of selections in literature:

"We do not care to take our school time for such matters as this. Such requests are so very numerous that we might spend our entire time answering them. We prefer to have some time left for

teaching. Very few eastern schools bother us; they have learned better. I am hoping those farther west will soon learn too and allow the schools to fulfill their legitimate mission.

Very truly,

“P.S. If you start a movement for the suppression of nuisances, we will gladly coöperate.”

These letters illustrate — to be sure, rather emphatically — the most recurrent criticisms of investigation by questionnaire in education, the first that the method is unreliable as a source of information and the second that its frequent use is excessively time-consuming for the respondent. Administrative officers have been most outspoken on this point. Both lines of denunciation are often joined by the same critic, as was done recently in an article bearing the title “The Blight of the Questionnaire” published in a well-known educational periodical.¹

Condemnation of the questionnaire has appeared in many quarters. Not only is it admitted in article form to the pages of educational journals by certain editors, but it is actually sometimes abetted by them, as in the instance of the periodical just referred to, whose editor introduced the author of the article as “another recruit for the fast growing band of questionnairicides.” The officers of one of our strongest educational organizations have directed

¹ *Educational Review*, 73 : 102-108 (February, 1927).

its bureau of research to "do something," presumably to abate the flood. The "ill repute" of the questionnaire extends even to some of those who have used it, as may be instanced by the statement made in a recent report of an investigation by this method whose author "will always sympathize with those who use the questionnaire method of research." The tide of animadversion has mounted to such proportions that it may even sweep out to a considerable extent the possibilities of resort to what is admitted by many as at times a legitimate source of data procurable in no other way.

Of the two lines of censure illustrated, namely, the undependability of the questionnaire as a source of data and the burden it imposes on respondents, the former may be regarded as much the more momentous. After all, if the prospective respondent resents the imposition of the burden, all he needs to do to relinquish it is to drop the blanks of inquiry into the waste basket at hand or to return them to the investigator unanswered, should the latter have inclosed the necessary postage. But if the method of questionnaire is inherently defective and never dependable as a source of data, we have a much more fundamental objection to its use.

Although the problem of the burden imposed on respondents is not ignored in the following chapters, the problem of general usefulness of the method is more consistently faced. While making this statement concerning the nature of the content of the

monograph, the author desires also to make clear at the outset that, as a matter of fact, this content is built around neither objection referred to and has been selected to make sole and specific answer to neither. What is done is to consider the extent to which the questionnaire method has been used; the fields of education in which, in comparison with other methods of investigation as sources of data, it has been applied; the types of response that have been required; the criteria by which questions and questionnaires should be tested; the "approach" to the respondent; and other important relationships. This is done while presenting the results of a systematic analysis of numerous studies by questionnaire and by the other recognized methods of investigation in education. The writer looks upon this monograph as a whole as a combined critique of the questionnaire and manual of directions for its proper use. The respects in which it is not a complete treatise of this method of investigation relate chiefly to such questions as proper sampling and of statistical manipulation and evaluation of data gathered by questionnaire. These matters are more properly discussed in manuals on statistical procedure, a number of which are now available to the educational investigator. Thus, the purpose of the monograph, although not neglectful of the issues that are usually raised as these have been illustrated above, is much more comprehensive of problems relating to questionnaire procedure.

II

THE EXTENT OF QUESTIONNAIRE INVESTIGATION

The sources represented.—In casting about for examples of reports of investigations to be analyzed for the purposes of such a study as is here reported one thinks naturally of (1) educational periodicals and of (2) researches prosecuted in graduate departments of education either by members of their faculties or by graduate students. These are the sources drawn upon for the investigations represented in the present analyses. Of the periodicals seven were selected, these being, in alphabetical arrangement, (1) *Educational Administration and Supervision*, (2) *The Elementary School Journal*, (3) *The Journal of Educational Psychology*, (4) *Journal of Educational Research*, (5) *School and Society*, (6) *The School Review*, and (7) *Teachers College Record*. These were the seven journals standing highest in the "number of articles reporting educational research during the years 1924 and 1925" in an analysis of a long list of periodicals made by Trabue.¹

For each of these journals excepting *School and Society* all issues published during a two-year period were examined, and always in complete volumes. The issues examined were those of 1925 and 1926 for the first, third, and sixth in the list. For the

¹ M. R. TRABUE, "Educational Research in 1925." *Journal of Educational Research*, XIII : 336-344 (May, 1926).

second and seventh they were the issues of the volumes for 1925-26 and 1926-27; and for the fourth, the four half-year volumes beginning with the first issue of Volume XII in June, 1925. Of *School and Society*, the single weekly periodical in the group, only two half-year volumes were examined, those of 1926. Moreover, for this journal only the section headed "Educational Research and Statistics" was included in the analysis. The readers of *School and Society* will recall that this section occupies the final pages of each issue.

As representatives of the second group, researches prosecuted in graduate departments of education, two series were selected, the *Supplementary Educational Monographs* published in conjunction with *The School Review* and *The Elementary School Journal* by the Department of Education in the University of Chicago and the *Columbia University Contributions to Education, Teachers College Series*, hereafter to be referred to in the present study as *Teachers College Contributions*. Because, up to the time of making this study, there had been thirty-three numbers of the former series published from 1917 to 1927, it was possible to include the entire list. It was, however, impracticable to include all the two hundred fifty and more *Teachers College Contributions* which had appeared, and it was therefore decided to analyze a generous number of more recent issue. The group selected were all those of

Numbers 200 to 255 accessible to the writer at the time of making the analysis, these totalling forty-seven monographs. The *Supplementary Educational Monographs* have been the product usually either of members of the faculty or of graduate students, candidates for the doctor's degree. The *Teachers College Contributions* are universally doctors' theses.

It may be needless to point out that the articles representing the periodicals do not include all articles appearing in them. Many articles are not of an investigational nature, being instead merely discussional or descriptive. As the reader acquainted with these periodicals will readily recognize, the proportion of investigational reports varies from periodical to periodical, and also in the same periodical from year to year. Although no accurate count has been made of the total amount of noninvestigational content in the volumes analyzed, it may be reported that it equals and even exceeds in amount the space occupied by the articles classified as investigational. It is safe to say that something like a total of 20,000 pages of educational literature were analyzed for the tabulations reported in this study.

Before presenting and discussing the results of the analysis it seems desirable to call attention briefly to the selection and approval represented in this published material. This is to be admitted for the articles in periodicals, but must be even more

characteristic of what is published in the two research series. This is not to commend all the materials as being on a uniformly high level of quality, but it does mean that it has all been to some extent systematically scrutinized from the standpoint of its acceptability for publication. Moreover—and this is a matter of special concern to us in this critique—such criteria as have been used were operative on all studies whether or not they had their source in questionnaires.

The proportions of questionnaire investigations found.—It has already been stated that the amount and proportion of investigational material which emanates from questionnaires varies from periodical to periodical, and from one research series to another. The extent of variation is shown in Table I and Figures 1 and 2. In these it will be seen that the proportions which questionnaire studies are of all investigations have been measured in two ways. One of these has been to compute the percentage which the number of studies utilizing data emanating from questionnaires is of the total number of investigational articles. The other has been to compute the percentage of space (number of pages) which the questionnaire studies occupy of all space devoted to reports of investigations. Of the two perhaps the latter measure is the more reliable, but it is observable that the two measures differ widely in only a few instances.

TABLE I. NUMBERS AND PERCENTAGES OF INVESTIGATIONS AND OF THE SPACE GIVEN TO THEM DEVOTED TO QUESTIONNAIRE STUDIES

PUBLICATIONS	STUDIES			PAGES		
	Total Number	Number by Questionnaire	Per Cent by Questionnaire	Total Number	Number by Questionnaire	Per Cent by Questionnaire
1. <i>Educational Administration and Supervision</i> . . .	55	22	40.0	541	204	37.7
2. <i>Elementary School Journal</i>	59	19	32.2	648	151	23.3
3. <i>Journal of Educational Psychology</i>	112	10	8.9	994	115	11.5
4. <i>Journal of Educational Research</i> ¹	97	15	15.5	992	177	17.8
5. <i>School and Society</i>	49	14	28.6	136	44	24.4
6. <i>School Review</i>	68	31	45.6	711	363	51.1
7. <i>Teachers College Record</i>	36	9	25.0	675	136	20.1
8. <i>Supplementary Educational Monographs</i>	58 ²	10	17.2	5,471	1,175	21.5
9. <i>Teachers College Contributions</i>	47	13	27.7	5,382	1,468	27.3
10. <i>Educational Periodicals (1-7)</i>	476	120	25.2	4,741	1,190	25.1
11. <i>Research Series (8-9)</i>	105	23	21.9	10,853	2,643	24.4
12. <i>Both Periodicals and Series (1-9)</i>	581	143	24.6	15,594	3,833	24.6

Focusing attention on these percentages of space devoted to questionnaire studies in the educational periodicals only, one finds that they range from

¹ Numbers and proportions are slightly smaller here than they should be because two articles were omitted, some of the materials of which had been encountered in the analysis of other periodicals.

² Because some of these monographs reported several investigations each the number of studies is considerably in excess of the number of monographs analyzed, which was 33.

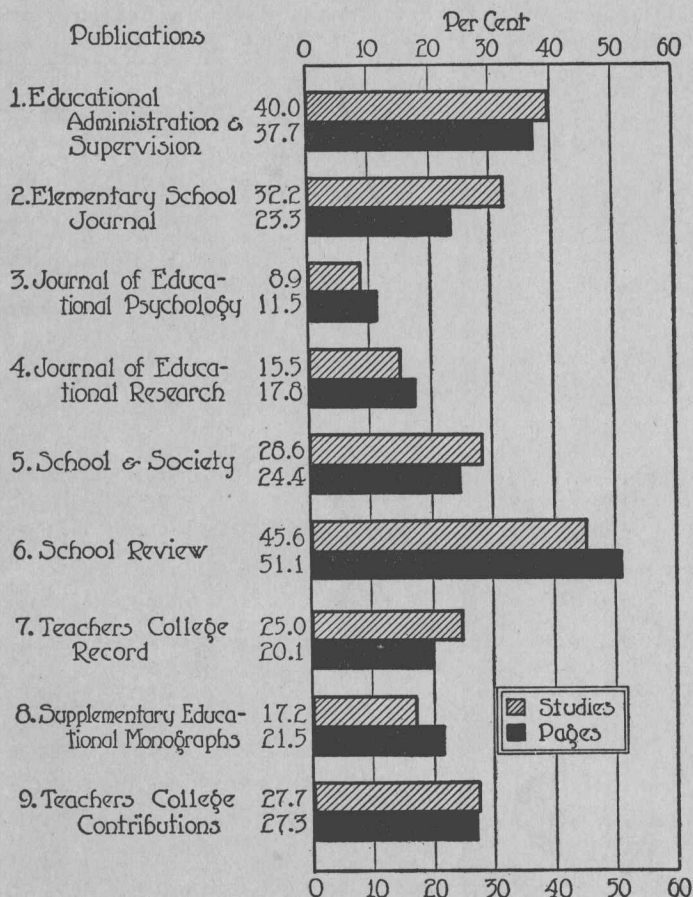


FIG. 1. Percentages of numbers of studies and pages included devoted to questionnaire studies (each periodical and series shown separately).

11.5—approximately a ninth—for the *Journal of Educational Psychology* to 51.1—a full half—for the *School Review*. Between these limits the periodicals arrange themselves in the following order of increasing proportion which questionnaire studies are of all investigations reported: *Journal of Educational Research*, *Teachers College Record*, *Elementary School Journal*, *School and Society*, and *Educational Administration and Supervision*.

For the two research series these percentages are: *Supplementary Educational Monographs*, 21.5, and *Teachers College Contributions*, 27.3. It will be made clear in the next section of the chapter that the proportion of space in these series actually given over to the presentation of materials emanating from questionnaires is actually smaller than as here reported, for the reason that the studies, being in general (even though far from always) larger and of more consequence educationally than are those published in article form, more frequently take recourse to more than a single method of investigation. In view of this situation the correct interpretation here is that the questionnaire method *enters as an important constituent* into the sources drawn upon in somewhat less than a fourth for the first of these two series and somewhat more than this proportion for the second.

Comparison of the two main bodies of literature included in the analysis as wholes rather than as

individual periodicals or series, facilitated by Figure 2, shows them to be made up in about equal parts of studies in which the questionnaire method has been used. *The proportion of both bodies of literature and, therefore, of all the literature, in which the method was used is an approximate fourth. This makes of questionnaire studies, whatever their merit, a large con-*

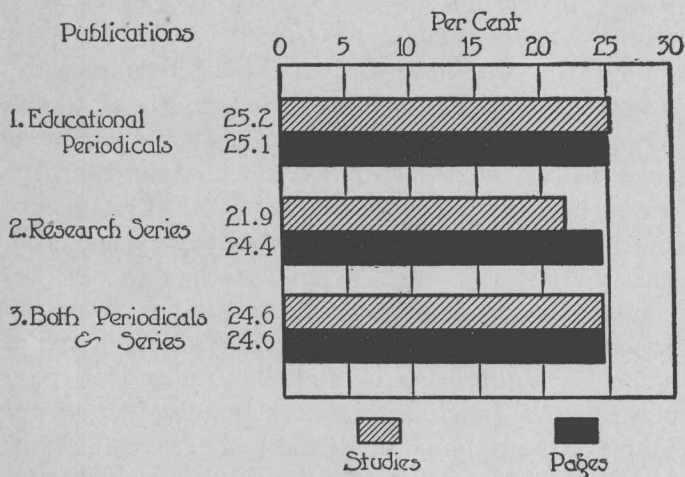


FIG. 2. Percentages of numbers of studies and pages included devoted to questionnaire studies (two chief bodies of sources and all sources).

stituent of our investigational literature. In consequence, it is inconceivable that they should be devoid of merit, that without merit such a large proportion of our educational literature should pass muster with our editors and with those who scrutinize