

# What makes a senior examiner?

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## Note

This research is based on work undertaken by the University of Cambridge Local Examinations Syndicate for Oxford Cambridge and RSA Examinations (OCR).

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## What makes a senior examiner?

### Abstract

As part of a project investigating effects of examiner gender OCR examiners for one component from each of GCSE English, Food Technologies and History were asked to complete the Bem Sex-Role Inventory (BSRI). The examiners for these components work in teams and each team has a Team Leader. The BSRI was designed for conducting empirical research on psychological androgyny. This self-administered inventory provides independent assessments of masculinity and femininity through self-reported possession of socially desirable, stereotypically masculine and feminine personality traits.

This paper will briefly review research into the sex and sex-role orientation of examiners and consider recent and relevant research into the use of the BSRI. The data from the inventory was used to investigate how personality traits of the Team Leaders differ from the other examiners. All the examiners for the Food Technologies component are female and the characteristics of the Team Leaders for Food Technologies were compared with the characteristics of the male and female Team Leaders of the English and History components. Principal component analyses of the response to the BSRI were carried out and the components were used to predict the probability of whether an examiner was a Team Leader or not. The interpretation of the principal components analysis and the relationship between the components and the probability of being a Team Leader are described in the paper.

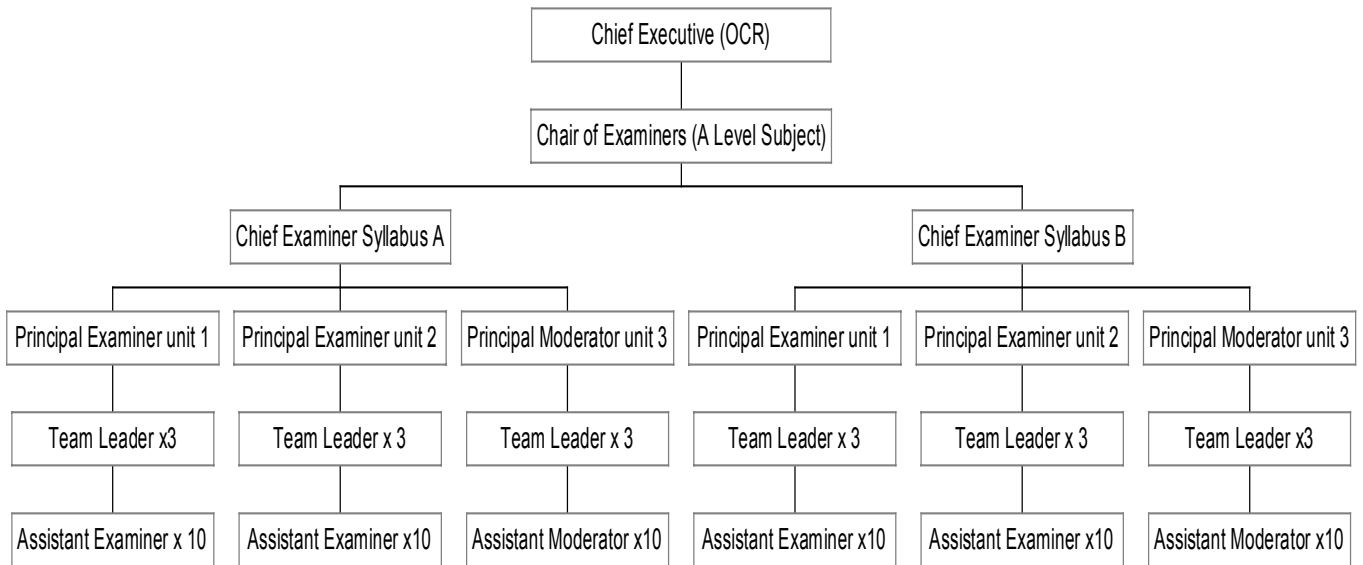
### Introduction

In this paper the issue of gender and the status of examiners in examining terms is considered.

In the England there are 3 Awarding Bodies which administrate general and vocational qualifications. These Awarding Bodies are Assessment and Qualifications Alliance (AQA), EdExcel and Oxford, Cambridge and RSA Examinations (OCR). The general qualifications include the General Certificate of Secondary Education which is a national assessment normally taken in a series of subjects by sixteen year olds. There is also the General Certificate of Education, which is a national assessment, typically taken in three or four subjects by eighteen year olds.

Moody (1999) studied the number of males and females in senior examining posts and the possible reasons for the statistics that she found. She focused upon Chairs of Examiners, Principal Examiners and Moderators of Examinations. The roles of the Chair of Examiners, Chief Examiner, Principal Examiner, Assistant Examiners and Team Leaders are outlined in QCA (2001). The hierarchy for examining is given in Figure 1.

**Figure 1 Hypothetical Hierarchy of Examiners**



Moody (1999) found that less than 20% of senior OCR examiners were female, and that there was a stereotypical subject representation of female senior examiners. This pattern held for both GCSE and A level examinations. She also found that when the majority of examiners were female there was still a majority of male senior examiners. This pattern is similar to the pattern in teaching where the majority of secondary school Heads (73.2% in 1999) are male but the majority of classroom teachers (54.4% in 1999) are female (Department for Education and Skills, 1999). But Moody (1999, 78) adds that:

*The data showed that the under-representation of women as senior examiners cannot be accounted for entirely by the relative size of the female teaching population.*

Moody (1999) found, through her questionnaire based study, a male culture of examining which discouraged women from applying for senior posts. The survey also revealed that a high proportion of examiners of both sexes would not apply for a senior post. She made recommendations to improve the situation. Indeed, before her report was written OCR were beginning to take action to improve the sex balance of examiners in senior positions. For example, the following is an extract from the minutes of the meeting of the Examinations Committee held on 12 March 1998:

*Members noted the dearth of female appointments, and it was suggested that OCR should take action to encourage women to apply for senior examining posts (Moody, 1999, 1). Also anecdotal evidence suggests that OCR are taking the issue of 'training' future senior examiners (of both sexes) seriously. For example, at an 2002 Awarding Meeting for Design and Technology, which was attended by one of the authors, all the Awarders (Subject Officers, Chair of, Chief and Principal Examiners) were male. But they had invited a young female Assistant Examiner to observe, as she was an extremely accurate marker who they wanted to encourage to become a more senior examiner, and they were aware there was no official apprenticeship for the job.*

Examiners, particularly senior examiners, have considerable influence in all aspects of the examining process. Gipps (1994) demonstrated that gender was a factor in the setting and marking of question papers, both in terms of the conscious or unconscious bias inherent in questions, and in terms of the possible bias of markers. Baird (1996) investigated sex bias in marking in Chemistry and English Literature A level. Using a blind marking approach, she found that marks were not affected by the

gender of the examinee or the style of handwriting in either subject. In the case of 'live' GCE and GCSE examinations, blind marking would be a considerable logistical challenge. (Large entry syllabuses include tens of thousands of scripts).

Moody's (1999) study was the first into the disproportionate number of male and female senior examiners in OCR and possible causes. One issue which was beyond the scope of her study was the masculinity and femininity of the individual examiners, which is the focus of this study. Indeed she did not consider this as a possible route forwards.

Moody (1999) focused upon the top of the examining hierarchy rather than the number of males and females in the 'middle management' of examining - the Team Leaders (TL). It is particularly interesting to study Team Leaders as, to become a more senior examiner, people generally must have formerly been a Team Leader. The exception to this rule of thumb is when there are too few examiners to require a team structure. If there are barriers to women becoming Team Leaders then this is one of the factors that prevents them from becoming more senior examiners. One of the factors that prevented women from becoming senior examiners in Moody's (1999) study was that some appointments had been made through networking. Team Leaders are already known by the Awarding Body as they have gone through an application system to become an Assistant Examiner (AE). But to become a Team Leader an AE must have very accurate marking (measured by the Awarding Body and stored as operational data). When a Subject Officer needs a new TL they are likely to tell the Principal Examiner (PE) who are the most accurate markers. The PE will then recommend someone from that group with the people-skills to keep AEs motivated and in line with Awarding Body requirements. This has parallels to the former system for recruiting senior examiners (i.e. it potentially involves networking). This study, therefore, focused on Team Leaders.

Given the arguments about different subjects and gender (above) three case studies were chosen for this research:-

- English Literature GCSE, because there was a similar number of male and female examiners;
- History GCSE, because there were slightly more male than female examiners;
- Food Technology GCSE, because there were no male examiners.

The research question is which gendered personality characteristics, if any, are typical of people who are Team Leaders in each of these situations. GCSE was investigated rather than GCE as GCSEs affect more candidates than GCEs.

## **Androgyny**

To investigate the masculinity and femininity (gender) of the examiners as a personality trait we must consider the theory of androgyny and scales for measuring masculinity and femininity.

Constantinople (1973) revolutionised the way that masculinity and femininity were conceptualised when she argued that they were independent constructs and not opposite ends of a unidimensional continuum. From this argument followed psychological androgyny theory, with the principle that individuals could be both masculine and feminine (Ballard- Reisch and Elton, 1992).

### ***Bem Sex-Role Inventory***

The Bem Sex-Role Inventory (BSRI) measures the masculinity and femininity (gender/sex-role orientation) of individuals and categorises them as:-

- masculine (high on the masculine scale and low on the feminine scale);
- feminine (low on the masculine scale and high on the feminine scale);
- androgynous (high on the masculine and feminine scales);
- undifferentiated (low on the masculine and feminine scales).

The characteristics in the BSRI are based upon what are considered to be desirable traits for men and women.

There is some debate about whether it is more desirable to be androgynous or for people to be sex typed. Arguably the androgynous person is better adjusted and flexible than someone who is sex typed, as the androgynous person can draw from a whole range of traits as the situation requires (Bem, 1974). On the other hand Kline (1993) argues that in gendered societies, like Western societies, people are better adjusted if they are sex typed.

The Bem Sex-Role Inventory was developed in the 1970s and so some might reasonably question whether studies based upon its use are still valid. Zhang et al. (2001) found that Chinese males and females were less sex typed than American males and females. This is an example of how the BSRI measures Anglo-American sex-role orientation, and that the definition of sex-role orientation might vary with cultures (Harris, 1994). But Auster and Ohm (2000, 525) say that: *The findings of our study bring the validity of masculine and feminine dimensions of the BSRI into question if we evaluate the masculine and feminine traits with the criteria used in the original development of the instrument. On the other hand, the striking patterns of the desirability ratings arranged in rank order might cause one to be less critical of the BSRI because the ratings of the traits seemed so traditionally gender typed. ....The respondents' perceptions of most men and most women were quite gender typed.* This suggests that the masculinity scales and femininity scales still have some validity in modern Western society.

Another limitation of the Bem Sex-Role Inventory is that it measures a series of gendered personality traits (Blanchard-Field et al., 1994). But personality traits are not the whole story. There may be other components which constitute sex-role, for example, stereotypes, attitudes, behaviours, social relationships, interests and abilities (Ashmore, 1990). Eichler (1980) criticises androgyny by saying that it assumes that there are some standards of what constitutes masculinity and femininity against which deviations are recorded.

Despite its limitations, the Bem Sex-Role Inventory was chosen as a useful tool because Auster and Ohm (2000) argue that it still has some validity. Other possible measures of masculinity and femininity (amongst other traits), like the Minnesota Multiphasic Personality Inventory, are for diagnosing personality disorders. Such an instrument would be wholly unsuitable for a research study about employees completed by an employer. A limitation of an employer sending a questionnaire to its employees is that they are likely to try to respond in socially desirable ways. For example, people might be more likely to respond in a gender stereotyped manner if they believe that this is more socially desirable from their employers' perspective. It should be noted that respondents were told that their individual responses were confidential to the Research and Evaluation Department (RED) of UCLES, and that OCR would not have their individual data. But examiners might not trust the assurances given by RED.

### ***Sex-role orientation and leadership***

It has been established that sex-role orientation is a better predictor of leadership behaviour than biological sex (Korabik and Ayman, 1987). Korabik (1981) found significant correlations between:-

- an initiating structure leadership style and masculinity. Initiating structure leadership style is when the leader clearly defines the leader and sub-ordinate roles, establishes formal lines of communication, and determines how tasks are to be performed;
- a consideration style of leadership and femininity. The consideration style of leadership is when the leader shows concern for sub-ordinates and attempts to establish a warm, friendly, and supportive climate;
- androgyny and both styles of leadership.

She argued that androgynous persons were the best leaders, as they are able to incorporate both the initiating structure and consideration styles of leadership as the situation required. This argument is very like Bem's view that androgynous people are the most flexible, as they can respond appropriately in a range of situations requiring the use of both masculine and feminine personality traits. Later, Cann and Siegfried (1990) found that masculine traits were rated as consistent with the initiating structure leadership style, and consideration leadership style behaviours were rated as feminine. So the initiating structure (task orientated) leadership style might be considered masculine and the consideration (inter-personally orientated) leadership style feminine.

However, Hackman et al. (1992) showed that the transformational leadership is stereotypically gender-balanced. The transformational leadership style is generally characterised by:-

- emotional appeals directed at goal achievement;
- intellectual stimulation;
- making appeals to group interests and broader organizational goals;
- encouragement of employees to question their own work methods;
- encouragement of employees to break with the past;
- giving assignments in order to develop employee's skills and knowledge.

Bushardt et al. (1987) found that there was no significant correlation between sex-role orientation and leadership styles. This could be because all the subjects had low scores on leadership skills, or because of the particular leadership styles studied. However, they did find that supervisors with some sex-role differentiation were perceived as effective leaders (which could be due to job stereotyping). Therefore the literature is equivocal about the link between sex-role orientation and leadership and/or leadership styles.

In a more recent survey of female Headteachers, it was found that they identified with feminine and masculine traits, tended to use androgynous leadership styles, and that their management style tended to be consultative and people-orientated, but not democratic as final decisions rested with them. The survey also found that women experienced isolation and sexism in their role. It is unlikely that the results of this survey can be applied directly to examining but there are similarities between these results and Moody's (1999) findings.

### **Methods**

Examiners for three GCSE subjects were asked to complete the BSRI:

- English 1500 paper 3 (Non-fiction and Media Texts) Higher Tier paper;
- History 1605 paper 2 (Medicine Through Time), a Higher tier Paper;
- Design and Technology: Food Technologies (Food) 1460 paper 1, a Foundation Tier paper.

The first two were chosen to investigate the relationships between:-

- examiner sex and examination marks;
- examiner sex-role orientation and examination marks.

This is reported separately in Greatorex and Bell (2002). The Food Technologies paper was chosen specifically for this aspect of the study because all the examiners are female.

The masculinity and femininity scores were calculated as specified in the BSRI manual (Bem, 1978). In addition, the questionnaire responses were investigated using principal components analysis. The probability of an examiner being a Team Leader or above was modelled using logistic regression. Note that in this paper, female refers to biological sex, femininity to the total femininity score from the BSRI and feminine the sex-role resulting from the BSRI (derived from both masculinity and femininity scores). The same applies to male, masculinity and masculine respectively. A person with a high femininity score can be either feminine or androgynous and male or female. A person with a low femininity score may be undifferentiated or masculine and male or female. The same principle applies to masculinity scores.

## Results

### Subject specific results

**Table 1 Distribution of examiners who returned the questionnaire by sex**

Subject	Female	Male	Total responses	No. of examiners	Response Rate (%)
English	48	56	104	147	70
Food	53	0	53	82	65
History	10	25	35	57	61

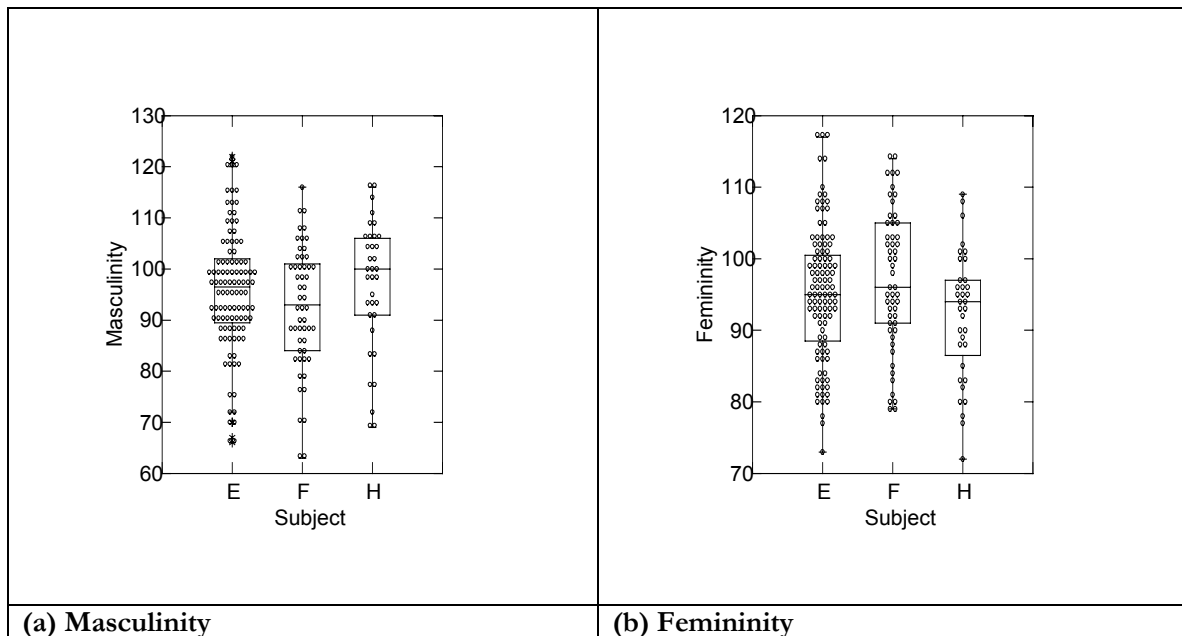
In Table 1, distributions of examiners who returned the BSRI by sex are presented. This illustrates the differences in gender compositions of the groups of examiners for the paper under consideration, and who answered the questionnaire. This pattern does not necessarily hold for all components, papers and syllabuses in the subjects concerned.

**Table 2 Distribution of Examiners by sex-role orientation**

Subject	Androgynous	Feminine	Masculine	Undifferentiated	Total
English	16	26	24	38	104
Food	12	14	9	18	53
History	7	1	13	14	35

Although the classification of sex-roles was not used in the subsequent analysis, it is useful for summarising the differences between the subjects. In Table 2, the distribution of examiners by sex-role orientation is presented. There is one striking feature: only one of 51 History examiners responded to the BSRI in such a way as to belong to the feminine sex-role orientation.

**Figure 1: Distribution of masculinity and femininity total scores**



The low femininity scores for History examiners are also illustrated in Figure 1. The distributions of the masculinity and femininity measures for each subject have been presented as box plots overlaid with symmetric dot plots (each examiner is represented by a separate dot). It is clear from Figure 1 that History examiners tend to be more likely to have high masculinity scores and low femininity scores.

**Table 3: Means and t-tests by sex and subject**

**Masculinity**

Subject	N	Female		Male			t-value
		Mean	SD	N	Mean	SD	
English	48	92.5	11.2	56	98.8	11.6	<b>-2.8</b>
Food	53	92.6	12.1	-	-	-	-
History	10	99.1	16.3	25	96.0	11.4	0.5

**Femininity**

Subject	N	Female		Male			t-value
		Mean	SD	N	Mean	SD	
English	48	97.2	9.5	56	93.8	9.1	1.8
Food	53	97.1	9.7	-	-	-	-
History	10	92.7	7.7	25	92.0	9.6	0.2

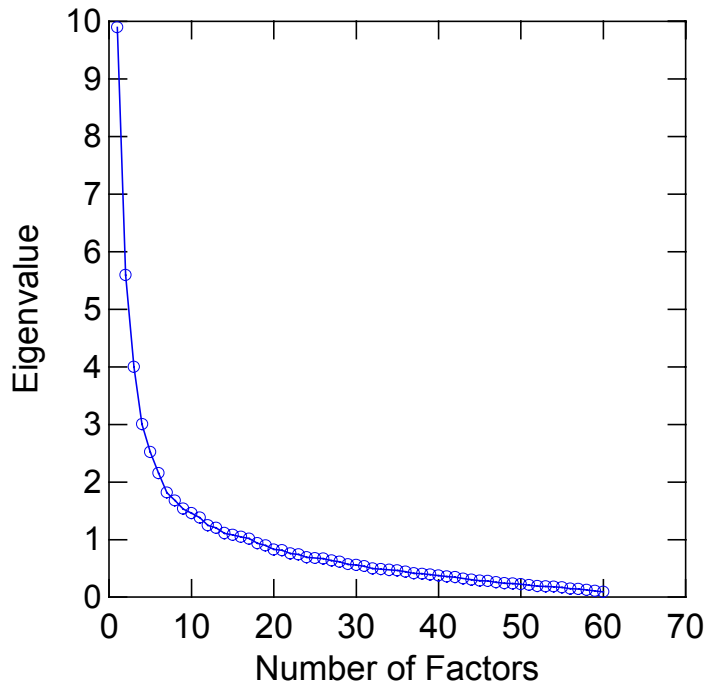
Note: These scores in table 3 and figure 1 are total scores on the masculine and feminine scales. To calculate the raw score, which is used to categorise people into masculine, feminine, androgynous and undifferentiated, the total score, standard deviation and mean can be divided by 20. For full details of how to categorise respondents see Bem (1978). The other values remain constant.



The results of t-tests of the differences in the masculinity and femininity scores are presented in Table 3. The most striking feature of Table 3 is the high mean value for masculinity and the low mean value of femininity of the ten female History examiners.

### All Examiners

Figure 2: Scree plot for PCA of BSRI responses



The BSRI responses for all the subjects together were analysed using principal component analysis. The resulting scree plot is given a Figure 2. From the scree plot, it seems reasonable to consider the first six components. In Table 4, the component loadings for the first six components, extracted using varimax rotation, are presented. To assist in their interpretation, the large loadings have been highlighted in bold.

Table 4: Loadings for the first six components

Statement	1	2	3	4	5	6
<b>Defend my own beliefs</b>	0.31	<b>0.54</b>	0.07	-0.14	0.01	0.01
<i>Affectionate</i>	<b>0.57</b>	0.11	0.00	0.21	-0.33	0.11
Conscientious	0.23	0.31	<b>0.58</b>	-0.13	0.17	0.00
<b>Independent</b>	-0.01	0.24	0.21	0.16	<b>0.64</b>	0.02
<i>Sympathetic</i>	<b>0.74</b>	0.01	0.00	-0.02	0.20	0.01
Moody	0.08	0.23	-0.33	<b>-0.51</b>	-0.05	-0.04
<b>Assertive</b>	0.00	<b>0.78</b>	-0.05	0.03	0.15	-0.04
<i>Sensitive to the needs of others</i>	<b>0.65</b>	0.04	0.11	0.04	0.29	-0.22
Reliable	0.29	0.25	<b>0.53</b>	0.03	0.27	0.03
<b>Strong personality</b>	0.08	<b>0.75</b>	-0.14	0.07	0.23	-0.09
<i>Understanding</i>	<b>0.72</b>	0.15	0.18	0.08	0.25	-0.09
Jealous	0.01	0.14	-0.42	-0.35	-0.17	-0.11
<b>Forceful</b>	0.00	<b>0.79</b>	-0.09	-0.03	0.05	0.02
<i>Compassionate</i>	<b>0.74</b>	0.16	-0.01	-0.09	0.13	-0.09
Truthful	0.21	0.13	<b>0.61</b>	0.05	0.15	0.07
<b>Have leadership abilities</b>	0.07	<b>0.65</b>	0.22	0.24	0.03	-0.10
<i>Eager to soothe hurt feelings</i>	<b>0.63</b>	0.03	0.01	-0.06	0.01	0.07
Secretive	0.04	0.02	-0.39	-0.30	-0.02	0.20
<b>Willing to take risks</b>	0.04	0.28	-0.27	0.17	0.27	0.34
<i>Warm</i>	<b>0.59</b>	0.20	-0.01	0.35	-0.15	-0.03
Adaptable	0.25	0.18	0.21	0.42	0.19	0.06
<b>Dominant</b>	-0.05	<b>0.79</b>	-0.09	-0.02	0.02	0.04
<i>Tender</i>	<b>0.71</b>	0.05	0.05	0.13	-0.34	0.11
Conceited	-0.12	0.22	-0.46	-0.10	-0.07	0.21
<b>Willing to take a stand</b>	0.14	<b>0.59</b>	0.03	-0.04	0.23	0.08
<i>Love children</i>	0.42	0.09	0.05	0.24	-0.07	0.21
Tactful	0.45	-0.08	0.43	0.16	0.06	0.09
<b>Aggressive</b>	-0.16	0.29	-0.29	-0.35	-0.07	0.23
<i>Gentle</i>	<b>0.66</b>	-0.11	0.08	0.14	-0.07	0.09
Conventional	0.06	0.08	<b>0.53</b>	-0.19	-0.44	0.26
<b>Self-reliant</b>	0.13	0.16	0.39	0.16	<b>0.52</b>	0.14
<i>Yielding</i>	0.20	-0.22	-0.08	0.06	-0.03	0.40
Helpful	<b>0.56</b>	0.03	0.17	0.19	0.37	-0.02
<b>Athletic</b>	0.07	0.01	0.03	0.20	0.08	0.34
<i>Cheerful</i>	0.22	0.12	0.00	<b>0.69</b>	0.18	0.13
Unsympathetic	<b>-0.52</b>	0.17	0.00	-0.21	-0.21	0.23
<b>Analytical</b>	-0.02	0.20	0.24	-0.16	0.18	0.35
<i>Shy</i>	0.21	-0.33	0.13	-0.46	-0.08	0.12
Inefficient	-0.12	-0.28	<b>-0.56</b>	-0.26	-0.13	0.15
<b>Make decisions easily</b>	0.09	0.39	0.13	0.30	0.19	0.04
<i>Flatterable</i>	-0.02	0.12	-0.49	-0.01	-0.09	0.12
Theatrical	0.07	0.18	<b>-0.53</b>	0.01	-0.01	0.04
<b>Self-sufficient</b>	0.03	0.07	0.25	0.17	<b>0.59</b>	0.15
<i>Loyal</i>	0.30	0.18	0.39	-0.01	0.38	0.15
Happy	0.17	0.18	0.14	<b>0.69</b>	-0.06	0.25
<b>Individualistic</b>	0.15	0.25	-0.05	0.03	<b>0.55</b>	0.11
<i>Soft-spoken</i>	0.24	-0.35	0.16	-0.12	0.06	0.31
Unpredictable	0.07	0.12	<b>-0.53</b>	-0.04	0.31	-0.05
<b>Masculine</b>	-0.22	0.02	-0.29	-0.08	0.16	<b>0.64</b>
<i>Gullible</i>	0.01	-0.16	-0.39	-0.21	-0.17	0.26
Solemn	-0.01	-0.13	0.10	<b>-0.59</b>	-0.11	0.29
<b>Competitive</b>	-0.04	0.38	-0.16	0.25	-0.09	0.41
<i>Childlike</i>	0.16	-0.02	<b>-0.57</b>	-0.11	0.01	0.25
Likeable	0.30	0.16	0.14	<b>0.56</b>	-0.05	0.05
<b>Ambitious</b>	0.12	<b>0.52</b>	0.10	0.25	0.05	0.08
<i>Do not use harsh language</i>	0.08	0.01	0.28	0.01	-0.03	0.23
Sincere	0.40	0.14	<b>0.56</b>	-0.07	0.15	0.11
<b>Act as a leader</b>	0.01	<b>0.67</b>	0.11	0.24	0.00	0.00
<i>Feminine</i>	0.31	0.08	0.27	0.07	-0.18	<b>-0.50</b>
Friendly	0.41	0.05	0.01	<b>0.55</b>	0.12	0.00

It should be noted that the 1<sup>st</sup>, 4<sup>th</sup>, 7<sup>th</sup> etc statements are used to form the masculinity scale (in bold) and the 2<sup>nd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, etc are used to form the femininity scale (in italics). The other statements are

fillers. It is clear from the table that the first component is strongly related to the femininity scale and the second component is strongly related to masculinity scale. The third component would seem to be a measure of *conscientiousness* and the fourth component *cheerfulness*. The fifth component would seem to be a measure of *self-reliance*. The sixth component constitutes a masculine-feminine dichotomy. This is contrary to androgyny theory, which claims that individuals can be both masculine and feminine, that is that masculinity and femininity are not opposite ends of a continuum, they are different scales.

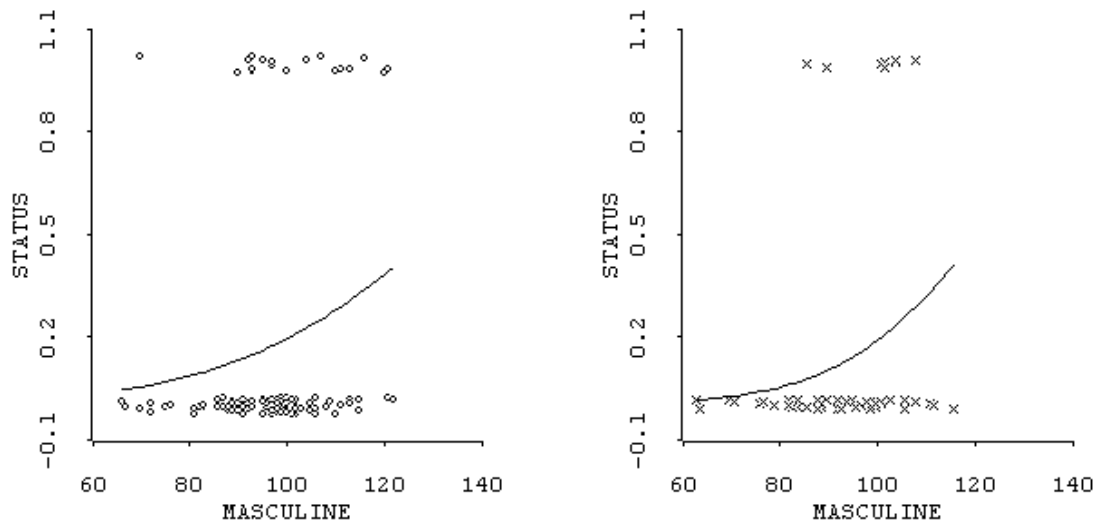
Although the results are not presented here, the relationship between examiner status (Principal Examiner/Team Leader/Assistant Examiner) and biological sex was investigated using two-by-two tables (Cross tabs) and chi-square tests. There were no significant differences.

**Table 5: Results of logistic regression for predicting status of examiners**

Predictor	English				Food				History			
	Const		Slope		Const		Slope		Const		Slope	
	Est.	s.e.	Est.	s.e.	Est.	s.e.	Est.	s.e.	Est.	s.e.	Est.	s.e.
Femininity	-1.51	0.26	0.14	0.26	-1.87	0.44	0.43	0.40	-1.74	0.20	0.50	0.53
Masculinity	<b>-1.62</b>	<b>0.56</b>	<b>0.56</b>	<b>0.29</b>	-1.77	0.42	0.85	0.49	-1.78	0.48	-0.20	0.44
Conscientiousness	-1.50	0.25	-0.05	0.25	-1.91	0.45	0.61	0.46	-1.84	0.51	-0.16	0.49
Cheerfulness	-1.56	0.27	0.46	0.28	-1.88	0.44	0.69	0.48	-1.79	0.48	-0.03	0.51
Self-reliance	-1.49	0.26	0.31	0.25	-1.82	0.43	0.30	0.46	-1.85	0.51	0.32	0.59
M-F dichotomy	-1.50	0.26	-0.03	0.23	-1.99	0.49	0.62	0.54	-1.81	0.50	-0.06	0.50

The relationship between masculinity, femininity and each of the first five components was investigated using logistic regressions. The results of fitting the logistic regressions are presented in Table 5. Note that the sample sizes of AEs and TLs who responded to the BSRI are lower than the ideal for detecting significant differences. When the subjects were chosen an attempt was made to avoid this situation by choosing syllabuses with large numbers of examiners. Never the less, with the low sample sizes only extreme results will be statistically significant. Only one relationship was significant: the probability of being a Team Leader increased with higher levels of total masculinity score for English. The relationship was similar (but not statistically significant) for Food Technologies. However, the relationship was not significant for History, but examiners as a group were much more masculine for this subject. The relationships between the probability of being a Team Leader and the masculinity measure for English and Food Technologies have been presented in the scatterplots in Figure 2. The variable 'status' takes the value 1 if the examiner is a Team Leader and zero if the examiner is not. This means that there would be considerable overlap of points if it was not for the vertical jittering used in the figures (jittering involves adding a small amount of random error to each point).

Figure 2: Fitted logistic regression lines for English and Food Technologies



(a) English

(b) Food Technologies

The fitted line indicates that the predicted probability of an examiner being a Team Leader increases from 0 from an examiner with low masculinity to 0.4 for high masculinity.

## Discussion

There were two significant results from the analyses described. The first is that these History examiners tend to be more masculine than other examiners. It would be interesting to investigate this further. Is it just an idiosyncratic result particular to the component of the examination considered here, or a feature of History examiners, or History teachers? If it is a general feature, are the characteristics developed by the study of History, or are people with the characteristics attracted to History? If it is the former, then the question is what is it about the study of History that makes people consider themselves to be independent, assertive and forceful?

The second significant result is that examiners who rated themselves highly on the masculinity scales are more likely to become Team Leaders. It is important to consider what the masculinity scale measures. Auster and Ohm (2000) imply that it tends to be made up of dominant/assertive traits and self-sufficiency/decisive traits. Team Leaders need to be consistently decisive and to have people skills to manage their team, so it is not surprising that these characteristics are reported by people who become Team Leaders. However, the TLs do not seem to have scored themselves highly on traits that could be seen as useful for developing people skills. This evidence should **not** be used to argue that examining culture necessarily encourages masculine leadership styles, for a number of reasons:-

- the literature is equivocal about whether leadership style correlates with sex-role orientation;
- the examiners were asked to rate themselves in terms of each personality trait in life in general, not in terms of how they conducted themselves as an examiner/Team Leader. However, it is highly likely that there is a good deal of overlap;
- it is unclear whether the TLs have developed traits whilst they have been a TL or whether they had masculine traits before becoming a TL. One way of investigating this would be to identify which AEs from 2002 became TLs in 2003 and what were their BSRI scores.

Fitzgerald (1976) investigated the relationship between occupational membership and sex-role orientation. She found that men in stereotypically masculine occupations rated themselves as very masculine, but that women in stereotypically female occupations did not rate themselves as highly feminine. The male examiners in History tended to rate themselves as highly masculine (as did the female examiners), although History is not necessarily perceived to be a male dominated subject. The Food examiners, who are working in a stereotypically female occupation (teaching) and subject, like the female subjects in a similar situation in Fitzgerald's study, did not rate themselves as highly feminine. The Food TLs were not significantly masculine or feminine, and this agrees with the survey reported by Elms (undated) that female Headteachers used an androgynous leadership style and were not significantly masculine or feminine.

It is beyond the scope of this study to consider in detail factors besides personality which relate to who becomes a Team Leader, but there are obviously many other factors involved. Future research might investigate the other factors which affect who becomes a Team Leader/Principal Examiner/Chief Examiner in predominantly male and female subjects as well as those with even numbers of males and females.

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