

GENDER AND PUPIL PERFORMANCE: WHERE DO THE PROBLEMS LIE?

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ABSTRACT

Over the last 30 years policies to promote equal opportunities in education focused on overcoming the disadvantages experienced by females. More recently there has been concern about lower levels of attainment by males in national examinations. The article suggests that policies aimed at recent male underachievement in secondary schooling are too simplistic. It presents statistical evidence to show a gender gap in attainment since 1975; gender differences from pre-school onwards; relatively greater progress by males than females in post-compulsory schooling; wide social class differences in attainment; preponderance of boys referred to learning and behavioural support; continuing differences in subject choice which reflect gender differences in careers.

This article is based on research commissioned by the Scottish Executive. The research was carried out over one year, in 2000, and was based on a review of the relevant research literature and policy documents, statistical analysis of official data and case studies of six secondary schools in different parts of Scotland, together with their associated primary schools. Overall, 76 members of staff were interviewed in the case study schools, of whom 14 were in primary schools. Further findings from the research are detailed in Tinklin, *et al.*, 2001.

INTRODUCTION

Differences between girls and boys in the experiences and outcomes of school education have been issues of concern in Scottish education for nearly thirty years. Since the 1970s there has been awareness that some aspects of school education contribute to the disadvantaged position of women in society and employment (Turner, *et al.*, 1995; Powney, 1996). More recently, there has been a great deal of publicity about gender differences in attainment in national examinations, and there has been a major shift of focus to address the perceived underachievement of boys (Arnot, *et al.*, 1998; Scottish Office, 1999). Similar trends have been found in many other countries (Sutherland 1999).

This article examines research and statistics on gender differences in performance in Scotland, to ask:

- Is the gender gap in attainment a recent phenomenon?
- At which stage(s) do gender differences in performance emerge?
- Do boys catch up later?
- Are there differences in attainment by social background as well as gender?
- Are there differences by gender in the likelihood of identification of need for learning and behaviour support?
- What are the implications of gender differences in subject choice?

IS THE GENDER GAP IN ATTAINMENT A RECENT PHENOMENON?

From the earliest provision of schooling to very recent times girls have had less

opportunities for educational advancement than boys due to a combination of economic, social and institutional constraints. Early evidence of gender inequality in education is the difference in levels of formal literacy in 1851: 89 percent of men compared with 77 percent of women could sign the marriage register rather than putting a mark (Anderson, 1999). However, reforms that created universal and compulsory schooling broke down barriers to gender equality; in 1872 a state system of compulsory education was introduced for the 5–13 ages, and by 1900 almost all males and females were formally literate (*op cit* p219.)

Similarly, comprehensive reorganisation in 1965 did not have an overt aim to address gender inequality, but removed further barriers. Prior to 1965, pupils were selected for senior secondary schooling (with the opportunity to sit national examinations) on the basis of a “qualifying examination” at the age of twelve. There is evidence from elsewhere in the United Kingdom of the pass rate for the eleven-plus examination being set at a lower level for boys than girls in order to ensure that sufficient numbers of boys entered Grammar schools (Gipps and Murphy, 1994), and there is anecdotal evidence of similar gender differentiation in Scotland. Comprehensive reorganisation, and subsequent raising of the school-leaving age (ROSLA) to 16 in 1973, brought a dramatic increase in overall levels of attainment in public examinations, with significant gains among pupils of lower socio-economic status (McPherson and Willms, 1987). Attainment of both males and females increased, but the attainment of females rose more rapidly than that of males. This is illustrated in Figure 1, which shows trends in Scottish Certificate of Education (SCE) qualifications held by male and female school leavers since 1965. Trends are shown for two levels of attainment:

- those who had no awards at O-grade A–C or Standard Grade 1–3;
- those who had three or more Highers passes at A–C.

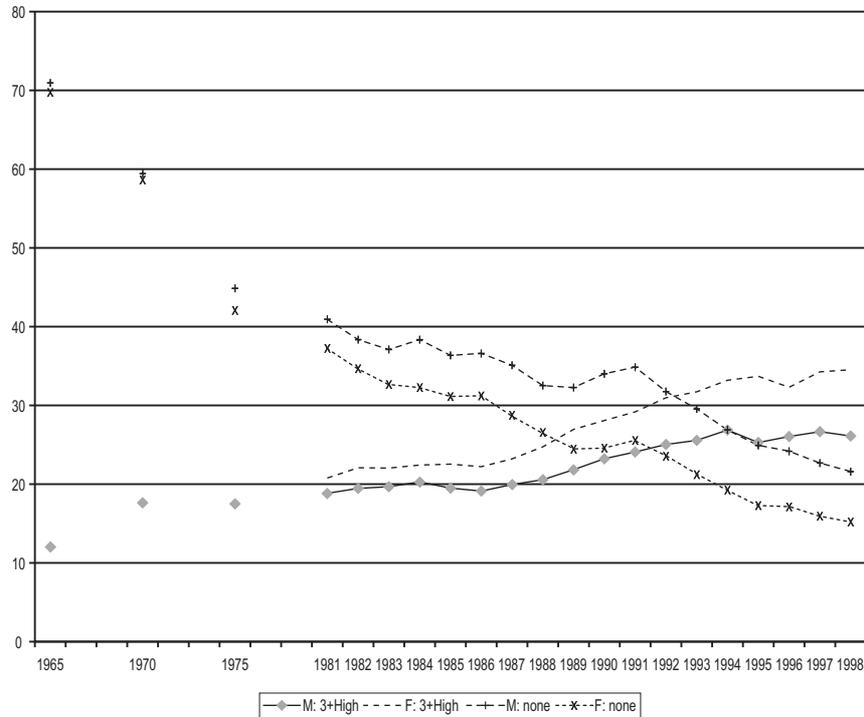
These are based on *Statistical Bulletins* published by the Scottish Executive (formerly known as the Scottish Office). Data for 1965, 1970 and 1975 are shown as isolated points in Figure 1 because we have not found continuous data for the period prior to 1981.

At the top left hand corner of Figure 1 it can be seen that in 1965, prior to comprehensive reorganisation, 70 percent of both male and female school leavers left school with no SCE qualifications. This proportion declined very steeply to 1975, and thereafter more steadily, so that by 1998 only 12 percent of school leavers had no qualifications at Standard Grade 1–3. The proportion of females leaving school with no qualifications declined more rapidly than the proportion of males, so that a small female advantage first became apparent in 1975, and subsequently increased up to 1991. Since 1991, the difference between males and females in the percentage with no SCE qualifications has remained fairly constant, and although the proportion of both genders with no awards has declined the difference between them has not.

At the bottom left hand corner of Figure 1 it can be seen that in 1965 only 12 percent of school leavers had three or more Highers passes. (A pass at Higher Grade is an award at A–C). This proportion has increased gradually, and by 1998 thirty percent of school leavers had three or more Highers passes. In 1965 and 1970 the percentage of males with 3+ Highers was slightly higher than the percentage of females, but this position had been reversed by 1981. Thereafter, the proportion of female school leavers with three or more Highers has increased more rapidly than the proportion of males, so that by 1998 35 percent of female school leavers had this level of award compared with only 26 percent of males.

From these data we can conclude that gender differences in overall attainment

Figure 1: Trends in highest level of attainment of Scottish school leavers by gender, 1965–98: % with no awards at O-grade/Standard Grade (A–C/1–3), and % gained 3+ Highers passes (A–C)



Source: Scottish Executive (1999a); Scottish Office (1992)

are not a recent phenomena but have been evident since 1975. Levels of attainment by both males and females have risen very substantially over the past thirty years. Average attainment by males has increased, although the increase has not been as great as that of females. Explanations of gender differences in attainment therefore need to take account of changes over three decades, including the social, economic and policy changes that have transformed the context of education.

AT WHICH STAGE(S) DO GENDER DIFFERENCES IN PERFORMANCE EMERGE?

Until now the main focus of concern about gender differences in performance in Scotland has been on the secondary stages. There has been very little interest in gender issues in the primary stages, and this may be partly due to the relative lack of information about attainment in the stages prior to public examinations at the end of compulsory schooling. However, as we demonstrate below, recent research evidence shows that the tendency for females to attain more highly than males emerges during the pre-school stages, and is found at all stages of primary and secondary schooling.

Differences between boys and girls at the pre-school and early primary stages have been identified by a national pilot study of baseline assessment. The sample for the national pilot study included 46 pre-school centres and 27 primary schools throughout Scotland. Teachers were asked to rate each child on a four-point scale for each of eight aspects of learning. At the pre-school stage, girls were more likely than boys to have been highly rated on every aspect of development and attainment including personal,

social and emotional development, physical co-ordination, expressive communication, listening and talking, reading and writing, mathematics, and understanding the environment. At the Primary 1 stage girls had significantly higher ratings in personal, emotional and social development and writing, while differences in other aspects were not statistically significant (Wilkinson, *et al.*, 1999).

Other evidence that girls had more highly developed literacy skills at the point of entry to Primary 1 are available from standardised baseline assessments in two local authorities. The data show that at this very early stage girls had significantly higher reading attainment on average than boys, after taking account of a number of pupil characteristics including age, free meal entitlement, first language, pre-school experience and local area characteristics (Croxford, 1999; Sharp and Croxford, 2003). The girls had retained their higher levels of reading skills by the end of Primary 1.

At the Primary 3 stage there is evidence from the national evaluation of the Early Intervention Programme (EIP) that females had higher attainment in reading at age 6-7 (Fraser, *et al.*, 2001). In addition, the Assessment of Achievement Programme (AAP) shows that girls are performing consistently better than boys in reading and writing at the Primary 4, Primary 7 and Secondary 2 stages (Scottish Executive, 2000). Similar gender differences in reading at various age-stages have been found in inner-London junior schools (Sammons, 1995).

In mathematics the pattern of performance is less clear. The national evaluation of EIP found no evidence of gender differences in mathematics at the end of Primary 3 (Fraser, *et al.*, 2001). Similarly, the AAP found no significant differences between the performances of girls and boys in the 1997 Mathematics survey, which covered P4, P7 and S2 (Scottish Office, 1998). However, in inner London junior schools it was found that girls made more progress in Mathematics than boys, and they achieved higher attainment in Mathematics by the end of junior school at age 10 (Sammons, 1995).

Gender differences at the secondary school stages are well documented through Standard Grade and Higher Grade results. On average, females gain more Standard Grade and GCSE awards than males. Table 1 shows that females gain more Standard Grade awards than males on average and the largest differences in performance are found at the highest levels of attainment. with more females than males gaining five or more awards at 1-2 (Credit level) and 1-4 (General or Credit). A similar pattern is found at Higher Grade: 55% of young men compared with 61% of young women completed S5 and S6 with three or more passes at A-C in 1999.

Table 1. Percentage of males and females gaining five or more Standard Grade awards in 1999

| Level of Standard Grade awards | Males | Females | Difference in favour of females |
|---------------------------------------|--------------|----------------|--|
| 1-2 (Credit) | 29 | 40 | +11 |
| 1-4 (General or Credit) | 73 | 81 | +8 |
| 1-6 (Foundation, General or Credit) | 92 | 94 | +2 |

DO BOYS CATCH UP IN S5 AND S6?

Several respondents in the case study schools believed that the differences between males and females were reduced in S5 and S6, and that males became more mature and caught up with girls in terms of attainment. One teacher explained:

“I notice a difference between boys attainment between 4th year and 5th year. They’re just so much different. You know they have matured and if you like the daftness has gone a wee bit and they’re more focused on their studies.”
(Business Studies teacher)

A local authority respondent said:

“You’ve got to inform the guidance staff in schools not to write boys off too early, that they mature later; they might have a poorer set of Standard Grade results, but they’ll get their five Highers.” (Local Authority personnel)

We tested this question using the Scottish School Leavers Survey. The dataset used represented a 20% sample of all young people in Scotland who completed S4 in 1998 (aged between 15–16 years), to which we linked records of attainment in national qualifications at S4, S5 and S6. Our analysis is based on all members of the cohort who responded to the survey at ages 16–17 and 18–19.

Two years after the end of S4, females had gained an average 2.3 passes (A–C) at Higher Grade, compared with an average 1.9 passes for males. If we focus on those who stayed on for post-compulsory schooling, we find that females gained an average 3.2 passes at Higher Grade compared with 3.0 passes for males. These figures confirm that on average females have higher levels of Higher Grade attainment than males. Our question, however, is whether there is any evidence that males made more progress than females in the two years after Standard Grade. For this, we used a multilevel model to look at the relationships between number of passes (A–C) at Higher Grade in S5 and S6 and number of credit level awards at Standard Grade in S4, together with gender and socio-economic status. The results are shown in Table 2 (only effects that are statistically-significant at the 95% confidence level are shown).

The results confirm that attainment at Higher Grade is strongly related to prior attainment at Standard Grade (predicted 0.61 Higher Grade passes for each credit level award). In addition, there is a positive interaction between prior attainment and gender, indicating that males who had achieved credit level awards at Standard Grade were predicted to gain slightly more Higher Grade passes than females of equivalent prior attainment (predicted addition of 0.036 Higher Grade passes for each credit level award). These effects are illustrated by Table 2b, after controlling for all other factors.

These results confirm that males with one or more credit-level awards at Standard Grade made more progress between S4 and S5/6 than their female counterparts. Since males had lower average Standard Grade attainment than females these findings suggest that to some extent the attainment of these young men caught up with the attainment of young women. However, for those males with no credit-level awards at Standard Grade there was no evidence of catching up in S5 and S6.

Other evidence from England, confirms differential progression rates for males and females between the ages of 16 and 18. Yang and Woodhouse (2000) used data on four complete cohorts of students who took A/AS level qualifications (at ages 17–18) in the years 1994, 1995, 1996 and 1997. They examined the relationship between attainment at GCSE level (at age 16) and A/AS level attainment using multilevel modelling. Their findings suggest that males did attain more highly at A/AS level than females with equivalent GCSE attainment.

Table 2a: Number of passes (A–C) at Higher Grade in S5 and S6, predicted by multilevel statistical model (N=4919)

| Factors predicting attainment at Higher Grade | Estimate | Standard error |
|--|-------------|----------------|
| Number of credit level awards at Standard Grade (net effect of each award) | +0.61 | 0.008 |
| Male (compared with female) | +0.003 (ns) | 0.064 |
| Interaction: Number of credit level awards * male | +0.034 | 0.016 |
| Family background: Mother completed school to age 17 | +0.23 | 0.049 |
| Father completed school to age 17 | +0.19 | 0.052 |
| No information on age mother left school | +0.15 | 0.070 |
| No information on age father left school | -0.14 | 0.065 |
| Father in professional occupation | +0.13 | 0.046 |
| Independent school | +0.37 | 0.10 |
| Mean of reference category | -0.17 | 0.048 |
| Variance | | |
| • Between schools | 0.057 | 0.014 |
| • Between pupils | 1.76 | 0.037 |

Note: Reference category refers to pupil who is female, has no credit level awards at Standard Grade, attending a state school, whose parents left school at age 15 or 16, father in non-professional occupation.

Table 2b: Predicted number of Higher Grade passes (A–C) (from Table 2a)

| Number of credit level awards at SG | Predicted number of passes at Higher Grade | |
|-------------------------------------|--|-------|
| | Females | Males |
| 0 | 0 | 0 |
| 2 | 1.23 | 1.30 |
| 4 | 2.46 | 2.60 |
| 6 | 3.69 | 3.90 |
| 8 | 4.91 | 5.20 |

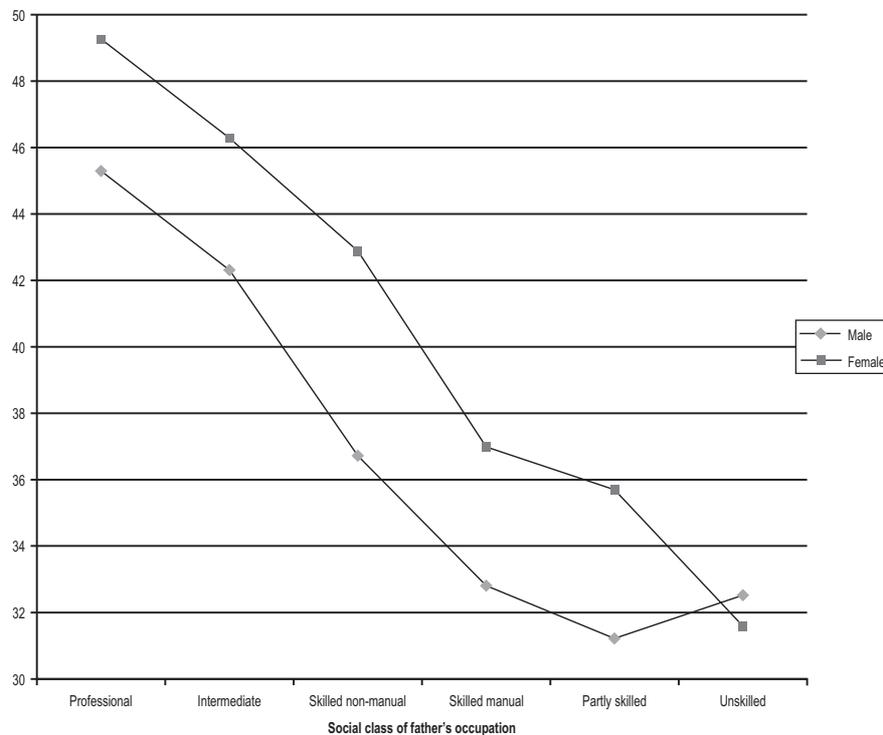
ARE THERE GENDER DIFFERENCES IN ATTAINMENT BY SOCIAL BACKGROUND?

Social class is still a major source of social inequality in Scotland. The early influence of socio-economic status (SES) on attainment has been identified among pupils starting their first year of primary school: pupils with free-meal entitlement have lower baseline attainment in reading, and make less progress in the course of Primary 1 than other pupils (Croxford, 1999). Pupils with low SES were also found to have lower attainment in reading in Primary 4 and Primary 6 (Scottish Executive, 2000). The influence of social class on attainment in secondary schools has been identified by a number of studies (eg Paterson, 1992; Tinklin, 2000; Croxford, 2000b).

Figure 2 is based on data from the Scottish School Leavers Survey of pupils who sat Standard Grade in summer 1998. We calculated a Standard Grade point score, which took account of both numbers of awards and level of awards (by counting an award at 1=7 points, 2=6 points, 3=5 points etc). We compared the point score achieved by pupils of different gender and social class as measured by the social class of their fathers' occupations (Registrar General's classification). We found that the effects of social class were strong; pupils with fathers in professional occupations attained an average 47 points, compared with skilled manual occupations 35 and unskilled 32.

The average attainment gap between males and females was smaller than the attainment gap between pupils of different social class. Males attained 35 points on average, compared with females 39. Differences in attainment between males and females are found at all levels of social class except among pupils with fathers in unskilled occupations (Figure 2).

Figure 2: Mean point score at Standard Grade in 1998 by gender and father's social class (data from Scottish School Leavers' Survey)



In addition, Table 2a shows the significant effect of social advantage on Higher Grade attainment even after taking account of differences in Standard Grade attainment. Those from advantaged social backgrounds (ie those at independent schools, those with fathers in professional occupations, and those with more educated parents) were more likely to do well at Higher Grade than others with equivalent S4 attainment.

ARE THERE DIFFERENCES BETWEEN BOYS AND GIRLS IN REFERRAL TO LEARNING AND BEHAVIOUR SUPPORT?

Another area where there are clear gender differences is the area of special educational needs. Riddell (1996) argues that gender is invisible in the field of special educational needs, which is surprising because there is a preponderance of boys in all categories of learning difficulty. She states that, in 1992, boys outnumbered girls in special schools by 2:1. More up-to-date statistics show that this ratio remained unchanged in 1998 (Scottish Executive, 1999b). She goes on to demonstrate that the most marked gender difference was in the area of emotional and behavioural difficulties, which comprised 81% boys. These findings were confirmed by staff in the case study schools. These staff and Riddell noted, however, the element of subjectivity in assigning young people to learning and behaviour support units and special schools, which does allow for a possible gender bias.

Staff in the case-study schools estimated that the ratio of boys to girls receiving additional support ranged from 2:1 to 5:1. There was some suggestion that when boys were having difficulties they were more conspicuous and disruptive than girls and that this partly explained their greater representation in learning and behaviour support.

“Because to get to that level... you have to be dramatically, openly and consistently in conflict with the system as you see it. And you have to be able to demonstrate that conflict in social situations... I’m not making a judgement but it seems to me, observing the practice, that the boys are up for it. Their difficulties manifest vocally in refusal, far more I think perhaps than the girls.” (PT Behaviour Support)

WHAT ARE THE IMPLICATIONS OF GENDER DIFFERENCES IN SUBJECT CHOICE?

The Sex Discrimination Act 1975 made it “unlawful to refuse to allow girls in a co-educational school to join a course or class to which boys are admitted and vice versa” (Scottish Education Department (SED) 1976). Before the Sex Discrimination Act there had been a report by HMI showing some overt discrimination in the provision of courses for girls and boys (SED, 1975). However, just by outlawing overt discrimination, the Sex Discrimination Act could not address the deep-rooted gender-stereotypes which caused pupils, parents and teachers to believe that some subjects were appropriate for males and others for females.

Differences in subject choice by males and females have been identified by many studies over a number of years, in the UK and elsewhere (for example: Rylie *et al*, 1979; Riddell, 1992; Sutherland, 1999; Croxford, 2000a). In particular, there have been a large number of studies which have focused on the low level of participation by women in mathematics, science and engineering courses, and the tendency for girls to choose to study biology rather than physics (Kelly, 1987; Croxford, 1997). Other studies have looked at low levels of participation by girls in craft and technology (Riddell, 1992), and general low levels of uptake and performance in modern foreign languages by males (Barton, 2000).

Subject choices are important in determining young people’s future opportunities in further/higher education and careers. The benefit of providing opportunities for

choice is that it allows pupils to have more “ownership” over their curriculum and reduces the likelihood that they will be alienated by an over-prescriptive curriculum. However, the exercise of “choice” may be a problem if the individuals responsible for “choosing” subjects are overly influenced by the traditional attitudes and unequal opportunity structures in society. The question: “Choosing or Channelling?” (Kelly, 1981) reflected the double-edged process of subject choice which led many girls to “choose” traditional girls’ subjects, and thereby limit their choice of careers.

In Scotland, as elsewhere in the UK, the earliest opportunity to choose between subjects is at the age of 13–14, when pupils choose which subjects to take at Standard Grade. Their choices are to some extent constrained by the Scottish Curriculum Framework. The reforms that introduced the Curriculum Framework and related Standard Grade Examinations in the 1980s did not have any explicit focus on gender, but by providing a core entitlement they have reduced gender (and social class) inequality in access to the curriculum and attainment (Croxford, 1996; Gamoran, 1996). For example, among school leavers in 1977 only 48 percent of females had studied any science, compared with 71 percent of males but, by 1991 after the introduction of the Curriculum Framework, almost all school leavers had studied a science subject (Croxford, 1994).

Data from the Scottish Qualifications Authority (SQA) in 1999 showed that there were continuing gender differences in subjects chosen within some modes. For example, within the scientific studies mode, 70% of biology candidates were female compared with only 31% of physics candidates. Within the technological activities mode, 80% of candidates for office and information studies were female compared with just 36% for computing studies. In the past, males tended to out-perform females in certain subject areas such as mathematics and physics. The 1999 SQA data, however, show that female candidates at Standard Grade were more likely than males to gain awards at Credit level or General/Credit level in every subject they entered, with the exception of physical education, economics and (general) science.

At Higher Grade, gender differences in subject choice increased still further. The core subjects of English and mathematics showed some degree of balance, with 57% of English candidates and 47% of mathematics candidates being female. However, gender differences described for Standard Grade continued and, in addition, the majority of Higher Grade candidates were female in modern languages, history, modern studies, art, drama, music and religious studies, while the majority of physical education candidates were male. At Higher Grade, as at Standard Grade, female candidates were more likely than males to gain a pass at A–C in every subject they entered, except for human biology and accounting and finance.

Explanations put forward for gendered subject choice include the influences of home and society, teachers’ attitudes and behaviour, the pupil’s intrinsic interest in the subject or belief that s/he is good at the subject, and perception that the subject will be useful in a future career (Croxford, 2000a). We asked our respondents about gender differences in subject choice. Pupils said they chose the subjects they liked, those they were good at and those which they thought would be useful for entering the careers they had in mind. Although the majority of pupils felt that boys and girls should be able to study any subject they wanted to, they believed that peer pressure was a stronger barrier for boys than for girls.

Boy: “If a boy wants to take a girl’s subject on he’s considered or picked on as a pure posy nancy guy, right, but if a girl was to pick a boy’s subject, techy or something like that, you don’t think oh it’s a pure man – it’s just a case of “so what”.”

Interviewer: “So it’s actually easier for girls – they have more choices?”

Boy: "They don't get as much pressure – girls can play football but if a boy tried to do ballet ...” (Boys group, lower ability)

In some cases the gender stereotypes seem to have been overcome. For example, one boy who was taking Home Economics explained,

“Well the sort of jobs that I'm interested in like to do with fitness and health, you had to take Home Economics cos you have to tie in with all the leisure and stuff – so that's why I chose it.” (Boys group, higher ability)

However, there were residual problems in some subjects, such as physical education and languages, in which girls or boys were put-off by the overwhelming numbers of the opposite sex taking the subject:

“I know that in our subject it has been an issue that girls don't like to take it because there's so many boys taking it... I know that some of the teachers in our department would say that the girls are intimidated by the boys.” (PE teacher)

“The females think it's a male dominated environment.” (Craft and Design Teacher)

Some teachers, however, perceived that subject choices arising from lack of confidence were a source of underachievement among some girls:

“They perceive that 'I'm no use at this, this will be too hard for me'. And it's a shame. A lot of them opt out of it because they think they're not able to do it, and really they are.” (Maths teacher)

Most of the teachers believed that vocational relevance was an important consideration in subject choice, and often that gender stereotypes regarding subjects were linked to attitudes to careers. In some cases the link between subject choice and career ideas may be problematic in view of the gendered nature of the labour market. However, there is evidence that the occupational choices of females are becoming more ambitious than was previously the case (Francis 2002). Many teachers mentioned the change:

“I think that the girls realise that there's a huge world out there and there's lots of opportunity for them. It's good to see that.” (Guidance teacher)

DISCUSSION

In recent years, the focus of concern, among policy-makers, practitioners, researchers and the media, has shifted from the underachievement of girls to the underachievement of boys, in particular, their attainment at the end of post-compulsory schooling. How a problem is defined has a significant impact on decisions made about what to do about it. We would argue that this definition of the “problem” is too simplistic and thereby severely limited. A much more complex definition of the problem needs to be adopted which takes account of all of the following factors:

- there are continuing inequalities for females in education and beyond;
- there are persistent and marked differences in attainment for both sexes by social class background;
- there are gender, and social class, differences in performance from pre-school onwards;
- there are gender differences in assignment to learning and behaviour support;

- there are gender differences in uptake and attainment in different subjects across the curriculum;
- the notion of boys' underachievement is based on an average: not all boys are underachieving and not all girls are doing well;
- there is evidence that males make relatively more progress in post-compulsory education than at earlier stages.

Historically, females have been disadvantaged and have had fewer opportunities for educational advancement than males. Since 1975 the focus of equal opportunities teaching in schools has been to challenge the low status of women in education, employment and society. The success of equal opportunities policies is evidenced by the attitudes expressed by young people in our study, who were almost unanimous in their expectations of the equality of sexes in work and family life (Tinklin *et al* 2001). Similarly, the current high levels of attainment by females may be seen as a consequence of breaking down historic barriers to the education of females. Nevertheless, females are still disadvantaged in higher education and employment. Previous research by one of the authors demonstrated that females were not entering higher education to the same extent as males with equivalent levels of attainment (Tinklin and Raffe, 1999). At the other end of the attainment spectrum, we find that females who leave school with low levels of attainment are more disadvantaged than low-attaining males in the labour market (Biggart, 2000).

Gender is in fact a much smaller source of inequality and underachievement in education than social class. If we are concerned about social justice we should also consider the differences in opportunities between males and females from different social backgrounds.

Recent concern about gender differences in performance focused on a single dimension – overall levels of attainment in Scottish secondary schools. However, our review of existing research showed that gender differences in learning development are evident at the pre-school and primary stages. In particular, girls tended to have more highly developed literacy skills than boys throughout primary education. Many of our respondents in primary schools were quite surprised at the extent to which gender differences in learning, attitudes and behaviour among their pupils were revealed by our questions. Primary teachers who had not previously thought about gender differences at the primary stages, described problems and issues which were very similar to those described by teachers in secondary stages. These included boys being less mature, more likely to misbehave, more subject to peer pressure, and boys and girls tending to prefer different learning styles. The first three of these factors became more evident through the course of primary education. This suggests there is a need for greater awareness of gender differences in performance at the early stages of schooling.

A further dimension to gender differences in performance is the differences in attainment in subject areas. There are still some subjects considered to be boys' subjects or girls' subjects, and gender stereotyped subject choice is associated with different opportunities for higher education and careers. Young people we interviewed were very clear in the view that males and females should be able to study any subject they wanted, however, when we looked at patterns of subject uptake, it was clear that young people are still opting for gender-typical subjects where there is room for choice.

Average figures for attainment conceal many differences between groups of pupils. Some males achieve very high levels of attainment, and some females fail to achieve examination awards. We found that high attaining boys can feel discouraged by the suggestion that all boys are underachieving. Similarly, the perception that

all girls attain high levels could cause lack of attention to those girls who are not doing as well as they could. Our research showed far greater differences in school experiences between high attainers and low attainers of both sexes than between boys and girls. We agree with the conclusions of other researchers (Collins, *et al.*, 2000) that it is more helpful to consider the “gender jigsaw” than the “gender gap” because males and females are not homogeneous groups.

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