

## **GENDER DIFFERENCES IN THE SCHOLASTIC SELF-CONCEPTS OF IRISH PUPILS**

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Self concept questionnaires were completed by 1 779 boys and 1 844 girls towards the end of their primary schooling. The pupils were asked to compare themselves to other members of their class on a 5 point scale on 14 characteristics: mathematics, spoken Irish, Irish reading, written Irish, English reading, English composition, interest in reading, interest in school, intelligence, memory, originality, exam results, sport, and keenness to do well in school. Large numbers of pupils (both boys and girls) rated themselves as average or above average in relation to all the characteristics. A series of analyses of variance (following a multivariate analysis of variance) revealed that boys and girls rated themselves differently on 11 of the 14 characteristics. Boys rated themselves more favourably than did girls on eight characteristics and less favourably on three characteristics. The characteristics on which girls rated themselves more highly compared to boys related to attitudinal and motivational factors, while boys rated themselves higher than did girls in curriculum areas as well as for intelligence, memory and sport.

Pupils' concepts of themselves, either in a general sense or with reference to particular aspects of the school curriculum, are probably based to a considerable extent on their accumulated experiences in dealing with learning tasks. In their attempts to learn, pupils may evaluate their own success, but the evaluations of their efforts by teachers, parents, and other pupils probably also contribute to the formation of their self-concepts. The view that self-concepts are the result of pupils' prior success, or lack of it, in learning is consistent with findings that scholastic self-concepts become more differentiated and more closely related to measures of pupils' achievement as pupils progress through the grades of the elementary school (1).

While self-concepts may be the result of school experience, it also seems likely that they affect pupils' attitudes to, and actual performance in, subsequent

learning tasks. Thus, the self-concept of pupils may be regarded as an important construct in analyzing the performance of children in school, since it can be viewed as both a valuable educational outcome in its own right, as well as a vehicle to improve future scholastic outcomes.

The construct of self-concept is probably best considered as having many facets, particularly as children grow older (4). The facets may be inter-related in a hierarchical fashion (6), but we do not take this into account in the study reported in this paper. If self-concepts are multifaceted, then we might expect to find pupils who have relatively negative self-concepts regarding their competence in certain areas (e.g., mathematics) to have relatively positive self-concepts regarding other school activities, such as reading or sport.

Our interest in the study reported in this paper is in possible gender differences in pupils' self-concepts relating to schooling, as pupils approach the end of their primary schooling in Ireland. Studies in other countries which have considered gender in the context of self-concept have not provided evidence of consistent differences between males and females (3, 5). The lack of consistency between the findings of studies may be due to a variety of factors, including differences in the ages of children included in the studies, as well as in methods of measurement. Differences may also be due to the fact that different aspects of self-concept were the focus of attention in different studies. If self-concept is multifaceted, gender differences may exist for some facets but not for others.

Several approaches, including behavioural observations, projective techniques, questionnaires, and rating lists, have been used to measure self-concept. Perhaps the most straightforward approach involves asking pupils to say how they view themselves in relation to learning and how they view their learning in relation to the learning of other pupils in their class or school (1). This was the approach adopted in the present study. Sixth-class pupils were asked to compare themselves to other members of their class on a 5-point scale on a selected set of 14 school-related variables. The variables cover cognitive (e.g., English reading), attitudinal (e.g., interest in reading), and motivational (e.g., keenness to get on) characteristics, though other variables (e.g., related to pupils' feelings) that are sometimes included in self-concept measures were not considered.

In a previously reported Irish study, sixth-class primary-school pupils were found to tend to rate themselves very positively on most characteristics (2),

gender differences, however, were not examined. The present study is designed to determine the nature and extent of differences that may exist between boys and girls on a variety of aspects of their self-concepts.

#### METHOD

##### *Sample*

The population of Irish national schools (excluding private, Protestant, special, and one-teacher schools) was stratified by location (city, town, rural) and sex composition (all boys, all girls, mixed). From each of seven of the nine strata, 15 schools were randomly selected giving a total of 105 schools.

Every teacher of sixth-class pupils in the selected schools was asked to have pupils complete a self-concept questionnaire. Questionnaires were completed by 3,623 pupils, of whom 1,779 were boys and 1,844 were girls, in 129 classes in 85 of the sample schools.

##### *Self-concept Questionnaire*

In the questionnaire, pupils were asked to compare themselves to other members of their class, using a 5-point scale ('at the top', 'well up', 'around the middle', 'well down', and 'at the bottom'), on 14 characteristics: mathematics, spoken Irish, Irish reading, written Irish, English reading, English composition, interest in reading, interest in school, intelligence, memory, originality, exam results, sport, and keenness to do well in school.

##### *Procedure*

The questionnaire was administered to classes by teachers in their own classrooms towards the end of the school year. Questionnaires were returned for processing to the research organization which carried out the study.

##### *Analysis*

For each characteristic, the percentages of boys and the percentages of girls who assigned themselves each of the five ratings, and of those who failed to rate themselves at all, were calculated. All of these percentages were based on the full number of 3,623 pupils.

Ratings on each characteristic were also considered as scores in which a value of 1 was assigned to a rating 'at the top', a value of 2 to 'well up', a value of 3

to 'around the middle', a value of 4 to 'well down', and a value of 5 to 'at the bottom'. A low score indicates a high self-rating, a high score a low self-rating.

Using these scores, a multivariate analysis of variance (MANOVA) was carried out to test the hypothesis of an overall difference between boys and girls in their self-ratings on the 14 characteristics. Only pupils ( $N = 3,137$ ) who had given themselves a valid rating on all characteristics were included in this analysis. Subsequent to the MANOVA and contingent upon a significant difference between groups being found, univariate analyses of variance (ANOVA) were carried out for each characteristic.

### RESULTS

The distributions of ratings, for boys and girls separately, on each of the 14 characteristics are set out in Figures 1 to 4.

In the case of both boys and girls, a majority of pupils placed themselves in the middle category on eight of the characteristics. The characteristics which did not exhibit this tendency are keenness to do well at school, interest in reading, English reading, English composition, sport, and interest in school. For the first three of these, a majority of both boys and girls rated themselves in the 'well up' category. In the case of English composition and sport, a majority of boys, but not of girls, rated themselves in the 'well up' category, though the gender difference for sport is very slight. In the case of interest in school, a majority of girls, but not of boys, rated themselves in the 'well up' category.

For all except one characteristic, the distributions are positively skewed, indicating that pupils tended to rate themselves towards the top rather than towards the bottom. As we would expect, this is most obvious for the characteristics described above, for which a majority of pupils chose the 'well-up' category. Furthermore, less than 10% of pupils (both boys and girls) rated themselves below the middle category for English composition, intelligence, or memory.

FIGURE 1

DISTRIBUTIONS OF SELF RATINGS FOR MATHEMATICS SPOKEN IRISH  
IRISH READING AND WRITTEN IRISH BY GENDER

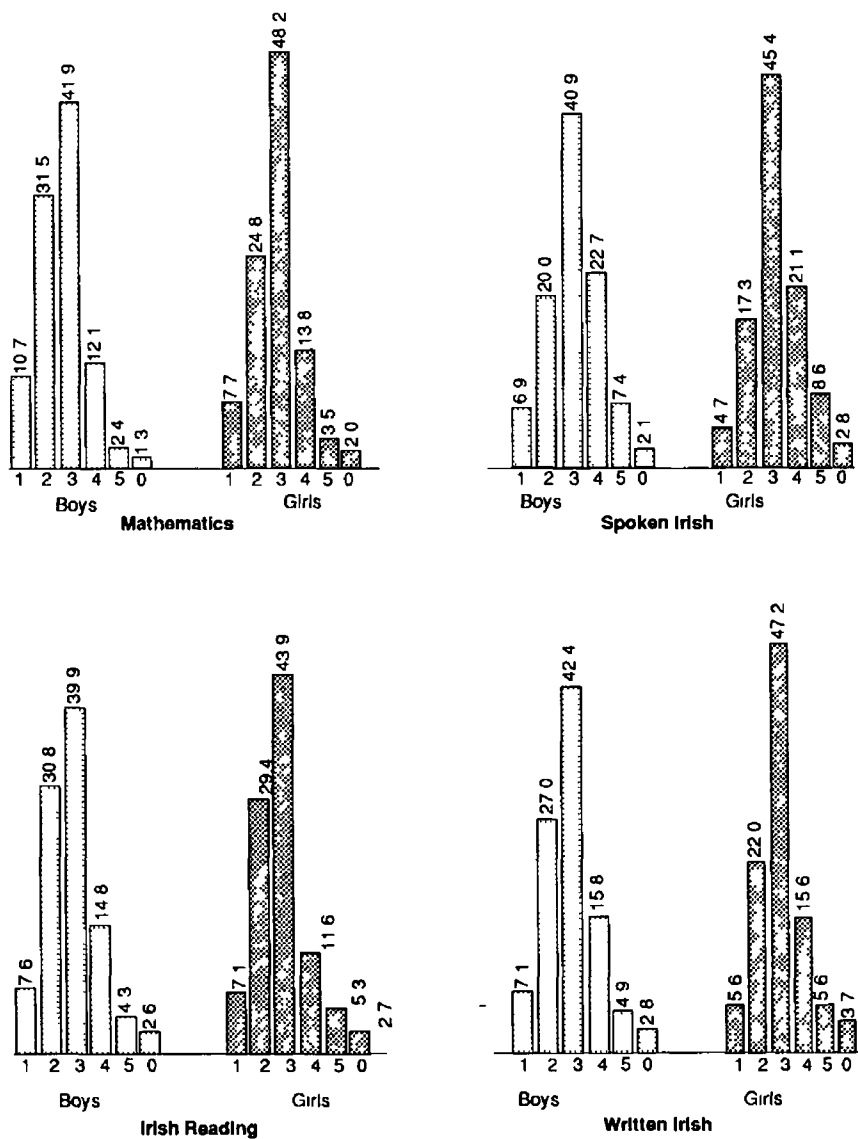


FIGURE 2

DISTRIBUTIONS OF SELF RATINGS FOR ENGLISH READING,  
ENGLISH COMPOSITION INTEREST IN READING  
AND INTEREST IN SCHOOL BY GENDER

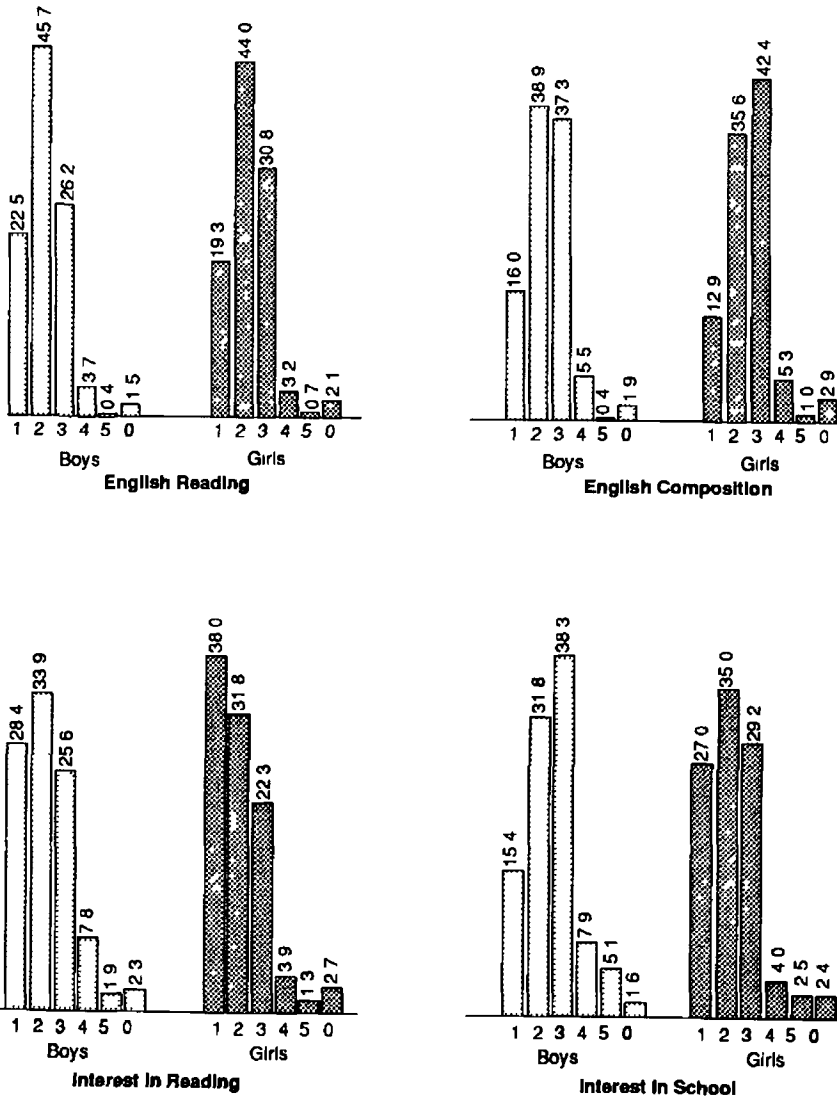


FIGURE 3

DISTRIBUTIONS OF SELF RATINGS FOR INTELLIGENCE MEMORY, ORIGINALITY AND EXAM RESULTS BY GENDER

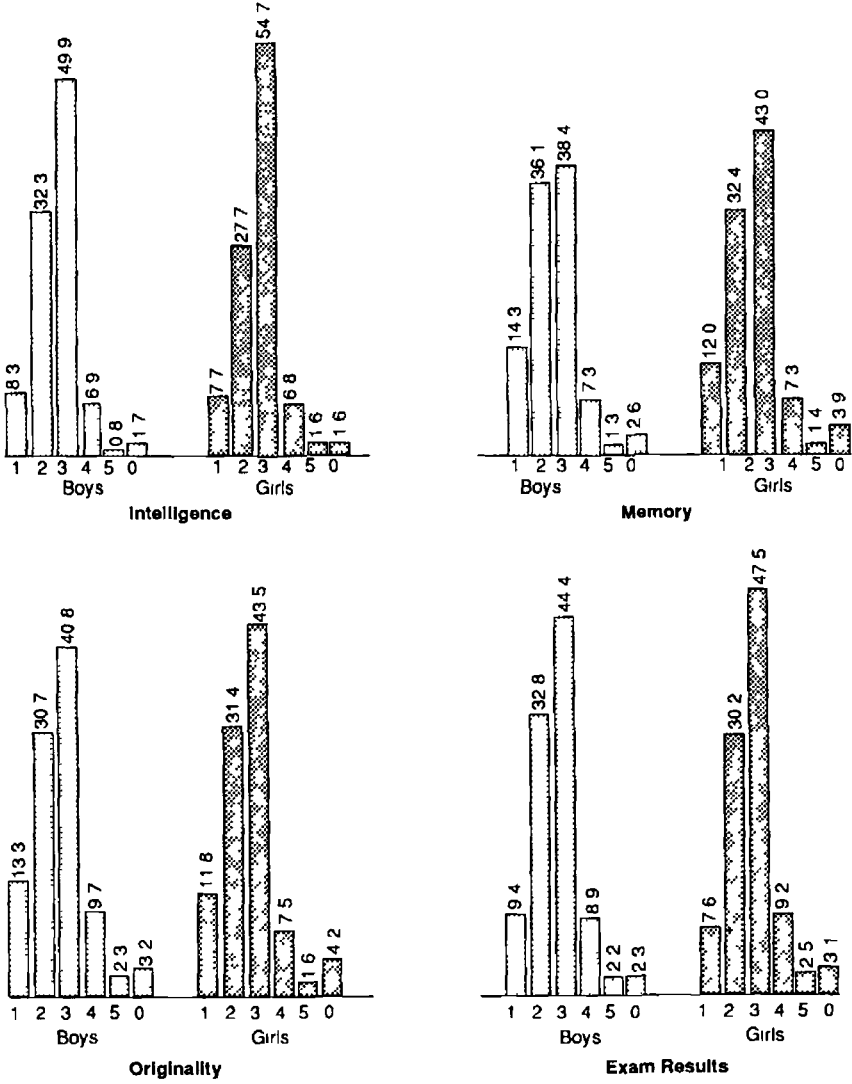
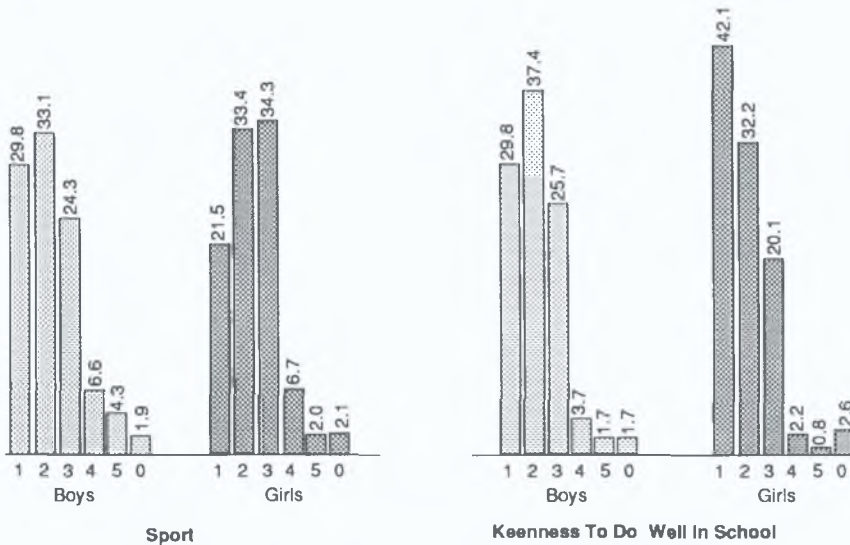


FIGURE 4

DISTRIBUTIONS OF SELF-RATINGS FOR SPORT  
AND KEENNESS TO DO WELL IN SCHOOL, BY GENDER



In the one characteristic in which the distribution of ratings exhibited a negative skew, more pupils rated themselves below the middle category than above it for spoken Irish. A considerable number of pupils, though not as many, also rated themselves below the middle category for written Irish.

Marked gender differences are apparent on several of the characteristics. Immediately noticeable are the higher percentages of girls who, compared to boys, rated themselves 'at the top' in keenness to do well in school, interest in school, and interest in reading. Also obvious are the higher proportions of boys, compared to girls, who rated themselves 'at the top' in sport and 'at the top' or 'well up' in mathematics.

Means and standard deviations for each rating, separately for boys and girls, are set out in Table 1. In the MANOVA, a *lambda* value of .895, which has an associated *p*-value of less than .001 (*df* = 3136, 14, 1) was obtained. The results of univariate ANOVAS are also presented in Table 1.

TABLE 1  
MEANS AND STANDARD DEVIATIONS OF SELF RATINGS BY GENDER\*  
(*df* = 1 3135)

Characteristic	Group				F	f
	Boys		Girls			
	N=1581		N=1556			
	M	S D	M	S D		
Mathematics	2.60	.91	2.75	.88	21.41	<.0001
Spoken Irish	3.02	1.01	3.10	.94	4.88	<.05
Irish reading	2.75	.94	2.74	.92	.02	NS
Written Irish	2.83	.95	2.92	.92	6.05	<.02
English reading	2.10	.80	2.98	.81	6.02	<.02
English composition	2.33	.83	2.42	.82	8.88	<.01
Interest in reading	2.18	1.01	1.92	.92	57.46	<.001
Interest in school	2.52	1.00	2.13	.93	126.60	<.001
Intelligence	2.56	.77	2.63	.77	6.12	<.02
Memory	2.43	.87	2.50	.84	5.42	.02
Originality	2.54	.91	2.52	.86	.43	NS
Exam results	2.58	.85	2.64	.82	3.76	NS
Sport	2.21	1.08	2.33	.95	10.78	.001
Keeness to do well in school	2.07	.92	1.82	.85	63.48	<.001

\*A low score indicates a high self rating

Gender differences in favour of girls were found for self-ratings of interest in school, interest in reading, and keenness to do well in school. Differences in favour of boys were found for mathematics, spoken Irish, written Irish, English reading, English composition, intelligence, memory, and sport. No gender difference was associated with pupils' self-concepts relating to Irish reading, exam results, or originality.

#### DISCUSSION

In the introduction, we suggested that pupils' self-concepts are important both as outputs of educational endeavour and as prerequisites for future learning. It can be argued that this is so, even though discrepancies may exist between pupils' own ratings and other measures of their performance, such as teacher ratings and test scores (2). The findings of our study suggest that a large number of pupils in the final grade of primary school view themselves as average or more positively in relation to a variety of educational variables. On 10 of the 28 sets of ratings presented in Figures 1 to 4 (male and female ratings for 14 characteristics), more than nine out of ten pupils rated themselves around the

middle or above it. On a further 13 sets, four out of five pupils rated themselves in this way. On the remaining five ratings, two-thirds to three-quarters of pupils rated themselves around the middle or above it. Provided these ratings are not unrealistic, they can be interpreted as providing evidence that the previous learning experiences of large numbers of pupils had been positively reinforcing and that their disposition towards future learning tasks would also be positive.

Some of pupils' most positive ratings were applied to affective or non-curricular areas: keenness to do well in school, interest in school, interest in reading, and sport. Curricular areas that attracted similarly high pupil ratings were English reading and English composition. Pupils' ratings of mathematics were mostly in the middle category, while Irish (spoken, written, and reading) attracted the largest numbers of ratings below the middle.

A number of conclusions are evident when we consider our findings related to gender. First, there are considerable differences in the ways boys and girls rate themselves and, we may conclude, in the way they perceive themselves as learners. There were only three characteristics (Irish reading, exam results, originality) for which the ratings of boys and girls did not differ significantly. Second, boys, compared to girls, tend to rate themselves more favourably. In our study, boys rated themselves more favourably than did girls on eight characteristics, while girls rated themselves more favourably than did boys on only three characteristics. This indicates that the self-concepts of boys over a variety of educational variables are more positive than those of girls. And thirdly, the characteristics on which girls rated themselves more highly compared to boys related to attitudinal and motivational factors--interest in school, interest in reading, and keenness to do well in school. Boys, on the other hand, rated themselves more highly for the curriculum areas of English (reading and composition), Irish (spoken and written), and mathematics, as well as for intelligence, memory, and sport. Since the gender differences in curriculum areas cannot reflect actual differences in achievement between boys and girls, the source of boys' perceptions of superiority must be sought elsewhere.

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