

FACTORS RELATED TO CHOICE OF POST-PRIMARY SCHOOL IN IRELAND

THOMAS KELLAGHAN
*Educational Research Centre,
St Patrick's College, Dublin*

and

VINCENT GREANEY
Boston College

A representative sample of eleven-year old Irish school-children (N 500) was followed up two and a half years later and the type of school they were attending determined. Significant differences in verbal reasoning ability, assessed while the children were still at primary school, were found between pupils in three types of school (secondary, vocational and primary). Differences related to home background factors (social status, size of family, ordinal position in family and parental interest) were also found for type of school. The educational history of pupils who later went to secondary schools was more satisfactory than that of pupils who later went to vocational schools, the history of pupils in both types of school was more satisfactory than that of pupils who had left school altogether. Location (urban-rural) of primary school was not related to type of post-primary school attended.

In 1967, a representative sample of 500 children was drawn from the population of eleven-year old children attending school in Ireland. Pupils from all types of school, with the exception of special schools (for handicapped children) were included. One purpose in selecting the sample was to follow the educational progress of such a representative group of children and to relate this progress to information that had been obtained about the children at the time the sample was drawn. This information included score on a verbal reasoning test and data concerning the child's home background and educational progress. It is important to remember throughout this paper that all this information was obtained when the child was still at primary school. About two years later (at the beginning of the school year 1969-70), teachers provided information on the school then being attended by children in the sample. At this time, the children were aged between 13 years 6 months and 14 years 6 months. One would expect most children of this age to have transferred to post-primary school. Some, on having reached the age of fourteen, would have left school.

A pupil still attending school could be in one of four types of school: secondary, vocational, comprehensive or primary. Most post-primary pupils in Ireland attend secondary (grammar) schools. Traditionally, such

schools have emphasized academic subjects and have provided the avenue to the Leaving Certificate examination, third-level education and a variety of white-collar jobs (cf. 12). The vocational school, the other main type of school, since its establishment, emphasized practical subjects and the preparation of students for trades (cf. 13, 18). The third type of school—comprehensive—is new on the Irish educational scene, as the name implies, it provides a comprehensive curriculum. Finally, post-primary education is also provided in a small number of primary schools, the departments in primary schools which provide such education are called 'secondary tops'. In 1967-68, 71 per cent of post-primary pupils were in secondary schools, 25 per cent in vocational and 4 per cent in the secondary tops of primary schools (16). At this stage, comprehensive schools were only beginning and so the number attending was negligible.

Over the past few years, post-primary education has been expanding and its organization changing. For a long time, the broadening of post-primary school curricula has been advocated, particularly by people concerned with primary (7) and vocational education (18). Recently, the Department of Education has encouraged the development of a common comprehensive curriculum in all post-primary schools (6, 16, 17). At this stage, however, we have no exact information on the extent of that development.

The present study is primarily concerned with the factors related to the distribution of a representative group of school children among the different types of post-primary school available in Ireland. Is a child's choice of school, for example, related to his ability or to his home background? Before briefly considering the factors which might be related to choice of post-primary school, it is well to make clear the meaning which we attach to the word choice. We are not unaware that in many cases, children or their parents may not have made a conscious choice of post-primary school. Often, only one school is within a reasonable distance of a child's home, again, a child may have wished to go to a certain school but may have failed to gain admission. The term 'choice' then is used in a strictly operational sense, it is inferred from the school which the child is actually attending.

Ability is one factor possibly related to choice of post-primary school. This has been shown for other countries (4, 21). One might suggest the secondary/vocational division in Irish education is paralleled by the grammar/secondary-modern division in Britain. Irish secondary (grammar) schools, however, even if they set out to be so, could not be as selective as British grammar schools, since less than a quarter of the

population attend grammar schools in Britain (1, 14), while over seventy per cent attend secondary schools in Ireland. At the same time, since Irish secondary schools have traditionally followed an academic programme and since many hold entrance examinations (though the level of attainment of some pupils admitted may be low—cf 15), it seems likely that differences in ability will be found to exist between pupils in secondary and vocational schools.

We might also expect factors in the child's home background to be related to choice of school. In a survey carried out in Ireland in 1963, children of professional and semi-professional parents were over-represented in secondary schools while children from semi-skilled and unskilled homes were under-represented, the position was reversed in the case of vocational schools (5). This type of picture is not peculiar to Ireland. In Sweden, for example, social background has been found to be related to pupils' plans for an academic education (4) and to actual acceptance for gymnasium (grammar school) studies (11).

Other background factors which might be related to choice of school, in so far as they may be related to parents' ability to maintain a child in full-time education, are family size and a child's ordinal position in family. Parental interest in education has also been found to be related to the school progress of children in many studies (e.g., 2), if one type of school is seen as more valuable educationally, we would expect that interested parents would strive to get their children into such a school. For this study, we had no direct measure of parental interest, however, we did have teachers' assessments of parental interest and these were used in our analyses.

A pupil's educational history might also affect aspirations for future education and vocational choice. Again, for this study we had no direct measures of pupils' attainments. We did, however, have teachers' estimates of the scholastic progress of the pupils (cf 9) and a record of the pupils' school attendance, which might be taken as an index of interest in education.

Finally, location may be related to opportunities for post-primary education. *Investment in education* (5) reported regional inequalities related to post-primary schooling. The number of cases in our sample was not large enough to examine the data by county, we were however able to relate post-primary school choice to the location (urban-rural) of the primary school attended.

Although the present study provides some information on early school leavers, our main interest is in the choice of children still attending school.

The case of the early leaver will be considered in more detail in a separate paper

METHOD

Sample

A random sample of 500 children was drawn from a larger sample of 2,164 eleven-year old children who had taken part in the standardization of a verbal reasoning test in 1967. The standardization sample was selected so as to be representative of all eleven-year old children in the country attending national and private (but not special) schools. In the selection of the parent sample, location (city-town-rural), size of school, sex of children attending school and type of administration in the school (religious-lay) were all taken into account.

Procedure

In the summer term (between May 16 and June 30) 1967, all pupils in the sample took the Drumcondra Verbal Reasoning Test. Thus a verbal reasoning score was available for all pupils. We also had information on the sex of pupils and on the location (city-town-rural) of the schools attended by pupils.

In the following school year (1967-68), a questionnaire was posted to the teachers of all the pupils in the sample and information was requested on the pupils' home background and educational history. Information on the following factors relating to home background was obtained: (i) occupation of pupil's father or guardian (as an index of the social status of the family), (ii) number of children in pupil's family, (iii) pupil's ordinal position in family (i.e. the number of older and younger siblings), (iv) the interest of the pupil's mother in the child's education rated by the teacher 'very interested,' 'interested,' 'completely without interest,' 'don't know', (v) the interest of the pupil's father in the child's education rated by the teacher 'very interested,' 'interested,' 'completely without interest,' 'don't know'. Two indices of pupils' educational history were obtained: (i) teacher's rating of the pupil's school progress as satisfactory or not, (ii) the number of days the pupil had been absent from school in the school year 1967-68.

A second questionnaire was sent to the pupils' teachers in the first term of the school year 1969-70. This was simply to determine the type of school which pupils were attending at that time. The possible alternatives were secondary, vocational, comprehensive, primary and no school at all. Of

the pupils in primary schools in our sample, we do not know whether these pupils were in secondary tops or were waiting on in the higher standards of the primary school to complete their education

RESULTS

On both occasions on which questionnaires were sent to teachers, all were returned. In a few cases, the information supplied was incomplete and there were six pupils who could not be traced.

The location of pupils in the sample in the first term of the school year 1969-70 is set out in Table 1. It will be noted that the number of children in our sample attending comprehensive schools was very small, likewise the number who could not be traced was very small. It was therefore

TABLE 1
LOCATION OF 1967 COHORT OF ELEVEN YEAR OLDS IN 1969-70 (N 500)

	Secondary	Vocational	Type of school Compre- hensive	Primary	Left school	No trace
Boys	148	69	1	13	15	4
Girls	175	47		7	14	2
Total	323	116		20	29	6
%	64.6	23.2	1.2	4	5.8	1.2

necessary to confine some of our analyses to four categories of pupil: secondary, vocational, primary and those who had left school.

1 *Personal characteristics of pupils*

Sex Table 1 indicates how the sexes were distributed across different types of school. It will be seen that there is a slight tendency for girls to be over-represented and for boys to be under-represented in secondary schools. The situation is reversed in the case of vocational schools. To test whether these tendencies could be attributed to chance factors, the chi-square test was used (20). The difference in representation between boys and girls was not found to be significant in the case of secondary and primary schools, but it was significant in the case of vocational schools ($\chi^2 4.17$, $df 1$, $p < 0.05$).

Verbal reasoning ability The Drumcondra Verbal Reasoning Test was standardized with a mean of 100 and a standard deviation of 15. Means

and *SDs* for the pupils in each type of school in the present study are set out in Table 2. An analysis of variance which was carried out to test

TABLE 2

VERBAL REASONING SCORES ACCORDING TO TYPE OF SCHOOL

Type of school	N	Verbal reasoning score	
		M	SD
Secondary	323	105.04	13.81
Vocational	116	95.08	12.94
Comprehensive	6	104.67	14.38
Primary	20	77.15	8.10
Left school	29	83.38	11.77
No trace	6	88.33	19.78

the significance of the differences between types of school revealed a significant *F* value ($F = 33.82$, $df = 5, 494$, $p < .001$). To explore further the source of the significance revealed in the analysis, the differences between pairs of means for the categories in the analysis were examined using Scheffé's (19) method of post hoc comparisons. (In these comparisons throughout the paper, comprehensive and 'no trace' categories were not considered, as the numbers in both these categories were very small.) Differences between the mean verbal reasoning score of those at secondary school and the mean scores of all other groups are significant at the .05 level. Likewise differences between those attending vocational school and all other groups are significant at the same level. The difference between the primary school children and those who had left school is not significant.

2 Factors in the child's home background

Social status. Each pupil was assigned to one of five social status categories on the basis of the occupation of his father or guardian. The classification of the British Census (3) was used with certain modification. The following were the five categories used: 1—professional, higher administrative and managerial, 2—intermediate professional, administrative and managerial (and farmers over 30 acres), 3—skilled occupations, 4—partly skilled occupations (and farmers of 30 acres and less), 5—unskilled occupations. The distribution of pupils according to social class in each type of school is set out in Table 3. For any type of school, we can hypothesize that all social groups will be represented in proportion

TABLE 3

DISTRIBUTION OF PUPILS ACCORDING TO SOCIAL STATUS

Social group	Type of school					
	Secondary	Vocational	Compre- hensive	Primary	Left school	No trace
1	12	1	—	1	—	1
2	116	17	3	1	2	2
3	117	34	2	4	5	1
4	48	31	1	2	7	—
5	30	33	—	12	15	2

to their numbers in the total sample, and we can then look at the actual situation as it appears in the sample. In the case of secondary schools, our hypothesis is not confirmed (χ^2 25.28, df 4, $p < .001$), social groups are not equally represented. The main departures from expectation occur for children from social class 2 (intermediate professional, administrative and managerial), who are over-represented in secondary schools and for children from social class 5 (unskilled) who are under-represented. Likewise our hypothesis of proportional representation in the case of vocational schools is not confirmed (χ^2 22.85, df 4, $p < .001$), social group 2 is under-represented and groups 4 and 5 over-represented.

In the case of children still at primary school, it was necessary to combine some social status categories in the statistical analysis because of the smallness of numbers. Groups 1 and 2 were combined, also groups 4 and 5, giving three groups altogether. For the primary school pupils, social groups are not represented in the proportions in which they appear in the total sample (χ^2 10.16, df 2, $p < .01$), children from groups 4 and 5 are over-represented while those from groups 1 and 2 are under-represented.

Groups 1 and 2 were combined in the analysis that examined the difference between social groups for children who had left school. Among these children, groups 1 and 2 are under-represented (χ^2 25.75, df 3, $p < .001$).

Size of family. Mean sizes (and *SDs*) of the families of children attending each type of school are set out in Table 4. Analysis of variance revealed significant differences between the family sizes of children attending different types of school (F 7.22, df 5,494, $p < .01$). Using Scheffé's

TABLE 4
SIZE OF FAMILY BY TYPE OF SCHOOL

Type of school	N	Size of family	
		M	SD
Secondary	323	5.25	2.52
Vocational	116	6.29	2.87
Comprehensive	6	5.50	2.35
Primary	20	6.45	2.80
Left school	29	7.07	3.59
No trace	6	5.17	2.48

method of post hoc comparisons, the only differences significant at the 0.05 level are between secondary school pupils on the one hand and vocational pupils and those who have left school on the other.

Position in family Mean ordinal positions in family of pupils according to type of school are set out in Table 5. Analysis of variance of these data

TABLE 5
ORDINAL POSITION IN FAMILY BY TYPE OF SCHOOL

Type of school	N	Ordinal position	
		M	SD
Secondary	323	3.06	2.09
Vocational	116	4.13	2.44
Comprehensive	6	4.17	2.56
Primary	20	3.90	1.55
Left school	29	4.34	2.83
No trace	6	3.83	2.04

revealed a significant F value ($F = 5.39$, $df = 5, 494$, $p < 0.01$). In a series of Scheffé comparisons, the only significant differences (0.05 level) were between the means of those attending secondary school on the one hand and those attending vocational school and those who had left school on the other. Earlier born children were more likely to be attending secondary schools.

Parental interest Teachers were asked to indicate separately the interest of both parents in their child's education. Parents rated 'very interested'

were assigned a score of 0, those rated 'interested' a score of 1, and those rated 'completely without interest' a score of 2. Thus a low score is indicative of interest and a high score is indicative of lack of interest.

Mean scores of mothers' interest by type of school are set out in Table 6. The table is based on 446 cases, in 43 cases, teachers were unable to form a judgment, while in a further eleven cases, the child's mother was dead. Analysis of variance of the data yielded an F value of 21.10 (df 5, 440, $p < 0.01$). In Scheffe post hoc comparisons, mothers of children now attending secondary schools showed significantly (0.05 level) greater interest in their children's education than did the mothers of children now attending vocational schools. Differences (again significant at the 0.05 level) were also found between mothers of the pupils who had left school, on the one hand, and the mothers of all other categories of pupil

TABLE 6

MOTHERS' INTEREST IN CHILD'S EDUCATION BY TYPE OF SCHOOL

Type of school	N	Mothers' interest	
		M	SD
Secondary	297	0.414	0.507
Vocational	98	0.847	0.563
Comprehensive	6	0.333	0.516
Primary	17	0.765	0.562
Left school	23	1.348	0.573
No trace	5	0.600	0.897

on the other, the mothers of early leavers were rated as showing low interest in their children's education.

The mean scores for fathers' interest are presented for each type of school in Table 7. The table is based on 369 cases. In 104 cases, teachers were unable to form a judgment and in 27 cases, the child's father was dead. Analysis of variance of the data yielded a significant F value (F 13.64, df 5, 363, $p < 0.01$). In the post hoc analyses, the fathers of secondary school pupils were rated as being more interested in their child's education than the fathers of pupils attending vocational and primary schools and of those who had left school. Fathers of vocational school pupils were rated as having greater interest than the fathers of

TABLE 7

FATHERS' INTEREST IN CHILD'S EDUCATION BY TYPE OF SCHOOL

Type of school	N	Fathers' interest	
		M	SD
Secondary	260	0.496	0.531
Vocational	73	0.849	0.569
Comprehensive	5	0.600	0.548
Primary	10	1.100	0.568
Left school	16	1.375	0.500
No trace	5	1.000	0.707

early leavers. All differences were significant beyond the .05 level.

3. *Pupil's educational history*

Teacher's estimate of scholastic progress. Teachers rated the scholastic progress of the pupils as satisfactory or unsatisfactory. Table 8 is based on 499 cases as a teacher's rating was not available in the case of one child. Chi-square analysis revealed that secondary schools had pro-

TABLE 8

PUPILS JUDGED AS MAKING SATISFACTORY AND 'UNSATISFACTORY' PROGRESS BY TYPE OF SCHOOL

Progress	Type of school					
	Secondary	Vocational	Comprehensive	Primary	Left school	No trace
Satisfactory	271	72	6	11	11	4
Unsatisfactory	52	43	—	9	11	2

portionally more pupils rated as 'satisfactory' and vocational schools proportionally more rated as 'unsatisfactory' than one would expect if the allocation of pupils had been random with respect to progress (.05 level of significance).

Days absent from school. The mean number of days pupils had been absent from school in the school year 1967-68 (when nearly all pupils were still in primary school) was calculated for pupils according to the type of school they were attending in the year 1969-70 (Table 9). Analysis of variance of number of days missed according to type of school yielded a significant F value ($F = 15.19$, $df = 5, 494$, $p < .001$). Scheffe post hoc comparisons indicated the significance of differences between pairs. It

TABLE 9

MEAN NUMBER OF DAYS ABSENT IN 1967-68 ACCORDING TO TYPE OF SCHOOL ATTENDED BY PUPILS IN 1969-70

Type of school	N	Days absent	
		M	SD
Secondary	323	11.18	10.91
Vocational	116	18.76	14.99
Comprehensive	6	10.50	4.76
Primary	20	23.90	25.89
Left school	29	30.28	22.64
No trace	6	10.83	7.41

was found that the primary school attendance of pupils now in secondary schools differed significantly from the attendance of pupils attending other types of school (vocational, primary) and the attendance of pupils who had left school. The pupils now at secondary school had missed fewer days. It was also found that pupils now at vocational school had missed significantly fewer days than pupils who had now left school. All differences were significant beyond the .05 level.

4 Location

Urban-town-rural differences Schools were grouped into three categories according to their location: urban (if located in one of the five boroughs of Dublin, Cork, Dun Laoghaire, Limerick or Waterford), town (if in a town with a population over 1,500) and rural (if situated in rural areas or towns with a population of less than 1,500). The figures in this analysis (Table 10) are based on children attending Catholic national schools only (n 468), since Protestant and private schools had not been coded for location. While there are tendencies for rural children to stay on in primary schools and for city children to leave school earlier, these

TABLE 10

ATTENDANCE AT TYPE OF SCHOOL ACCORDING TO LOCATION

Location	Type of school					
	Secondary	Vocational	Compre- hensive	Primary	Left school	No trace
City	91	36	—	4	12	3
Town	57	22	—	3	7	1
Rural	146	56	6	13	9	2

trends were not significant in chi-square analyses. Location was not related to choice of type of post-primary school.

DISCUSSION

The first thing that strikes one about the findings is the large proportion of pupils who attend secondary grammar schools—over 60 per cent of our sample. This proportion is one of the largest in Europe and considerably larger than in most European countries. The reason is no doubt partly historical, it may also reflect a tendency in Ireland to prefer the academic type of secondary education as a means of advancing to higher social and economic status (18), in a country, which traditionally has been more agricultural than industrial, skilled manual work may be under-valued.

When one looks at the characteristics of pupils in different types of school, the picture that emerges is one of a bi-partite, and sometimes a tri-partite, system. In the case of verbal reasoning ability, the picture is quite clear-cut, three levels of ability can be distinguished. At the top are those attending secondary schools, next are those attending vocational schools and lowest are those who are still attending primary school or who have left school. While our figures are too small to form a reliable judgment on pupils in comprehensive schools, the data we have suggest that comprehensive school pupils are similar in mean ability to secondary school pupils.

Pupils in the different types of school can also be differentiated in terms of home background. In the secondary schools, children of intermediate professional, administrative and managerial parents are over-represented. In vocational schools the converse is true. Further, vocational schools also contain a disproportionate number of the children of partly skilled workers. Pupils still in primary school come mostly from partly skilled and unskilled homes. It is of interest that the children of skilled workers are distributed in the various types of school more or less in proportion to their number in the total sample.

As far as family size is concerned, children at secondary school tend to come from smaller families than children at vocational schools and children who left school early. Findings for ordinal position in family paralleled those for family size. Earlier born children are more likely to attend secondary school. Family size and ordinal position, of course, are not orthogonal, Kellaghan and Macnamara (8) found a correlation of .21 between ordinal position and family size for the present sample,

children who come in relatively early ordinal positions are likely to come from small families, while those who come in later positions must come from large families. Thus in examining the effect of ordinal position, we are to some extent measuring the effects of family size.

It is unlikely that our findings on family size are reflecting social class differences to any extent. While in many countries, social class and size of family are negatively correlated, this is not noticeably so in Ireland, in our sample, the correlation between the variables was small ($r = 0.097$) though significant at the 0.05 level, i.e. there was a slight tendency for size of family to increase as social status decreased.

Our measures of parental interest as perceived by teachers again serve to differentiate between pupils in different types of school. If a mother is interested in a child's education, the child is more likely to go to a secondary school than to a vocational school, children of mothers with the lowest interest are more likely to leave school early. Basically, the same picture emerges in the case of fathers. It will be recalled that our information on parental interest is based on limited numbers, for a relatively large number of cases, teachers were unable to assess parental interest, they were less likely to be able to assess a father's interest than a mother's. We examined our figures to see if there was any tendency for teachers to be more or less familiar with the parents of children in any particular type of school. An earlier Dublin study had reported that parent-teacher contacts varied with the socio-economic background of the parents (10), and in the present study of course, socio-economic background and type of school attended are related. Chi-square analyses of our data, however, revealed no tendency for teachers' ability to form judgments on parental interest to be related to the type of post-primary school attended by the child.

Our measures of educational history were very limited. Despite their limitations they were successful in distinguishing between groups. On both teachers' ratings of school progress and absence from school (both at primary school), secondary school pupils fare better than pupils attending the other types of school.

The over-all picture is consistent: children attending different types of school differ in personal characteristics (verbal reasoning ability), home background (social status, family size, parental interest) and in educational history (teachers' assessments of their primary school progress and number of days absent from school). Two points should be mentioned which qualify this picture. First of all, the differences we speak of are *mean* differences, there is considerable over-lap in scores between schools. For

example, in the vocational group, the spread of scores on the verbal reasoning test was from 70 to 130, in the secondary schools, the range was - 70 to 140. Also, many vocational pupils had, of course, satisfactory school progress and came from homes in which parental interest in education was high.

The second point concerns the statistical analysis of the findings of the study. Relationships between type of school and all variables were examined separately. This is not an entirely satisfactory procedure, since we know many of the variables to be inter-related. This point was made in discussing findings on family size and ordinal position. Verbal reasoning ability and teachers' estimates of school progress are also related, a correlation of .25 has been reported for this sample (9), likewise verbal reasoning ability, social status and family size are significantly related (8). The separate analyses we carried out do not show up these relationships. A single analysis using all variables might have seemed preferable and might have been particularly useful in indicating the relative strength of different factors, however such an analysis did not seem feasible due to the variety of the types of measure used. Neither would it have been likely to have altered very much the general picture which has emerged, a picture in which our 1967 sample has now divided in terms of personal, home background and educational characteristics.

Finally, it should be noted that our study does not provide evidence that the various factors we studied bear a causal relationship to the type of post-primary school attended. It is unlikely, for example, that social status, as indicated by parental occupation, is related causally to the type of school a child attends. On the other hand, it may be that the decision to leave pupils at primary school beyond the normal transfer age is taken on the basis of the children's ability—the mean verbal reasoning score for this group was more than one standard deviation below the mean for the entire sample. Possibly, parents feel that such children would not benefit from further education. However, any attempt to describe the determining factors in choice of post-primary school must await much further study.

REFERENCES

1. BARON, G. *Society, schools and progress in England*. Oxford: Pergamon Press, 1965.
2. GREAT BRITAIN. DEPARTMENT OF EDUCATION AND SCIENCE. *Children and their primary schools*. A Report of the Central Advisory Council for Education (England). London: HMSO, 1967.

3. GREAT BRITAIN: REGISTRAR GENERAL. *Census 1951: Classification of occupations*. London: HMSO, 1956.
4. HÄRNQVIST, K. Social factors and educational choice. *International Journal of Educational Sciences*, 1966, 1, 87-102.
5. *Investment in education*. Report of the Survey Team appointed by the Minister for Education in October 1962. Dublin: Stationery Office, 1966.
6. IRELAND: DEPARTMENT OF EDUCATION. *All our children*. Dublin: Department of Education, 1969.
7. IRISH NATIONAL TEACHERS' ORGANIZATION. *A plan for education*. Dublin: INTO, 1947.
8. KELLAGHAN, T., and MACNAMARA, J. Family variables and verbal reasoning ability. Mimeographed. Educational Research Centre, St Patrick's College, Dublin, 1970.
9. KELLAGHAN, T., MACNAMARA, J., and NEUMAN, E. Teachers' assessments of the scholastic progress of pupils. *Irish Journal of Education*, 1969, 3, 95-104.
10. KELLY, S. G. *Teaching in the city*. Dublin: Gill and Macmillan, 1970.
11. LJUNG, G., and JANSSON, S. Recruitment to the gymnasium in Sweden. *Scandinavian Journal of Educational Research*, 1970, 14, 1-14.
12. MADAUS, G., and MACNAMARA, J. *Public examinations: A study of the Irish Leaving Certificate*. Dublin: Educational Research Centre, 1970.
13. McELLIGOTT, T. J. *Education in Ireland*. Dublin: Institute of Public Administration, 1966.
14. MORTON-WILLIAMS, R., and FINCH, S. *Young school leavers*. London: HMSO, 1968.
15. O'CATHAIN, S. *Secondary education in Ireland*. Dublin: Talbot Press, 1958.
16. O'CONNOR, S. Post-primary education: Now and its future. *Studies*, 1968, 57, 233-251.
17. OECD. *Reviews of national policies for education: Ireland*. Paris: Organisation for Economic Co-operation and Development, 1969.
18. O'LEARY, P. K. The development of post-primary education in Eire since 1922, with special reference to vocational education. Unpublished Ph.D. thesis, Queen's University, Belfast, 1962.
19. SCHEFFÉ, H. *The analysis of variance*. New York: Wiley, 1959.
20. SIEGAL, S. *Nonparametric statistics for the behavioral sciences*. New York: McGraw-Hill, 1956.
21. VERNON, P. E. (Ed.). *Secondary school selection*. London: Methuen, 1957.