

## A FURTHER DEVELOPMENT OF EMPLOYMENT PSYCHOLOGY

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Aside from the mere selective and classifying value of tests there are connected phases of employment procedure in which the psychological technique may be very valuable. The psychologist in industry finds in his technique, an instrument which sometimes gives him a great advantage over the ordinary employment man when it comes to analyzing labor supply, adjusting rates, discovering inconsistencies in existing employment procedure, etc., etc.

The following study, made in an industrial concern in which tests were a supplementary part of the employment procedure, indicates several directions in which the industrial psychologist may look for practical results.

During a period of six months, the psychological section of the personnel department had given clerical tests to 616 women who applied for clerical work. The method by which these tests were put into operation and the results followed up is described elsewhere. At the time when the study described here was made, the success of the tests had already been established.

Of the 616 applicants examined—

287 recommended by the psychological section had been hired;

137 had been recommended but not hired;

173 had not been recommended and not hired;

19 had not been recommended but hired nevertheless.

The employment office had therefore followed in the main the recommendations made by the psychological section. However, the large number of applicants recommended but not employed, taken in conjunction with a constant shortage of clerks, made the following study advisable. The purposes of this study were:

1. To open up new sources of clerical workers.
2. To determine on the basis of tests which had already proved satisfactory, how the performance of the applicants examined in the employment office compared with the performance of potential candidates who had not yet applied for positions

3. To determine a basis for adjusting earning rates so as to make possible the selection of the most promising potential applicants.

4. To point out discrepancies which were known to be present in the existing employment procedure.

A series of group tests, therefore, was given to (a) the senior class of the commercial high school, 181 pupils; (b) the beginners and advanced class of the X business college, 42 and 31 pupils respectively; (c) the advanced class of the Y business college, 38 pupils. The principals of these schools readily fell in with the plan of the study when its purpose was explained to them. The tests given were: (1) Woodworth Wells number group checking test; (2) a simple addition and subtraction test; (3) directions test; (4) letter substitution; (5) spelling; (6) alphabetical filing. These tests were given and graded by the same method as that used in the employment office, and by the same examiners.

The results of the study are shown in the following chart. For the sake of simplicity, actual averages are omitted and group ranks given instead.

		Group Tested	No. in Group	Rank in Tests	Rank in Educ	Rank in Age	Average Age
Applicants tested Employment Office	1	Recommended and hired	287	7	7	7	21
	2	Recommended and not hired	137	3	3	8	21.1
	3	Not recommended—not hired	173	8	9	9	21.9
	4	Not recommended but hired.	19	9	8	6	20.8
Pupils tested in school	5	High school girls	143	1	1 5	3	17.9
	6	High school boys	38	5	1 5	2	17 1
	7	X Business College (A C.)	31	2	6	1	16 2
	8.	X Business College (B C )	42	4	5	4 5	18.5
	9	Y Business College	38	6	4	4 5	18.5

Rank in education is based on the number of years completed in school. The high school seniors had almost twelve years of schooling to their credit and are therefore ranked highest in this respect. The group of applicants not recommended and not hired had only nine years of schooling to its credit and is ranked last.

The results of this study showed very clearly:

1. That the senior girls of the high school stood highest in their performance. On the basis of actual averages the performance of this group in the tests was 30% better than the

performance of Group 1, the group of applicants who were tested in the employment office, recommended, and hired.

2. The group tested in the Employment Office and recommended but *not hired* (Group 2 on the chart) is the only group among those tested in the employment office which compares favorably with the high school girls and girls of the X business college (advanced class.)

3. The pupils of the Y business college and of the beginners class of the X business college compare favorably with Group 1, the group of applicants recommended and hired.

4. Though the number of high school boys tested is comparatively small, their performance was considerably poorer than that of their girl classmates.

5. There is the usual correlation between performance in tests and education, but a much less marked correspondence between rank in tests and age.

Some of the above facts raised pertinent questions as to the existing employment methods.

In the first place, if the girls recommended by the psychological section of the employment office but not hired, represented the highest group of applicants, why were they not employed? The interview records showed that thirty-five of these applicants were either teachers or high schools pupils who wanted only summer work. Other reasons for not employing these applicants were: (1) They were already employed elsewhere; (2) the wages they demanded were above the starting rate for clerical work; (3) positions were not available at the time. With regard to the last two reasons, it was obvious that better rates and better selection might be in order.

In the second place, why were not more candidates secured from the high school and business college graduating classes? If these girls were much better in the tests than those hired, it would have paid to offer them higher wages than the existing standard maximum. Besides superiority in the tests, this group had the benefit of 2.3 years more of education. Moreover, they were 2.9 years younger than the girls hired, a fact which would lessen the likelihood of their leaving on account of marriage. The hiring of a superior type of clerk would also make it possible to reduce the amount of equipment and supervision required. Fewer desks, less space, less supervision, and fewer mistakes, all incident upon the employing of a better type of clerk, would warrant an increase in the wages paid.

In the third place, why were nineteen girls who were not recommended by the psychological section, hired nevertheless?

Nineteen out of 616 is, to be sure, a small number. Of this number four had left or been discharged as unsatisfactory. Why was the number of those leaving so small? Partly because a majority of these girls had been brought in at the suggestion of department heads or friends.<sup>1</sup> It is difficult to check up the work of clerks hired in this way, largely because they are working among friends. However, it frequently happens that an unsatisfactory applicant is hired because of a pressing emergency.

To sum up, the results of this study showed the importance of some knowledge of the available labor supply, and a basis upon which to determine its relative desirability. It showed that predetermined starting wages had eliminated some of the most desirable applicants. It showed that a system of flexible starting wages was highly desirable, *if* the wages could be varied in accordance with the quantity and quality of the available labor supply. These problems are among the most important and recurrent which the employment manager has to deal with.