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CAREER STRUCTURES FOR WOMEN IN THE WATER INDUSTRY IN THE UK, WITH PARTICULAR REFERENCE TO ANGLIAN WATER

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INTRODUCTION

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INTRODUCTION

This dissertation addresses the relative career success achieved by men as a group compared with that achieved by women as a group within the 'white-collar' workforce of the Anglian Water Authority. Hence the research on the grading and job distributions and also into the perceptions of the study group are all related to one complete work enterprise. It should be noted, however, that since all of these people were in AW's employ comparisons are not made with others who might have applied to work for AW in different circumstances.

In 1984, when the analysis of the jobs, their interrelationships, the occupancy by the sexes, qualifications, age and length of service was carried out, there were 3185 white-collar staff. Of these, 857, approximately 27% were female.

At that time, and still today, Anglian constituted approximately 10% of the UK water industry. Whilst the workforces of the other nine water authorities are outside of the scope of this thesis, it can nevertheless be reasonably assumed that the findings at Anglian would be mirrored throughout the water industry. The same functions exist. The same operating ethos applies. The terms and conditions of service are uniform. Officers from all of the authorities and drawn from a wide range of professional disciplines, frequently meet to deal with matters of common interest and to exchange views.

The major elements of work in this dissertation are a literature search, a study of the workforce and its distribution to jobs, and an analysis of the views and feelings of these employees about jobs/careers and their own needs from their working lives. These views being acquired by the questionnaire process in the autumn of 1986.

The overriding aim of this entire piece of work has been to detect any differences which might exist between men's and women's career success at AW and then to seek explanation for such that were discerned. It is hoped that the outcome has provided rarely available evidence from the practices of one large employer, that sheds light on the complex and socially important subject of equal opportunity.

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METHODOLOGY

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METHODOLOGY

The approach taken was first to review literature which pertained to various aspects which might influence the careers of men and of women. From this work a number of propositions were developed which were used as a focus for the research project.

One of the prime elements of the research was an analysis of the total white-collar workforce in terms of occupation, pay-grade, qualification, age, length of service and sex. The other was an investigation by the questionnaire process of the career aims of a sample of the workforce and the extent to which these were being satisfied.

Finally, questions were also put which related to the priority afforded to career desires within the framework of home, family and life in general.

Analysis was then carried out on the data as a totality and additionally by numerous sub-populations, viz by sex, age, marital status, qualification level, seniority level and various combinations of these.

In addition to the written material in the thesis considerable Appendices were developed to illustrate the statistical data. SUMMARY

SUMMARY

During the course of this piece of work, three propositions were developed which acted as focal points for the research. Investigation and analysis has shown that these were in part valid and in part unsubstantiated.

<u>Proposition No 1</u> Men and women have different job aims and different life goals

The reality is that there was found to be a very high measure of correspondence between the main job/career aims of the sexes. Both sets of employees overwhelmingly wanted Interesting Work, Job Security, A Good Employer and Development Opportunity.

Thus, for example, men did not attach overriding importance to high salary and to status. Likewise women did not attach overriding importance to convenient location and to flexitime.

In terms of life goals there was again found to be a strong degree of similarity in terms of direction but there were differences in magnitude of emphasis.

Both sexes subscribed to the importance of philosophical values such as happiness; the importance of having a satisfactory partner in life; and the desirability of leading a rounded existence with both a satisfactory career as well as other major interests outside of the workplace.

Hence men, as a group, were not career-aholics and, as a group, women were not solely intent on perpetuating the human race.

It was in the arena of priorities of endeavour that differences between the sexes emerged. Both sexes strongly agreed that women put home and family before career, whereas only a narrow majority believed the same of men. It would seem, therefore, that both the belief and its practical reality will militate against women in terms of career development. Men do not experience the same dichotomy of interest, or at least not to the same level.

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Proposition No 2

Some jobs include duties and responsibilities which have the effect of making them unattractive to one of the sexes

This was found to be true and the major factors appear to be social conditioning, educational bias, prejudice (probably arising from both of the former), physical differences (sometimes) and family commitments which prevent, or at least discourage, women from being as flexible as men in responding to job needs.

Many of the jobs at AW require a degree in a subject which does not seem popular with women, or professional membership in a specialism in which relatively few women are to be found.

An argument could be advanced which said that a country's educational system and its direction and practices broadly supported the requirements and mores of society in general. If that were so, then Educational Bias could, in this context, be seen as a specific manifestation of Social Conditioning.

The outcome of all of this at AW is profound job segregation on the basis of gender - both vertically in terms of seniority (most seniors are men) and horizontally in terms of distorted participation rates by the sexes in most jobs.

Proposition No 3 Men and women experience different levels of career fulfilment from each other

This was found to be true. Men at AW feel much more career fulfilled in their present job and are much more sanguine about their future career than are their female counterparts.

On the basis of the evidence found at Anglian Water, it would appear that not only are men's and women's careers substantially different from each other; they seem likely to stay that way unless either men, women, the Government, the employers, the trade unions or some combination of all of these either choose to redefine women's societal role or else modify companies personnel operating strategies to enable women to carry out their domestic role and still obtain career satisfaction.

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LITERATURE REVIEW

LITERATURE REVIEW

Occupational Segregation

Novarra¹ delineates men's work and women's work in terms of the type of task or duty performed. Women according to Novarra have by tradition or by nature been responsible for :

- 1. bearing children in the continuance of the human race;
- feeding the family including cultivating the family's garden plot;
- clothing the family spinning and weaving until lately;
- 4. tending the weak and sick at birth and in old age;
- 5. educating the young before school age;
- 6. maintaining the quality of the home or shelter.

As society has developed along with industry women have tended to migrate towards these same spheres of activity. The production of cloth, teaching, food processing and nursing are all work areas where women are to be found employed in large numbers.

From informal or natural beginnings it appears that occupational segregration has become institutionalised.

The Department of Employment Research Paper No 9 by Hakim² addressed the topic of occupational segregation. The report portrays very interesting movements in segregation patterns. In summary the inferences to be drawn are :

- that there has been some decline in horizontal occupational segregation;
- that there has been an increase in vertical occupational segregation both movements being over the period 1901 - 1971.

In her paper, Sexual Divisions within the Labour force, Hakim³ suggests that within the legal framework of the sex discrimination legislation, action will be needed to reverse a trend towards vertical segregation, and not simply to support the existing trend towards the disaggregation of occupations.

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.Hakim⁴ poses alternative explanations for existence of occupational segregation :

- (a) the structure of the Labour force divided into fairly clearly defined typically male and typically female occupations, determines the attitudes and expectations of employees and workers; OR
- (b) attitudes about 'suitable' work for women and men have produced these strong demarcations.

In her monograph, Work and Women, Holland⁵, also, reviews a number of the explanations for the maintenance and reproductions of sexual divisions. Three contrasting approaches to occupational choice are identified :

- (a) the rational decision making approach, based upon personal characteristics, capacities, interests and values;
- (b) the fortuitous approach where individuals drift into certain occupations rather than making any explicit choice;
- (c) the socio-cultural approach where there are parameters constraining occupational choice.

Mydral and Klein⁶ in their book, Womens Two Roles, look at the emergence of women's working role outside the home. The authors perceived that a significant shift of argument had occurred over the last few decades. Formerly the question had been what can women do. The question now was what should women do.

The authors see the increased choice of role of women arising from a number of factors. Those cited include, political and educational emancipation, sex education and birth control. Robarts, Coote and Ball⁷ also looked at segregation. Females were found to be particularly heavily over-represented

in a number of areas. The following figures show a percentage of the occupational workforce :

Catering, cleaning, hairdressing		
and other personal services	-	76.3%
Clerical and related	-	75.0%
Professional and related		
in Education, Welfare and Health	-	65.8%

On the other hand and on the same basis there was marked underrepresentation elsewhere :

Professional and related in Science, Engineering and Technology - 6.8% Managerial (excluding General Management) - 12.9%

'Women in the Civil Service'⁸ was awarded the 1980 Haldane Essay Prize. The author observed apparently high levels of underrepresentation at the senior levels of the civil service, i.e. vertical segregation.

Her main deduction in seeking to explain this was that the imbalance within the service was due to the imbalance of life in general. If men were to take an equal share in domestic life and childcare then women would be able to give a commitment to work which was equivalent to men's.

Janjic's⁹ paper reviews various measures adopted in a number of countries aimed at diversifying women's employment. She quotes 'The segmentation of employment appears to be a way by which employers, faced with uncertainty, can acquire some degree of freedom in modifying the pattern of wages and creating a flexible use of labour. This degree of freedom is subject to the restraint imposed by social order...., which implies protecting the position of the hard core of wage earners, i.e. the male population aged between 25 and 55 living in urban areas who, without being immune to unemployment, are increasingly better protected against its financial consequences.'

The EOC¹⁰ asserts that 'the old boy network' is keeping women from being appointed in significant numbers of public bodies. Most appointments are made by ministers on the advice of civil servants. The three main routes are personal recommendation, nomination by a representative organisation, or self nomination.

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Since women are not found in numbers at executive level of professional bodies or trade unions and since selectors are less impressed by the method of self-nomination, the consequence is that they are nominated less frequently and appointed comparatively rarely.

Cunningham¹¹ claims that, where it has happened, the penetration of women into the executive management range of jobs presents the corporation with 3 special problems :

- the corporate culture is still infected by attitudes that hamper the advancement of competent women;
- clear distinctions between right and wrong remain blurred by stereotypical thought and behaviour;
- the recent social revolution has increased the tensions in the work relationship of males and females.

Surveys have been carried out on projects in all member states, financed by the European Social Fund, which were designed to achieve a greater occupational choice and give access to those jobs and trades in which women were traditionally under-represented. In 1980, CEDEFOP¹² published the results of a survey. The numerical distribution and sum of the initiatives are shown in the table.

Number of innovatory measures

Belgium	33
Federal Republic of Germany	36
Denmark	10
France	10
Ireland	8
Italy	8
Luxemburg	2
Netherlands	5
United Kingdom	14
Europe of the Nine	126

CEDEFOP¹³ published a further report of the initiatives taken in France. Regional delegates submitted 200 schemes and ultimately 10 were selected. The emphasis of the schemes was to diminish vertical rather than horizontal segregation. CEDEFOP¹⁴ also published a report of the initiatives taken in the Federal Republic of Germany. The emphasis here was threefold and related to categories of females :

- comprehensive regional programme to promote the training of young women in recognised industrial/ technical trades;
- initiatives designed to promote the vocational qualifications or reintegration of unemployed women;
- 3. schemes to promote the reintegration of women resuming work after an interval.

Interestingly, it is alleged that only one out of three French women trained to work in a conventionally masculine field actually finds a job in her profession, according to a survey by the French Adult Vocational Training Association.¹⁵

We are told that of 1.7 million young Germans in apprenticeships¹⁶ in 1983, 800,000 specialised in just 20 job fields. The difference in the fields chosen by males and those chosen by females was striking :

Chosen by Young Women	
Sales Clerk	
Hair Stylist	
Office Worker	
Medical Assistant	
Industrial Sales Representative	
Dental Assistant	
Bank Management	
Retail Sales Representative	
Wholesale & Export Representative	
Tax Consultant	

Woodworth and Woodworth 17 studied various facets of female manager careers in the USA. Among their conclusions were :

- (a) women's penetration into management has largely been into staff roles such as public relations and personnel. There has not been an equivalent emergence in line management jobs;
- (b) companies could with advantage analyse existing female workers in an active attempt to locate potential line managers.

Between 1952 and 1982 it appears that women in the USA¹⁸ increased their ranks among doctors and dentists from 9.3% to 14.6%; among lawyers and judges from 4% to 15.5%.

Women, however, still comprised 99.1% of secretaries; comprised 95.6% of registered nurses and held 98.5% of pre-school and kindergarten jobs.

In the UK^{19} only one engineer in 500 is a woman. In the USA, the ratio is one in 50 and in the USSR the ratio is one in three. Various specific occupational studies have been completed in the UK.

The IPM^{20} carried out a detailed career analysis of 10% of the Institute's 20,000 membership. 450 women and 440 men responded and took part in matched pair interviews.

The findings showed that on average women were employed in lower-level jobs.

58% males were employed as Personnel Managers or above compared with 30% females.

Anderson²¹ quotes some figures in illustration of the occupational segregation of the sexes. She reported women members of the British Institute of Management standing at 2 per cent; of the Institute of Directors 3.5 per cent: of the Institution of Mechanical Engineers only 0.2 per cent. She deduces from these figures that the voices of women must carry little weight when it comes to implementing their role in industry.

Coote²² gives 13 case histories of young women following occupations usually carried out by men. These jobs are Production Engineer, Lorry Driver, Solicitor, Furniture Restorer, Forester, Plumber, Airline Pilot, Sales Representative, Astronomer, Car Mechanic, Accountant (2), Craftsman, Gardener.

The data is by necessity brief but the women so described do not appear to be unusual excepting perhaps - their degree of tenacity. Clutterbuck²³ reports on a management campaign at the car manufacturer Volvo which was designed to increase the penetration of the female workforce into senior levels of the company. In 1977 the company president reviewed the workforce situation. It was found that 95% of female employees were in the lowest four grades compared with 65% of men. A steering committee was formed to discover what, if any, were the impediments to promotion for women.

The committee found that there were four areas where additional skills would help women obtain better jobs. These were Career Planning and Personal Development, knowledge of Economics, knowledge of Marketing and knowledge of Engineering Technology. Sibbald²⁴ has conducted an interesting study of the membership of the Institute of Management Services and also of the occupation

of Management Services.

At the time of the study the membership was 21,375. Approximately 31% were women. Only 4% of the Council of Management were women. Further only 4% of the articles in the Management Services journal throughout the previous year were contributed by females. Barton et al²⁵ sought to examine the distribution of the sexes in technical occupations and qualifications in a sample employment sector comprised of 93 firms in the West Yorkshire area. The firms were engaged in engineering, textiles, chemicals and other manufacturing sectors.

They found extremely high male weighted ratios in respect of both existing technical qualifications and training via technical courses. The following table gives the ratios.

Qualifications of Employees of Sample Firms

	Male	Female
Those with HNC/D in technical subjects	984	48
Those with degree in technical subjects	558	48
Those with postgraduate qualifications		
in technical subjects	78	1
Those having served apprenticeships	4731	13
Those with professional qualifications	1261	35
Those on internal technical courses	128	50
Those on day-release technical courses	1257	162
Those on external technical courses	177	9

Silverstone and Towler²⁶ examined the occupation of secretary in 1970 and again, for the MSC, in 1981. In 1970 only 1% of secretaries in central London were male. By 1981 their figure had dropped to ½%.

In the earlier year, the sample questioned had seen a career choice as either teacher, nurse or secretary.

In 1981 the attractions to the career were good pay and plentiful supply of jobs.

Blades²⁷ looked at the distribution of jobs in the firm, S.....Ltd. there were 650 employees. Of the management team 3 were female. Of these 2 were separated from their husbands. Blades attributed this fact to career/marriage conflict.

Miller²⁸ in her book produced a thought provoking table.

Percentage of Women in Some Top Jobs (1977)

Bank Managers un Chartered Accountants Mechanical Engineers Civil Engineers	der 1% 2.2% (15% serving articles) 0.1% 1.0%
Dentists	15.0%
Barristers	6.0%
Solicitors	7.0% (25% of applicants for
	articles)
Chartered Surveyors	1.0%
Architects	5.0% (10% of students)
Veterinary Surgeons	10.0% (30% of students)
Advertising Account Executive	s 8.0%
Air Traffic Control Officers	3.0%
General Practitioners	14.0%
Consultants (Medical)	9.0%
University Professors	2.0%

Glucklich and Povall²⁹ worked on the London School of Economics research project on Equal Opportunities.

One of their significant conclusions was that a more powerful reason for developing equal opportunity policies was that they can lead to not only a more effective use of human resources, but also to more effective personnel systems. Reviewing recruitment, selection and promotion decisions to ensure that they are not discriminatory can point to a need to formalise certain areas of decision making. The book 'No Barriers Here' is published by the MSC³⁰ and is based on research into the main factors in organisations which limit opportunities for women to become managers and hence reinforce segregation.

From all of the preceding it can clearly be seen that 30 authors detected or perceived occupational segregation.

Socialisation

A number of writers pursue the theme that women and men are socialised in western nations to accept a subordinate role for women, particularly in the workplace.

Pettman³¹ voices the view 'Rarely, outside socialist countries, do nations fully accept or endorse the employment of women. Political constraints reinforce ambivalent social and cultural attitudes and generate resistence to the acceptance of the costs involved, and the benefits to be gained, in adjusting society's structure to the changing roles of women and assisting in the integration of women into the labour force without discrimination.'

The MSC^{30} found that 'most organisations have a distinct attitudinal climate emanating from the top. This often presents itself in the form of kindly protective attitudes towards female staff rather than as overt discrimination. Senior executives with these attitudes tend to make incorrect assumptions about the real interests and abilities of women and the types of work to which they are most suited.'

Martin and Roberts³² interviewed 5,588 women and 799 husbands in their very comprehensive survey.

They found a 'Distinctive lifetime pattern of domestic work for women'. This situation increased dramatically as women set up their own households, usually on marriage.

Focus on the Family derived from a Study Commission carried out by Rimmer.³³ The subject area included young mothers, one parent family situations, care of the old and the disabled, and the impact of all of this on females in the work situation.

It apppears that women are having shorter child-rearing breaks from work. Also that the divorce rate is increasing.

People are living to a greater age and also the possibility of infirmity increases markedly with age.

Women have traditionally, and still do, played the major role in providing 'care' facilities. At the same time there is, for a number of reasons, a strong desire to go out to work.

Coote²² asserts that a large proportion of girls are brought up to believe that the biggest event of their lives will be getting married and having children.

Holland^D made reference to pre-work socialization of children preparing the way for particular occupational roles.

As a wife and mother both the ideology and the welfare provisions of the state support the idea of the women as the economic dependant of her husband, the breadwinner. Holland quotes Beveridge in support of this contention 'During marriage most women will not be gainfully employed', 'One must treat man and wife as a team'.

Prather³⁴ alleged that women were not taken as seriously as men. She deduced that this was a consequence of a long traditional background in a subservient role.

Herman³⁵ argues that this traditional view has carried over into corporate life for the aspiring woman.

She may then be faced with a dilemma. If she takes on the attributes needed of a manager she may well then feel less feminine and more dominant. Conversely if she fails to demonstrate these qualities she may not merit consideration for the job.

Anderson²¹ sees women as, conditioned to live in a male world organised by men for men.

Missirian³⁶ studied the career progress of a group of female managers over a ten year period.

In essence, the study found that the group has substantially remained at approximately the same level of seniority over the period. The author sought to explain this phenomenon.

Missirian concludes by wondering if the group had been socialized as children into a philosophy of be a good girl and wait and see what happens to you. This had the effect of blunting their combinations of talents in the longer term.

Educational Bias

Various researchers have postulated the existence of educational bias to the detriment of women in the UK.

Harriet Harman's³⁷ book published by the National Council for Civil Liberties (NCCL) points up a number of consequences of the alleged discrimination :

- girls leave school with different skills and qualifications from boys and which taken as a whole provide a narrower and poorer career foundation;
- 2. girls leave school with completely different expectations of what their role in the labour market will be.

Some HMSO figures from 1978 are quoted to demonstrate the successful choices made in respect of 'O' levels, England and Wales, by the sexes.

The following table illustrates the situation.

'0' levels - 1978

Maths	Boys 61%	Girls 39%
Physics	Boys 79%	Girls 21%
Tech. Drawing	Boys 99%	Girls 1%
Biology	Girls 60%	Boys 40%
French	Girls 59%	Boys 41%
Cookery	Girls 99%	Boys 1%

Holland⁵ argues relative to school curricula that there are two components within them which embody feminine ideology :

(a) particular subjects are related to the adult female role; (b) disciplines such as mathematics and science are taught in such a way as to emphasise the application of the knowledge to the division of labour between male and female.

Coote and Gill³⁸ echo the views of others in respect of girls basic education and the disadvantageous bias in direction. They go on to say that those girls who go on to university and colleges find there is little overt discrimination. But a large majority sign on for courses in arts and social sciences. By this stage they do not have much option - they have not taken the necessary examinations at school to qualify for the traditionally male-dominated fields of study.

Barton²⁵ and his colleagues attributed the main cause of the predominence of men in the manufacturing firms which they studied to the educational bias followed by girls. Many professional and technical qualifications demand a good grounding in mathematics and the hard sciences.

Cooper³⁹ rather more optimistically advises that the UK University Statistical Record shows, from the early to late 1970's, that there was a 33% increase in women graduates entering industrial employment.

Differences between men and women

Chapman⁴⁰ presents the interesting perception that there are two tongues within English. One spoken by men and one by women. She further postulates that each language reflects in its pattern of usage the roles of men and the roles of women. Much of the masculine form is ordinary colloquial English plus an element of Anglo-Saxon words and expletives. It is, she says, the women's language that is the bone of contention.

Women tend to embroider their statements and qualify them with caveats, thus introducing signals of modesty, deference, ingratiation and conditionals.

Men are assertive, hence they do not need to ingratiate themselves to get what they need.

This essential difference may militate against women when being considered (usually by men) for promotion to a job with a managerial element.

Hay⁴¹ summarises findings from the research of others into the attitudinal differences between men and women in the career situation. She quotes research which indicates that both males and females are motivated by similar job characteristics.

Heinen⁴² et al's research showed that women have similar achievement needs to men. Those needs, however, get channelled into socially acceptable directions.

Another interesting male-female difference was reported by Hennig and ${\rm Jardim}^{43}_{\text{\cdot}}$

They surveyed more than 3000 women and 1000 men in business and discovered that women found it difficult to work with people they do not like. Men by contrast learned to tolerate one another to a great extent and to work effectively with people they may dislike. Alpander and Gutmann⁴⁴ deduced that women tend to focus on their own concept of themselves, whilst men were more attuned to what bosses and others expect of them.

Heinen⁴² produced a further male-female difference. Women are inclined to suppress their own achievement and leadership needs by slipping into supportive roles. Males did not have this tendency to the same degree.

Clutterbuck²³ found that women were to some extent afraid to apply for bigger jobs.

A woman likes to be sure that she has all the qualities listed in an advertisement. Most men if they have one or two of the qualifications will apply on the grounds that they can pick up the rest later.

Harrison⁴⁵ on the other hand observed 'Many men are afraid to delegate, either to women or other men, but at the same time, many women submit themselves to a stereotyped secondary role at work.'

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A number of researchers have sought to detect differences in the approaches of the two sexes to career planning. Veiga⁴⁶ records a project involving 400 women and 200 matched men. The women were all managers and were attending career development sessions. Their ages, education, marital and family status were varied.

The women were questioned about their overall career strategies. Over half of them subscribed to the view that doing the present job well and proving one's ability was of paramount career importance. Over one third of the group specified that hard work was a key determinant. There were no other significant common strains in the womens' responses. Veiga summarised the philosophy as being a 'here and now' approach.

He then established a group of over 200 male managers. Almost half the men subscribed to the notion of continuously developing new skills for future use. Almost half the male sample specified the critical importance of human relations skills.

Finally Veiga turns to a psychological theory to stress the importance of the career planning approach. It is asserted that many of life's experiences do not just happen. Life goals, or pulling motivators, serve as sources of energy which pull one into the future in varying but identifiable ways.

Stassinopoulos⁴⁷s book is an outright attack on Women's Lib and many of its senior proponents. She points out that the movement appears to be spearheaded by writers, intellectuals and artists who may consequently have very little notion of the achievement needs, career and otherwise, of females and indeed males, not similarly occupationally endowed.

Hiller and Philliber⁴⁸ found that 52 per cent of women at the top in the USA were single compared with 4 per cent of men. Sixty-one per cent were childless compared with 3 per cent of men.

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Working Life Patterns

There is evidence to suggest that the factors which in part determine working patterns are changing.

Musgrave and Bennett⁴⁹ feel that the majority of employers are reluctant to accept matters of fact. On the one hand there are still labour shortages in some professions. On the other employers will not recognise that the skills and training of a large number of women are being wasted.

Many women, as their children grow up, and hence have lives no longer dominated by the necessity for close supervision at home, are not content with a small part-time job.

Employers⁵⁰ described a number of measures introduced to permit flexible working possibilities for women. These measures included :

- (a) recognition of school hours and holidays;
- (b) a set quota of hours per week;
- (c) short, four or five hour shifts;
- (d) a 3 shift day, 7-12, 12-3.30, 3.30-7;
- (e) an evening, 'twilight', shift, 5-9;
- (f) 13 week contracts 18 hours per week;
- (g) every Wednesday off for mothers;
- (h) two full-time days;
- (i) job sharing.

The EOC⁵¹ on the other hand came to the conclusion that legislation restricting women's hours of work appears not be justifiable on health and safety grounds and should therefore be repealed.

According to the ILO, Geneva⁵², female participation in paid employment rose between 1960 and 1980 from 45% to 52%. The trend was sharpest in Sweden where 74.1% of women had entered the workforce. A striking exception to the trend occurred in Japan where female participation dropped from 60.1% to 54.9%.

In the USA⁵³ in 1950, a third of women aged 20 to 24 were childless. By 1980 the figure had risen to 41%. The author deduced that this trend, if continued, would result in women attaining greater seniority before the traditional career break for childbirth and child rearing. $Hakim^2$ demonstrated from census statistics 1911 - 1971 the emergence of the two-phase work profile for all women and also for married women. The figures show that in the early part of the century the work rate of women was at its highest in the age bracket 15 - 24 years thereafter declining until retirement age.

By 1961 an altogether different pattern had emerged. The economic activity rate was still high for the 15-24 group figure thereafter declined but then picked up markedly to show the highest rate in the spectrum to be in the age band 45-54 years.

Womens Needs

Womens needs, particularly those of young working mothers have been the subject of research by some.

Yogev 54 studied the perceptions of 164 professional working women at a large university in the USA.

Comparisons were made between their objective-quantitative and their subjective-qualitative views of the role load.

The subjects were divided into 4 groups:-

- (a) unmarried no children.
- (b) married no children.
- (c) married with children.
- (d) unmarried with children.

Total hours worked per week on professional plus domestic duties varied from 78 for group (b) to 108 for group (c). The average for the entire group was 90 hours per week (equivalent to 2 jobs).

Surprisingly, the respondents on average only reported feeling overloaded about once a week.

 ${\tt Johnston}^{55}$ on the other hand describes the typical problems of the female re-entrant to work:-

- (a) lacks recent work experience.
- (b) may lack qualifications.
- (c) older now.
- (d) possibly immobile.
- (e) reduced confidence.
- (f) domestic responsibilities may limit potential input
 - in terms of hours and commitment.

The Asian Regional Organisation of the International Textile, Garment and Leather Workers Federation⁵⁶ held a seminar on working womens problems. It found that the main handicaps of the 1.5 million members and others were:-

- (a) low skills.
- (b) lack of training.
- (c) low earnings.
- (d) exploitation by others.
- (e) no minimum wage legislation.
- (f) undernourishment.
- (g) heavy work.
- (h) contact with hazardous materials.
- (i) lack of child care facilities.
- (j) sexist attitudes.

Williams⁵⁷ gathered facts and opinions by the questionnaire process from 250 women all engaged in skilled professional activity.

Both the respondents and their husbands were reported as being delighted with the effect on their wives of the renewed exposure to the non domestic world.

The women reported a number of difficulties about the dual career role.

37% mentioned the need for more leave in the year. 34% needed more help domestically. 18% felt that promotion prospects were more limited for them. 13% would have liked more flexible hours. 3% felt that there should be more nursery schools.

Woods⁵⁸ interviewed 100 women holding management positions at all levels. They were of the view that females had particular traits to offer. Intuitiveness, sensitivity, understanding and a sense of fairness were cited.

The National Housewives Register⁵⁹ started with a letter to the Guardian suggesting that house-bound wives with liberal interest and a desire to remain individuals should form a national register for those like-minded women in neighbouring areas. Twenty years later in 1980 there were twelve hundred groups comprising twenty-five thousand members.

The volition appeared to rise not from sheer boredom but rather from intellectual and social needs.

Toner⁶⁰ described some of the major considerations which could arise for the working mother with young children. She saw the search for work in this circumstance arising from social need, financial need and intellectual need.

Toner found at the time of writing, in 1976, that work of a sort was often not too difficult to find. Whether or not it was satisfactory depended upon the prime motivation for seeking that work.

Part-time Working

 \mathcal{C}

Because the great predominance of part-timers are female a number of writers have highlighted some of the issues arising from this fact. Colin Leicester⁶¹ examined the area of part-time working recognising that the NCCL, the LPU, the TUC and the EOC and others had all done so and had come to a similar conclusion. Namely that "An injustice is being perpetuated on an important and growing category of British workers".

Part-time workers as a generality receive lower pay, worse terms and conditions, less promotion and training and enjoy fewer legal rights than their full-time contemporaries.

Molloy⁶² lists a number of employment rights which are dependent upon the number of hours worked including:-

Redundancy pay Maternity pay Maternity leave Unfair dismissal Written reasons for dismissal Written particulars of employment Minimum notice Guarantee pay Dismissal connected with medical suspension

Ann Sedley's⁶³ book for the NCCL on the subject of part-time workers presents some intriguing statistics. At the time of writing, 1980, she advises that four out of five part-timers are female. Further, that forty per cent of the female workforce works part-time. The 1981 EC Labour Force Survey⁶⁴ produced interesting data about part-time working in the UK. Interviews were obtained with members of 80,000 private households in Great Britain. The findings included the following facts:-

- (a) 90% of part-timers were women.
- (b) 80% of female part-timers were married. About 50% were aged 25-45.
- (c) Less than 33% of working women without dependant children worked part-time.
- (d) 33% of male part-time workers were over retirement age.
- (e) Part-time work was concentrated in particular industries particularly service industries.

Industrial Relations Review and Report⁶⁵ found that employers normally take on part-timers for four, not necessarily mutually exclusive, reasons:-

- (1) they might not be able to recruit enough full-timers.
- (2) to extend plant utilisation or opening hours.
- (3) to provide flexibility in manning levels at times of peak demand.
- (4) Because their total reward package, including all terms and conditions, is usually cheaper.

Manley and Sawbridge,⁶⁶ Durham University, examined the increase in part-time working by women and its concentration in the services sector. Comparisons were made between the UK, Germany, France and the Netherlands.

It was deduced that over the past twenty years and particularly over the last eight there has occurred a well-recognised shift towards female labour in the composition of the workforce in this country.

A major distinction drawn between the UK and the other EEC countries related to the degree of Social Security regulation in respect of part-timers. The other countries draw much less distinction and hence the employment of part-time workers is relatively more expensive there.

Day Care

Baroness Seear⁶⁷ writes "The establishment of equal opportunities between the sexes calls for vast but often subtle changes. The roots of prejudice run deep and touch the most profound springs of human behaviour. There is no one right way ahead and the advance must be made on a wide front. Changes at work depend on, and must be accompanied by, changes in the home, in the school, and in the provision of childcare services, for children of school age perhaps especially".

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Toner⁶⁰ found that formal childcare facilities were not geared, certainly in terms of quantity, to the needs of working mothers with very young children. This applied to both those run by local authorities and private organisations.

In England at that time, 1976, there were 488 local authorities offering full-day care for 23,718 children. A further 108 offered part-time care. There were 855 private day nurseries offering full day care for 22,364 children. A further 11,905 offer sessional or part-time care.

The varying pressures and influences, according to Garner, 68 result in less than a quarter of the under-fives having mothers who go out to work.

The EOC⁶⁹ have published a comprehensive manual to guide employers in setting up a nursery.

Reading through the 15 chapters produces an awareness of the existence of many rules, regulations and other considerations for the company considering embarking on such a venture.

Fraiberg⁷⁰ considered at length the childcare and mother-substitute problems of mothers who were compelled to leave a child in another person's care because of their need to work.

She regarded children as falling within one of three categories according to age.

Up until 3 years it seemed unlikely that there was a completely satisfactory substitute for the natural mother.

From 3-5 years, in a properly structured environment, regular absence of up to half a day in duration is tolerable and may even be beneficial.

Above 5 years a structured 6 or 7 hours regular absence at school may be increasingly welcome.

Equal Opportunity - Sex Discrimination - Equal Pay

'A Model Equal Opportunity Policy' is published by the Equal Opportunities Commission (EOC).⁷¹ It is a guide to employers wishing to develop their own equal opportunity policies.

The document quotes definitions of 'discrimination' and 'indirect discrimination' from the Sex Discrimination Act 1975 :

Discrimination

Where a person is treated less favourably on grounds of sex or marital status.

Indirect Discrimination

The imposition of a requirement or condition which is applied or would be applied equally to persons not of the same sex, marital status but :

- which is such that the proportion of persons of the same sex and marital status who can comply with it is considerably smaller than the proportion of persons not of that group who can comply with it;
- which cannot be shown to be justifiable irrespective of sex, marital status of the person to whom it is applied;
- 3. which is to the detriment of the individual concerned because he/she cannot comply with it.

The document warns of the need to guard against preconceptions in respect of individuals, due to sex and marital status, having characteristics which would make them unsuitable for employment.

The Department of Employment Research Paper No 20, by Snell, Glucklich and Povall 72 studied the implementation and effects of the Equal Pay and Sex Discrimination Acts in 26 organisations.

The study found that the vast majority of women in the 26 organisations were entitled to benefit under the Equal Pay Act. There were, however, groups of women in 15 organisations who fell outside of the provisions of the Act. A combination of job segregation and a lack of coverage by collective agreements or formal employers pay structures was responsible for those women not being entitled to benefit. The study concluded that several key factors had limited the effectiveness of the Equal Pay Act. These were employers' strategies for implementation, the method and level of pay determination, the role of trade unions locally, lack of pressure from the women and the extent of job segregation.

Changes to practices and procedures was a result of the Sex Discrimination Act were found to be few. Most employers had not examined their personnel practices as they were assumed to meet the requirements of the Act. Removal of overt discrimination from recruitment practices was the most common area of change. There was found to be little change to training and promotion practices.

Incomes Data Services (IDS) remind us again in 1984⁷³ of UK legislation which makes a two-pronged attack on sex discrimination.

The Equal Pay Act 1970 and the Sex Discrimination Act 1975 are those measures.

In respect of the former, the idea was to ensure that if a women does more or less the same job as a man, then she should get the same pay and enjoy the same conditions of employment as he does.

The Sex Discrimination Act outlaws certain kinds of discrimination on grounds of sex or marriage. So, for example, it prohibits discrimination in selecting to employ; deciding who to promote; transfer, train etc and deciding who to dismiss.

An Industrial Tribunal⁷⁴ in the sex discrimination case of Irvine versus Prestcold Ltd, in addition to making an award to Mrs I recommended positive action in that she should be given opportunities for career development.

At a high level conference on the Employment of Women held in 1980, Labour Ministers of the Organisation for Economic Cooperation and Development (OECD) adopted a fourteen-point Declaration pledging themselves to achieve equality of opportunity and of conditions of employment for women. This followed a five year study and a report. The report also specified some of the measures that could be adopted and was titled Equal Opportunities for Women.⁷⁵ Crow surveyed the careers of the entire female output of the Manchester Business School 76 since its inception. He produced a matched sample of males.

He found that, as a group, the median salary of females was 86% of that of the males - the upper decile was 75% of the male figure. He also found from ranking their jobs that there was a fairly wellbalanced situation in respect of job size.

Silverstone⁷⁷ analysed job adverts for secretaries from 1950 onwards. Prior to December 1975 when the Sex Discrimination Act came into effect in Great Britain there was an increasing bias towards sexist content in adverts for secretaries. Words such as girlish, delectable and girl Friday were included. This was not apparent in adverts for other occupational groups.

After 1975 things drastically changed but there has not been a corresponding reversion back to the pre 1940 days when secretary was largely a male occupational province. This, despite the fact that the pre-1975 mode of advertising was thought to substantially reinforce the sexual stereotyping of the job!

In the USA⁷⁸ it has been estimated that it could cost employers 150 billion dollars a year to raise women workers to the same wage levels as men who do jobs requiring comparable skills, responsibilities and efforts.

Trade Union Attitudes

The TUC⁷⁹ publication 'Working Women' is a discussion book for use on TUC and union courses. Much of its material reflects major policy statements by trade unions on social issues which are of particular relevance to females.

The TUC⁸⁰ called a special delegate conference in 1980 'to examine why the movement for equal opportunities for women in employment is experiencing difficulties and how positive action programmes might help'. The third volume published in 'The Directory of Social Change' is entitled 'Women'.⁸¹ It is a treatise in favour of the Women's Movement.

The section of the book devoted to Women at Work covers some thoughtprovoking areas.

The authors advise that 24 per cent of trade unions is made up of women and then give statistics clearly demonstrating the underrepresentation of women amongst the full-time officials in several major unions.

At the NALGO⁸² Annual Conference in 1981, a resolution was passed calling for positive action to improve womens' position at work. Provisions for working parents called for by the union were :

- 1. Improved maternity/paternity/parental care with pay
- 2. Time off to care for sick children/dependants
- 3. Workplace nurseries
- 4. Improvements in the position of part-timers
- 5. Job sharing opportunities (this should not be confused with work sharing or job splitting).

NALGO⁸³ has released a publication on the desirability of non-sexist language. Their principal argument being that biased language reinforces the stereotyping of men and women and that stereotyping paints a false picture of reality.

Career Guidance

The availability of informed advice could be a crucial career determinant.

The Daily Telegraph Careers Encyclopedia 84 contains almost 1000 pages on the subject. Much of the book, about 600 pages worth, is allocated to careers segregated into 8 groupings :

- 1. Administration and Finance
- 2. Creative, Communicative, Cultural and Entertainment
- 3. Environment
- 4. Central and Local Government and Armed Forces
- 5. Manufacturing and Production
- 6. Professional, Scientific and Social Services
- 7. Service Industries
- 8. Working Overseas.

The most thought-provoking section and perhaps the most useful for a forward looking overview is called 'Future Patterns in Employment'. This reminds us that change in job patterns have always been with us but not at the present rate.

'Back to Work'⁸⁵ was published as a practical guide for women considering formal occupational re-entry.

It contains a searching section devoted to occupational guidance and career counselling. The authors believe that relatively few people, men or women, take the trouble to think deeply about what kind of job they would like.

Faulder's⁸⁶ book on career advice, principally directed at females, provides an interesting categorisation of occupations comprised of 9 sections :

- 1. Administration
- 2. Applied Science
- 3. Communications
- 4. Creative
- 5. Management
- 6. Practical
- 7. Research
- 8. Selling
- 9. Service

Within these groupings she identifies 94 branches of occupation. The potentially useful feature of Faulder's work is those fairly readily understood, by women, work categorisations.

VNU⁸⁷ have produced a careers guide aimed to help 18+ school and college leavers.

Most of the book is devoted to three indexes. There is a job index which lists employers under the specific job opportunities that they may offer either directly or after training. Around 100 jobs groups are listed.

There is a training index. This shows possible training opportunities provided by particular companies and organisations. There are about 450 entries. These data are also grouped geographically within the UK.

Finally, there is a courses index. This is ordered by subject/ occupation and presents 10 pages of institutions offering the course. 'Second Chances 1982'⁸⁸ is a further guide to adult education and training opportunities. The book appears an impressive 350 pages targetted towards the mature job-enterer or job-changer.

Pates and Good have pursued a different slant from some others. The volume does not give descriptive matter about the activities implied by particular occupations. Instead it concentrates on approaches to gaining different, extra qualifications to those that the reader already holds.

Fort and Cordisco⁸⁹ describe a cooperative effort between business and higher education to produce a career development programme. The initial scheme was applied to women but later made available to both sexes. There were 4 elements to the programme :

- 1. The identification of participants
- 2. A 2 day orientation seminar
- 3. A concurrent assessment, advising and career planning workshop over an eight week period
- 4. Evaluation and follow-up.

Training and Development

In April 1983 the Manpower Services Commission (MSC)⁹⁰ issued a discussion paper 'Towards an Adult Training Strategy'. This paper commenced by quoting the three major objectives from an earlier paper, 'A New Training Initiative' May 1981, also by the MSC. These objectives are :

- To develop skill training, including apprenticeships in such a way as to enable people entering at different ages and with different educational attainments to acquire agreed standards of skill.
- 2. To move towards the position where all young people under the age of 18 have the opportunity either of continuing in full-time education or of entering a period of planned work experience.
- 3. To open up widespread opportunities for adults, whether employed, unemployed or returning to work, to acquire increase or up-date their skills and knowledge.

A Committee of the IPM⁹¹ commented upon the MSC discussion paper Towards an Adult Training Strategy. The comments were clearly appropriate to both males and females. A particularly relevant passage read :

> 'Adults need to develop means of anticipating, managing and coping with change. They will need to be equipped with those personal skills and attitudes which are necessary to deal pragmatically with continuously changing conditions. Technical skills acquisition is a secondary consideration. Once the skills required are known, there are tried and tested means of analysing, cataloguing and systematising them, and of teaching or instructing individuals to use them.'

The IPM^{92} published a code of practice for the continuous development of people at work. There were three aims to the document :

- (a) the integration of learning with work;
- (b) continuous self-development;
- (c) improved operational performance.

Greenhalgh and Stewart⁹³ researched the National Training Survey 1975 which covered 50,000 men and women in the UK.

They found that men in the lower level occupations are less likely to subsequently undertake training, but that, for those who do, it has a large impact on their prospects.

In addition, women are less likely to undertake full-time training than men, but, if they do, they obtain greater upward mobility than men as a result.

The Local Government Operational Research Unit⁹⁴ completed a very fine research project to assist the LGTB in developing a training strategy for women LG employees.

The report cited a number of benefits which LGORU believed would ensue if Local Government implemented the proposed strategy. One of those read : 'The issues raised in the proposed strategy relate not only to women, but all employees. Developing more flexible working conditions, adapting to technological change, combining work with family, re-training after a period out of the labour force - these are questions that are likely to be of concern to everyone.'

Measures to Help Women at Work

An EEC broad assessment on the implementation of the Directive on Equality of Opportunity was presented to the Council in 1981.

A major point was that although most States had introduced general legislation aimed specifically at promoting equal treatment in employment, it had on the whole fallen far short of the principles outlined in the Directive.

In 1981 the Manpower Services Commission⁹⁶ sponsored a Conference at Oxford University on Practical Approaches to Womens Career Development.

The nineteen papers examine different aspects of the topic including womens networks, role models, managing the career break, womens career counselling, sexism in training and so on.

Homer 97 studied 1,775 women of whom only ten per cent were markedly successful. She concluded that this sub group would serve as useful <u>role models</u> for future female aspirants.

Blue Collar Women⁹⁸ describes typical steps which have become necessary to meet the legally enforceable 'affirmative aid' measures in the USA.

An increasing number of American women are seeking and gaining entry to craft occupations which have formerly been the province of men. 99 a research/community worker for the Joint Docklands Action Group, brings together a series of papers, by women in community work. A section is devoted to two papers about the Gingerbread Movement. At the time of writing there were 25,000 members. Members tended to be mainly divorced and separated men and women; widows and widowers were under-represented and there were hardly any single mothers, especially teenage mothers.

The major UK clearing bank, Nat West, launched an innovative career break scheme in 1981 primarily intended for use by female employees and reported by Adams and then the MSC_{\star}^{100}

The banking career structure is essentially a progressive, agerelated structure. Across the clearing banks as a whole only 2% of management positions were held by women. The bank was also aware that some women now deferred their first child until they were in their early 30s. By that time, many females build up a very good record of depth of knowledge and experience that is not quickly replaceable.

Against this background the Bank decided to introduce a means of re-entry for women of high potential. The scheme is geared to cater for an approximately five year break.

The anticipated benefits of the scheme are fivefold.

First, there will be a team of known relief workers for known periods of pressure.

Second, there is now a register of potential job applicants of proven merit.

Third, the scheme is a means of attracting and retaining female recruits of high calibre.

Fourth, role models will be created to demonstrate that it is possible to combine family and career.

Finally, the package is a practical demonstration of the Bank's commitment to equality of opportunity.

The National health Service $(NHS)^{101}$ has over the years developed a number of measures designed to accommodate doctors and dentists who may not be able to pursue their profession on a full-time basis. The scheme started under Circular HM(72)42 Woman Doctors Retainer Scheme in July 1972. The aim was to encourage married women doctors with families and others with similar ties to remain in touch.

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Later on in 1979 a similar scheme for dentists was introduced under HC(79)11 Dentists Retainer Scheme.

A third scheme was introduced called the Training Scheme for the Employment of Doctors with Domestic Commitments, PM(79)2. This scheme was designed to allow doctors to continue to train on a parttime basis.

Summary

As can be seen from all of the preceding material in this section the writings and opinions of the various authors can be grouped into 13 classifications:-

- Segregation the division of occupations and occupational groupings into distinct areas, some of which are occupied predominantly by males and others by females.
- (2) Socialisation the preparation for life in society which as practised emphasises distinctions between male and female in the workplace.
- (3) Educational Bias primary socialisation may carry through into places of learning such that masculine and feminine roles and anticipated roles are reinforced by educational direction.
- (4) Differences between Men and Women suspected or perceived differences in attitudes, aspirations and behaviour between male and female.
- (5) Working Life Patterns differences between the daily routines of men and women and also differences between the working life patterns of women today compared with women in the past.
- (6) Womens Needs the requirements of women particularly when operating in a dual role of worker and mother of young children.
- (7) Part-time Working the great predominance of part-time workers in the UK are female and part-time working is carried out under different employment rights and pay conditions from full-time working.

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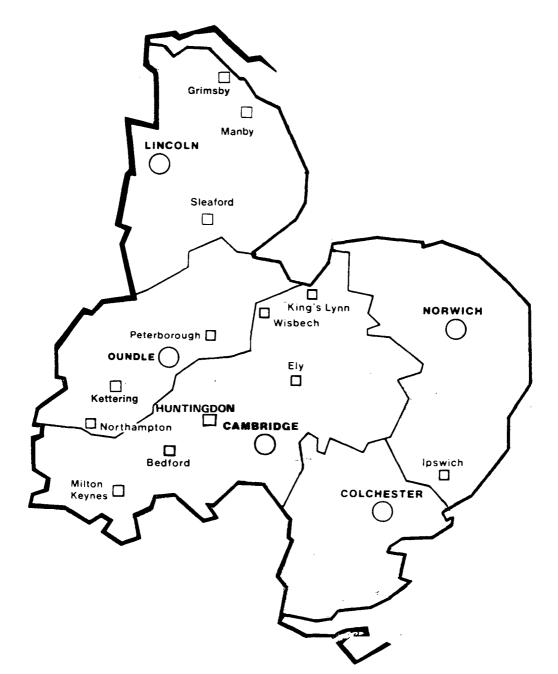
- (8) Day Care a major requirement of young working mothers is the provision of facilities for minding the young.
- (9) Equal Opportunity Sex Discrimination Equal Pay major changes in the law occurred 10 years ago and some of the effects of these changes are now apparent.
- (10) Trade Union Attitudes 24% of trade unionists are women and the attitudes of the trade unions reflect this.
 - (11) Career Guidance the availability of informed advice could be a crucial career determinant for both sexes.
 - (12) Training and Development adult training strategies are a major national concern.
 - (13) Measures to Help Women at Work if changes in the dispersion of men and women at work are desirable then a number of measures may have to be devised and implemented which deal with some of the problem issues facing women.

Propositions have been developed which will serve as focal points to investigate whether or not the factors identified affect the careers of men and women within Anglian Water. ANGLIAN WATER - JOBS AND JOB HOLDERS

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PURPOSE AND FUNCTIONS OF ANGLIAN WATER

This section seeks to illustrate the differences between the deployment of men and the deployment of women in Anglian Water. Within the United Kingdom complete responsibility for the water cycle in England and Wales is vested in 10 Regional Water Authorities. The area covered by Anglian Water is shown by the map, Fig. 1.



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The major functions of the enterprise are the location, acquisition, purification and delivery to the consumer of water to an appropriate standard of quality. When the consumer has concluded using the water then the Authority is further responsible for its removal, treatment and disposal.

Other functions include controlling the flow of rivers, their general quality and the containment of floods. Storage of water in reservoirs is required and these expanses of water as well as the rivers themselves are utilised for recreation - fishing, boating and similar pursuits. This activity also comes within AW's remit.

The area covered is in excess of 10,000 square miles and is populated by around 5 million people. To service this demand, to levels prescribed by numerous statutes, a manpower organisation has been developed.

Manpower Organisation

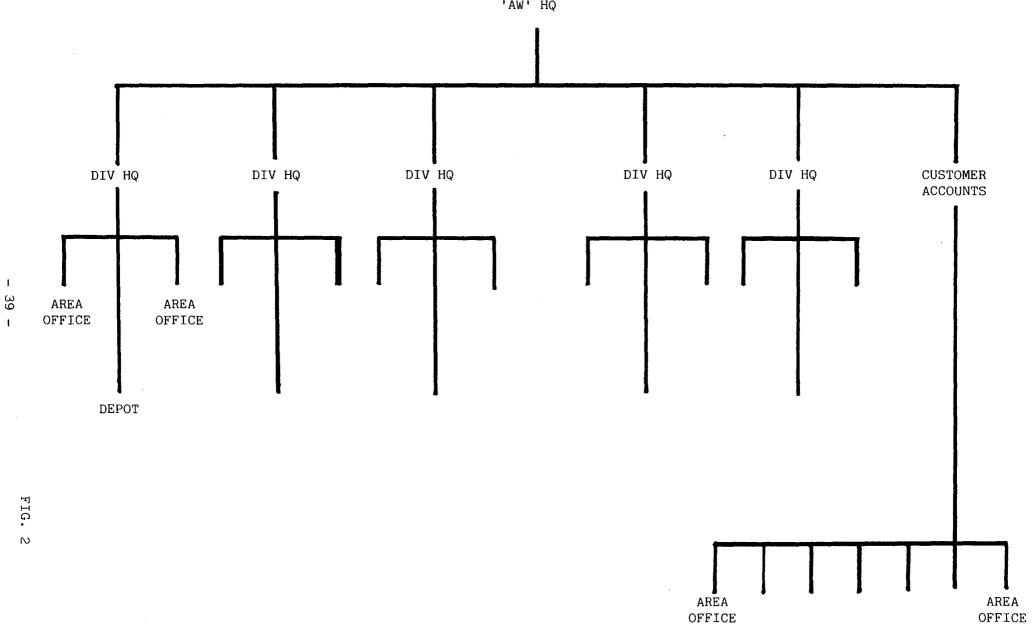
Because of the general geography of the region, the location of the main river basins and the disposition of the principal urban areas, it makes administrative sense to divide the whole into 5 Operating Divisions. In addition to a Divisional Headquarters, each Division has area offices and a plant depot with workshop.

Each Division is responsible for the complete water cycle in its catchment.

Above all of this, in hierarchical terms, there is a Regional Headquarters which lays down policy and then operates in such a way as to monitor the implementation of that policy throughout the region.

Finally because the collection of income, some £300M a year, is a large, specialist, repetitive job, there are 7 customer accounts offices placed at strategic locations. These also report to Regional headquarters.

Fig. 2 shows all of these arrangements pictorially.

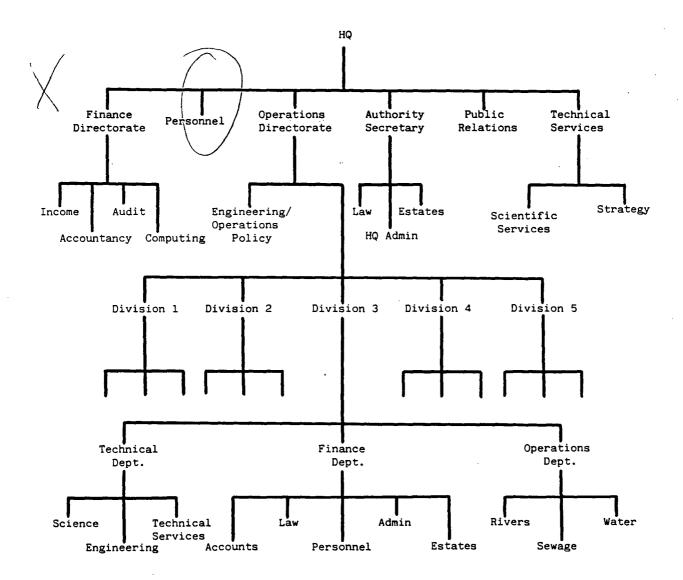


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'AW' HQ

Manpower

In total there are some 5300 employees of whom 1725 are manual workers; 390 are craftsmen. The balance of 3185 are white-collar staff and this is the group studied for the purposes of this thesis. The total workforce is subdivided into Directorates, Functions and Departments and this is illustrated at Fig. 3.





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Carrying out the work of many different departments calls for a wide range of professions, craft skills and supporting occupations. Fig. 4 lists the 30 principal professional occupations.

PROFESSIONAL ROLES/DISCIPLINES AT ANGLIAN WATER

	A
1	Accountancy
2	Administration
3	Audit
4	Biology
5	Chemistry
6	Company Secretary
7	Computing
8	Draughting
9	Economics
10	Engineering - Civil
11	Engineering - Electrical
12	Engineering - Maintenance
13	Engineering - Mechanical
14	Estates and Surveying
15	Fisheries Science
16	Hydrogeology
17	Hydrology
18	Insurance
19	Law
20	Librarianship
21	Management
22	Management Services
23	Microbiology
24	Personnel Management
25	Public Relations
26	Purchasing
27	Science
28	Superannuation
29	Transport Management
30	Work Study

FIG. 4

Beneath this raft of disciplines there are technicians in support, primarily concerned with engineering and laboratories. Then there are craftsmen; mainly fitters and electricians. Behind these are a further band of semi-skilled jobs, e.g. HGV Drivers, Drag-Line Operators and the like. Finally there are manual labouring activities and lowly skilled clerical tasks. The latter mostly performed by young workers.

White-collar Jobs

There were found to be 310 different job titles in use. Sometimes the difference in title between one job and another was quite minimal in style, e.g. Administrative Officer as opposed to Administrator - such differences, however, being deemed sufficiently important by local management and the job incumbent to warrant perpetuating the distinction. Examination of the Job Descriptions then revealed that to all intents and purposes there was often no or little difference between the 2 sets of duties.

To facilitate meaningful comparisons and statements about the characteristics of job-holders it was necessary to determine how many different jobs there really were. There is a Job Description to a standard format for each white-collar job and Fig. 5 overleaf shows a typical example. Further, jobs are linked together in administrative clusters and these relationships are illustrated on Family Tree diagrams, see Fig. 6.

By analysing such data where necessary it was resolved that there was in reality a total of 174 different jobs in the organisation. Figs.7-11 list these by title and also show the numbers of employees of each sex who occupy each job.

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ANGLIAN WATER JOB DESCRIPTION

POST REF:	AE001	JOB TITLE:	CHIEF ESTATES, RECREATION & CONSERVATION OFFICER
DEPARTMENT:	AUTHORITY SECRETARY	DIVISION:	Headquarters
INMEDIATE SU	PERVISOR: (Name & Title):		Authority Secretary
DATE:	November 1986	LOCATION:	Headquarters, Huntingdon

 <u>Major Purpose of Post</u> (say why the post exists)

To advise the Authority on all estates matters and all recreation, conservation and navigation matters.

To monitor the implementation of Authority policies on estates, recreation and conservation matters.

2. <u>Principal Responsibilities and their Purpose</u> (State the actual actions and their end result)

- 1. Advising the Board and senior management on all estates matters.
- 2. Advising on the programme for disposal of surplus property and to monitor progress.
- 3. Preparing and maintaining the Estates Manual.
- 4. Co-ordinating all Authority estates services.
- 5. Co-ordinating management of the Authority's property record systems.
- 6. Co-ordinating Authority's conservation functions and advising Board and senior management on conservation matters.
- 7. Advising the Board, and senior management on water recreation, navigation and amenity.
- 8. Attending the Regional Recreation and Conservation Committee and member working groups on recreation and conservation, as required.
- 9. Act as the administration focus for all conservation matters.
- 10. Co-ordinating response to N.C.C. in connection with designation, proposals and consents relating to SSSIs and other matters having a potential regional implication.
- 11. Acting as the Authority's archaelogical liaison officer in the protection of buildings or other objects of archaelogical, architectural or historic interest.
- 12. Co-ordinating the work of recreation and conservation officers in divisions in respect of recreation and conservation matters.
- Representing the Authority on external and national groups concerned with estates, conservation and recreation, amenity and navigation ' matters as required.
- 14. Performing specific professional estates duties as required.
- Performing such other reasonable duties as may be required from time to time.

FIG. 5



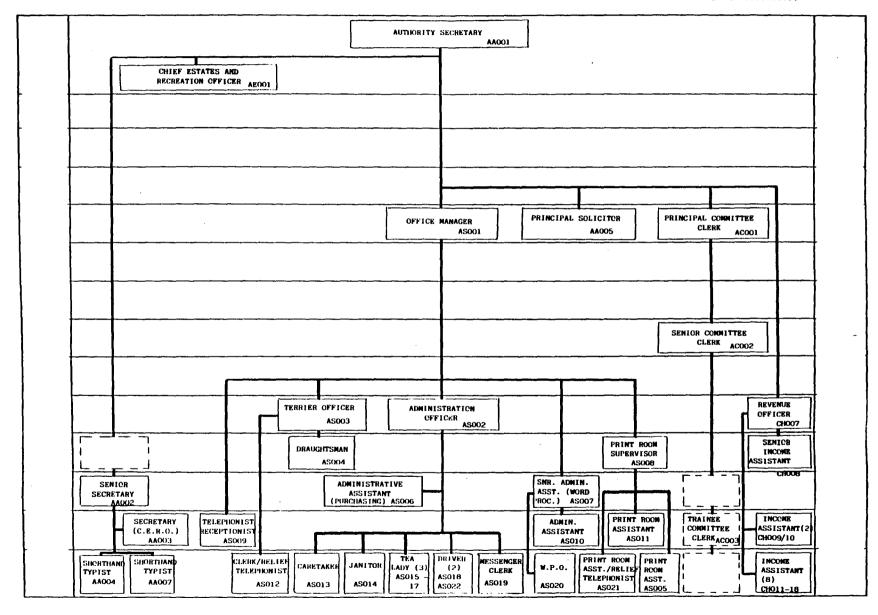
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44 -

Sheet

Date AUGUST 1986



NUMBER	TITLE	<u>NUM</u> MEN	IBERS WOMEN
1	Administrative Assistant	23	41
2	Area Chemist	11	3
3	Area Manager	41	0
4	Area Operations Engineer	11	0
5	Area Water Quality Officer	8	0
6	Assistant Biologist	4	1
7	Assistant Chemist	36	10
8	Assistant Customer Accounts Manager	3	0
9.	Assistant Distribution Superintendent	6	0
10	Assistant Engineer	77	6
11	Assistant Estates Surveyor	6	0
12	Assistant Fish Disease Scientist	3	0
13	Assistant Maintenance Engineer	3	0
14	Assistant Management Services Officer	8	2
15	Assistant Personnel Officer	5	2
16	Assistant Planner	3	2
17	Assistant Public Relations Officer	З	3
18	Assistant Purchasing and Stores Officer	5	3
19	Assistant Solicitor	2	1
20	Assistant Storekeeper	2	0
21	Assistant Superintendent	46	0
22	Assistant Supply Superintendent	8	0
23	Assistant Transport Manager	7	0
24	Auditor	1	0
25	Audit Manager	3	0
26	Authority Secretary	1	0
27	Bailiff	15	0
28	Biologist	8	0
29	Bonus Clerk	2	(3)
30	Canteen Assistant	0	18)
31	Caretaker	10	6
32	Chief Accountant	1	0
33	Chief Computer Operator	2	0
34	Chief Engineer Capital	1	0
35	Chief Engineer Policy	1	0

FIG. 7

NUMBER	TITLE	NUN MEN	<u>IBERS</u> WOMEN
36	Chief Estates and Recreation Officer	1	0
37	Chief Executive	1	0
38	Chief Financial Adminstrator	1	0
39	Chief Fisheries Adviser	1	0
40	Chief Information Officer	1	0
41	Chief Manpower Adviser	1	0
42	Chief Planner	1	0
43	Chief Programmer	1	0
44	Chief Scientist	1	0
45	Chief Solicitor	1	0
46	Civil Defence Officer	1	0
47	Cleaner	1	40
48	Clerical Assistant	13	$\left(\widetilde{63}\right)$
49	Clerk of Works	31	\sim
50	Clerk Typist	0	(74)
51	Co-ordinator Research/Laboratories	1	0
52	Communication Controller	38	3
53	Computer Application Officer	3	0
54	Computer Operator	11	2
55	Controller	12	`1 `
56	Customer Accounts Manager	1	0
57	Courier	3	0
58	Data Preparation Operator	0	2
59	Depot Clerk	10	(11)
60	Development Manager	1	Õ
61	Director	2	0
62	Distribution Clerk	2	2
63	Distribution Superintendent	32	0
64	District Manager	79	0
65	Draughtsman	.6	8
66	Driver	3	0
67	Effluent Inspector	27	1
68	Emergency and Communication Officer	4	0
69	Enquiry and Recovery Officer	26	3
70	Estates Surveyor	5	0

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NUMBER	TITLE	NUN MEN	IBERS WOMEN
71	Finance Assistant	72	(80)
72	Finance Manager	5	0
73	Finance Officer	9	0
74	Fish Disease Scientist	6	0
75	Fisheries Assistant	19	0
76	Fitter	6	0
77	Foreman	10	0
78	Forester	1	0
79	General Manager	5	0
80	Head of Computer Services	1	0
81	Head of Management Services	1	0
82	Head of Performance	1	0
83	Higher Technician	116	$\left(\circ \right)$
84	Hydrogeologist	4	
85	Hydrologist	4	2
86	Income Assistant	36	(106)
87	Inspector	90	\sum_{1}
88	Insurance Officer	1	0
89	Laboratory Assistant	2	6
90	Laboratory Technician	35	(43)
91	Legal Assistant	4	2
92	Librarian	0	1
93	Lock/Sluice Keeper	6	3
94	Maintenance Clerk	4	2
95	Maintenance Engineer	15	0
96	Maintenance Foreman	9	0
97	Maintenance Superintendent	49	0
98	Management Services Assistant	27	3
99	Management Services Officer	11	1
100	Meter Reader	4	0
101	Microbiologist	5	0
102	Middleware Manager	1	0
103	Network Controller	2	0
104	New Works Engineer	6	0
105	Operations Engineer	16	0

FIG. 9

NUMBER	TITLE	NUME MEN	BERS WOMEN
106	Operations Manager (River)	5	0
107	Operations Manager (Sewage)	5	0
108	Operations Manager (Water)	4	0
109	Personnel Assistant	2	(8)
110	Personnel Officer	(9)	\checkmark
111	Planner	12	ı
112	Plant Operator	9	0
113	Plant Superviser	9	0
114	Principal Administration Officer	9	0
115	Principal Chemist	5	0
116	Principal Economist	1	0
117	Principal Engineer	63	0
118	Principal Finance Officer	28	1
119	Principal Productivity Officer	1	0
120	Principal Recreation Officer	1	0
121	Principal Scientific Officer	10	0
122	Principal Water Quality Officer	9	0
123	Print Operator	0	4
124	Programmer	11	2
125	Project Leader	7	0
126	Public Relations Officer	3	4
127	Purchasing and Stores Officer	9	1
128	Recreation and Conservation Officer	5	0
129	Regional Fish Scientist	1	0
130	Resident Engineer	25	0
131	Revenue Officer	7	2
132	Safety Adviser	5	0
133	Safety/Emergency Planning Officer	1	0
134	Sampling Officer	5	0
135	Scientist	5	0
136	Secretary	0	44
137	Senior Administration Officer	23	2
138	Senior Auditor	10	0
139	Senior Chemist	29	1
140	Senior Engineer	131	1

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FIG. 10

NUMBER	TITLE		IBERS
<u> </u>		MEN	WOMEN
141	Senior Enquiry and Recovery Officer	7	0
142	Senior Finance Officer	32	2
143	Senior Income Assistant	6	5
144	Senior Inspector	17	0
145	Senior Programmer	5	0
146	Senior Resident Engineer	12	0
147	Senior Revenue Officer	10	3
148	Senior Shorthand Typist	0	6
149	Senior Terminal Operator	0	7
150	Senior Water Quality Officer	6	0
151	Shorthand Typist	0	$\begin{pmatrix} 61 \end{pmatrix}$
152	Solicitor	4	0
153	Storekeeper	13	0
154	Superannuation Officer	1	0
155	Superintendent	113	0
156	Supply Clerk	1	1
157	Supply Superintendent	24	0
158	Supply Technician	2	0
159	Systems Analyst	9	3
160	Systems Engineer	5	0
161	Team Leader	9	(24)
162	Technical Assistant	61	1-1
163	Technical Clerk	3	16
164	Technical Manager	5	0
165	Technical Services Officer	5	0
166	Technician	(196)	30 _
167	Technician Electronics	9	0
168	Telephonist/Receptionist	0	26)
169	Terminal Operator	1	24
170	Transport Clerk	1	2
171	Transport Manager	5	0
172	Water Distribution Manager	2	0
173	Water Supply Manager	7	0
174	Water Quality Officer	26	2

FIG. 11

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Occupational Groupings

Having distilled the true jobs from the apparent jobslist and then having analysed the occupancy by sex and numbers, clear evidence of segregation was visible. In order to study this further and also to link the research to the work hierarchy within AW, it became desirable to aggregate jobs into occupational groupings. Seventeen of these emerged and are listed at Fig. 12 together with the occupancy by sex and the anticipated occupancy calculated by prorating the total occupancy by the relative proportions of each sex in the white-collar workforce; Factors, Men = 73%. Women = 27%.

ANGLIAN WATER OCCUPATIONAL GROUPINGS

			NUMBE	RS	
		MEN		WOMEN	
GROUP	TOTAL	Actual	<u>Ant</u> .	Actual	<u>Ant</u> .
Engineering	774 [.]	718	565	56	209
Operations	714	689	521	25	193
Science	332	262	242	70	90
Income	251	108	183	143	68
Finance	238	155	174	83	64
Administration	223	71	163	152	60
Secretarial, Keyboard - Skills based	217	1	158	216	59
Technical Services	112	98	82	14	30
Office Support	72	14	53	58	19
Computing	65	49	47	16	18
Senior Management	61	61	45	0	16
Outdoor/Physical Jobs	43	40	31	3	12
Personnel	31	21	23	10	8
Estates, Recreation and Conservation	16	16	12	0	4
Legal	13	10	9	3	4
Public Relations	13	6	9	7	4
HQ Specialists	10	9	7	1	3
	3185	2328		857	

Workforce Analysis

At the conclusion of the data gathering, the redefinition and the regrouping, it became possible to analyse the outcome in such a manner as to test for correspondence with some of the observations and theories detected in the literature search. Some of the more prominent of these related to the existence of occupational segregation by sex.

Occupational Segregation

Hakim² adopted the convention of 'vertical segregation' - meaning demarcation between junior and senior jobs - and then analysed the relative participation rates in them by sex. She also analysed for participation rate in the same manner, 'horizontal segregation' meaning distinct difference between the activities of one profession, trade or calling and another. She used statistics derived from the UK, 10 year, national census over this entire century so far. In summary a trend towards greater vertical segregation was discernable. There was at the same time a complementary trend towards higher female participation in wider range of jobs, i.e. a reduction in horizontal segregation.

One of Hakim's exaplanations for the existence of occupational segregation was that :

'The structure of the labour force divided into fairly clearly defined typically male and typically female occupations, determines the attitudes and expectations of employees and workers.'

Hence attitudes about 'suitable' work for men and women have produced and sustained these strong demarcations.

It can be deduced from the literature review in general that the following types of jobs are often regarded as unsuitable for one sex or the other. See Fig. 13.

Jobs Often Regarded As Unsuitable for One Sex

Job_feature	Reasons sometimes quoted
Engineering jobs in general	Educational/Social
Jobs which require working with mechanical equipment	Educational/Social
Jobs which require working with electrical equipment	Educational/Social
Jobs which require working with heavy equipment	Physical
Jobs which are carried out in an unpleasant environment - e.g. at a sewage works	Social
Jobs which require mobility	Domestic
Jobs which have an unsocial hour nature	Domestic
Jobs which control male workers in numbers	Personality
Jobs which imply assertion in unpleasant circumstances	Personality
Jobs of a secretarial/typist/keyboard nature	Social/Physical
Jobs which have a largely domestic content	Social
Low paid jobs	Domestic/Social

FIG. 13

SUMMARY OF FACTORS WHICH ARE OFTEN THOUGHT, NOT NECESSARILY CORRECTLY, TO INFLUENCE MEN'S AND WOMEN'S JOB CHOICES

1. Environmental Factors

Factors include heat, cold, dirt, indoors, outdoors, danger, safety, smell and noise.

These may make a lot of jobs in Operations Directorate in Anglian Water unattractive to women. Apart from that exception most jobs in AW are environmentally suited to both sexes.

The cause of the unattractiveness may mainly derive from social conditioning.

2. Domestic Factors

Factors include housekeeping, child rearing and caring for the sick and the elderly.

The familial role, of married women in particular, places an alternative demand for commitment on them which men do not in general appear to accept to the same degree. This may manifest itself in terms of hours worked and distance travelled.

3. Social Factors

Factors include prestige, convention, prejudice, ignorance, snobbery, expectations and contacts.

These tend to shape the views of both men and women about what is suitable as an occupation for a man or a woman at some given point in time.

4. Physical Factors

Factors include strength, dexterity, speed, flexibility, endurance and age.

Many manual jobs and some staff jobs may require strength and endurance at a level in excess of that possessed by most women. Keyboard-based jobs may require sustained dexterity at a higher level than that possessed by the average man.

5. Political Factors

Factors include philosophy and laws.

These tend to dictate, or at least influence, tax levels and structures; 'State', and to some extent, 'Company', employee benefits and also other deductions from gross pay. This may be reflected in the choices made by women and, also, for women.

6. Educational Factors

Factors include school curricula, facilities for continuing education and the desire to continue.

It is a clearly demonstrable fact that career success at Anglian Water is correlatable to qualifications. The existing male workforce is very much better qualified, pro rata, than is the existing female workforce.

All top jobs and most senior jobs are filled by men.

7. Personality Factors

In its personality testing practices Anglian Water recognises 30 occupationally relevant personality factors. Factors include persuasive, controlling, independent, outgoing, affiliative, socially confident, modest, democratic, caring, practical, data rational, artistic, behavioural, traditional, change orientated, conceptual, innovative, forward planning, detail conscious, conscientious, relaxed, worrying, tough minded, emotional control, optimistic, critical, active, competitive, achieving and decisive.

At this point in time it seems that the only measurable differences between men and women relate to degree of Empathy (women higher) and degree of Assertiveness (men higher).

Since interviewing panels tend to be male-dominated, they may judge interviewees against themselves and in that event find women 'apparently' lacking driving force.

8. Job Requirement Factors

Factors include knowledge, experience and aptitude.

Knowledge in-post develops from the springboard of qualifications - women, in Anglian Water, are at a disadvantage in this respect. Knowledge is also correlatable with experience, mainly in the workforce, but also elsewhere. The average woman will have a career break and even if this is relatively short, may not be able to rejoin at her old level or occupation. Hence age for age, she will probably be at a lower job level than the otherwise equivalent man,

9. Employee Requirement Factors

Factors include pay levels, costs outlay, pension, other terms and conditions and social needs.

Both sexes seek job satisfaction, recognition and perhaps the company of others at the workplace.

Men may regard pay level as more important than do married women. (According to current convention, in the married circumstance, he will usually be the prime breadwinner and she the producer of a secondary income.)

It may be that women and men have different perceptions of success. A man's perception may be career-centred whilst a woman's may be related to a more general view including home, work and leisure pastimes. Turning back now to Fig.12. It can be seen that for some groups of jobs there are very strong correlations in AW between occupancy by sex and some of the job factors listed at Fig. 13. Thus in : Engineering (tends to require an Engineering qualification) - Women are under represented by 73% Operations (often implies an unpleasant environment - sometimes heavy work frequently controlling male manual workers) - Women are under represented by 87% Income (a preponderance of relatively low paid jobs) - Women are over represented by 110% Administration (a preponderance of relatively low paid jobs) - Women are over represented by 153% Secretarial, Keyboard-skills based (a preponderance of low paid jobs) - Women are over represented by 266% Office Support (Unskilled, lowest paid, domestic content) - Women over represented by 205% Senior Management (Top jobs, longish hours, sometimes mobile) - No women at all Outdoor Physical jobs (All-weather, sometimes assertive, sometimes heavy) - Women are under represented by 75% Estates, Recreation & Conservation (Requires outdoor and agility in early career years) - No women at all Public Relations (Requires sensitivity, commonsense and verbal ability) - Women are over represented by 75%

It became interesting to go back to Figs. 7-11, i.e. at the single job level, in order to examine the exact extent to which segregation occurred. The initial results were surprising. There were only 60 jobs out of the 174 jobs where both sexes were represented in approximately the statistically anticipated proportions.

It should be recalled however that men outnumber women by approximately 3:1 in the white-collar workforce of AW. Hence in any job with less than 4 incumbents there might reasonably be no women in any case. There were found to be 49 such jobs.

Because statistical variation might of itself influence under or over representation it became desirable to produce a convention to apply before classifying a job as belonging to either category. The convention adopted was to say that either sex was under represented in a job if there was less than half of the statistically anticipated occupancy by that sex. The corollary was that in such cases the remaining sex was over represented. The workforce is divided into 73% male and 27% female. Hence, dividing these figures by 2 produced factors of 36.5% for male and 13.5% for female. These factors were then used against the

total occupancy of the job to determine segregation.

Finally, whilst this convention was only applied in the case of women to those jobs where there were 4 or more occupants; it was applied for men for all 174 jobs because of their 3:1 sex preponderance. The outcome of these processes demonstrated that a high degree of sex segregation existed. A further conclusion was that, regardless of statistical probability, men had succeeded in obtaining a far wider degree of job choice than had women. Fig. 14 summarises in tabular form the major deductions. JOB OCCUPATION BY SEX - WHITE COLLAR AW

Total number of jobs	=	174					
Total number of jobs where one Man or more							
Hence jobs where no Men, 174-164	=	10					
Total number of jobs where one Woman or more	=	66					
Hence jobs where no Women, 174-66	=	108					
Jobs with more than 3 incumbents	=	125					
Jobs with less than 4 incumbents	=	49					
Jobs with more than 3 incumbents where one Woman or more in post, i.e. out of 125,	=	61					
Hence such jobs where no Women	=	64					
Jobs with more than 3 incumbents where fewer Women than statistically anticipated, i.e. less than 27%	=	86					
Jobs where fewer Men than statistically anticipated, i.e. less than 73%	=	28					
Jobs where Women under represented, i.e. less than $\%$ anticipated in jobs with 4 or more incumbents	=	75					
Jobs where Men under represented, i.e. less than ½ anticipated	=	16					

FIG. 14

Having established the extent of segregation by sex it remained necessary to establish the degree to which this was either vertical and/or horizontal.Fig.15/17 overleaf gives all of the jobs where there is over-representation. The results are collected together within the previously categorised occupational groupings. Jobs where there is significant under or over representation (i.e. less than $\frac{1}{2}$ of the anticipated participation by one sex or the other).

ENGINEERING			OPERATIONS		
JOB	M	W	JOB	M	W
Principal Engineer	63	0	Area Manager	41	0
Senior Engineer	131	1	Water Supply Manager	7	0 /
Assistant Engineer	77	6	District Manager	79	o /
Higher Technician	116	0	Superintendent	113	ο′
			Distribution Super.	32	0
			Supply Superintendent	24	0
Senior Resident Engineer	12	0	Assistant Superintendent	46	0
Resident Engineer	25	0	Assist. Distrib. Super.	6	0
Clerk of the Works	31	0	Assist. Supply Super.	8	0
			Foreman	10	0
SCIENCE					
JOB	M	<u>w</u>			
Principal Scientific Officer	10	0	Operations Engineer	16	0
Principal Chemist	5	0	Area Operations Eng.	11	0
Senior Chemist	29	1			
			Maintenance Engineer	15	0
Principal Water Qual. Officer	9	0	Maintenance Super.	49	0
Area Water Quality Officer	8	0	Maintenance Foreman	9	0
Senior Water Qual. Officer	6	0			
Water Quality Officer	26	2	Senior Inspector	17	0
Effluent Inspector	21	1	Inspector	90	1
Sampling Officer	5	0			
			Emergency & Comms. Off.	4	0
Fish Disease Scientist	6	0	Comms. Controller	38	3
Fisheries Assistant	19	0			
Biologist	8	0	Storekeeper	13	0
Microbiologist	5	0			
	FI	G.	15		

INCOME			FINANCE		
JOB	M	W	JOB	M	W
Senior Enquiry and			Principal Finance Officer	28	1
Recovery Officer	7	0	Senior Finance Officer	32	0
			Finance Officer	9	0
Team Leader	9	24			
Income Assistant	36	106	Senior Auditor	10	0
Meter Reader	4	0			
ADMINISTRATION			SECRETARIAL, KEYBOARD, ETC.	•	
JOB	M	W	JOB	M	W
Principal Admin. Officer	9	0	Secretary	0	44
Senior Admin. Officer	23	2	Senior Shorthand typist	0	6
Clerical Assistant	13	63	Shorthand typist	0	61
Technical Clerk	3	16	Clerk typist	0	74
Telephonist/Receptionist	0	26	Senior Terminal Operator	0	7
			Terminal Operator	1	24
Print Operator	0	4			
TECHNICAL SERVICES			OFFICE SUPPORT		
JOB	M	<u>W</u>	JOB	M	W
Technical Services Officer	5	0			
			Caretaker	10	0
Systems Engineer	5	0			
Technician Electronics	9	0	Canteen Assistant	0	18
Transport Manager	5	0	Cleaner	1	40
Assist. Transport Manager	7	0			
Management Services Assist.	27	3			

FIG. 16

JOBMWJOBMWProject Leader70
Senior Programmer50General Manager50Data Prep. Operator02Ops. Manager - Rivers50Ops. Manager - Water40Ops. Manager - Sewage50Finance Manager50OUTDOOR/PHYSICALMWNew Works Engineer60
Data Prep. Operator02Ops. Manager - Rivers50Ops. Manager - Water40Ops. Manager - Water40Ops. Manager - Sewage50Finance Manager50OUTDOOR/PHYSICALMMNew Works Engineer60
Data Prep. Operator 0 2 Ops. Manager - Rivers 5 0 Ops. Manager - Water 4 0 Ops. Manager - Sewage 5 0 Finance Manager 5 0 OUTDOOR/PHYSICAL M M New Works Engineer 6 0
Ops. Manager - Water 4 0 Ops. Manager - Sewage 5 0 Finance Manager 5 0 OUTDOOR/PHYSICAL 5 0 JOB M W New Works Engineer 6 0
Ops. Manager - Sewage 5 0 Finance Manager 5 0 OUTDOOR/PHYSICAL 5 0 JOB M W New Works Engineer 6 0
OUTDOOR/PHYSICAL50JOBMWNew Works Engineer60
OUTDOOR/PHYSICALJOBMWNew Works Engineer60
<u>JOB</u> <u>M</u> <u>W</u> New Works Engineer 6 0
Bailiff 15 0 Scientist 5 0
Plant Supervisor 9 0
Plant Operator 9 0 PERSONNEL
Fitter 6 0 JOB M W
Personnel Officer $\begin{pmatrix} 9 \\ 9 \end{pmatrix} = 0$
ESTATES & RECREATION Personnel Assistant 2 (8)
<u>JOB</u> <u>M</u> <u>W</u>
Estates Surveyor 5 0 Safety Adviser 5 0
Assist. Estates Surveyor 6 0
Recreation and Conservation <u>LEGAL</u> Officer 5 0
JOB <u>M</u> W
Solicitor 4 0
HQ SPECIALISTS
<u>JOB</u> <u>M</u> <u>W</u>
Librarian 0 1
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FIG. 17

By reference to the family trees and the job descriptions, it was possible to identify those jobs which were either senior management or the top man-manager within occupational working groups or top specialists in a particular function. The following list, at Fig. 18 shows 16 of these by title and the other 2 are collective groups for HQ specialists and Senior Management.

In effect the table shows that Anglian Water is run on a day-by-day basis by 302 senior officers of whom 300 are men and 2 are women. This represents abundant confirmation that there is profound vertical segregation of men from women within the staff structure at AW. Turning back now to Fig. 12 it is also apparent that there is very strong horizontal segregation. Whereas, however, in the case of vertical segregation there is almost total exclusion of females from the upper grouping, a different situation exists in horizontal groupings.

Women are totally excluded from some job groupings and have low representation in others. The same however applies to men in some other groupings. The extreme cases where women are under represented in a variety of jobs are associated with Engineering, Operations, Science, Finance, Outdoor/Physical, Estates/Recreation/Conservation and as previously highlighted Senior Management.

Men are under represented in a variety of jobs associated with Administration, Secretarial/Keyboard, and Office Support.

This additional analysis highlights the complex nature of segregation. For example although reference back to Fig. 12 shows that women are over represented in total in the Finance function, they are at the same time also under represented in 4 of the 7 Finance jobs. Fig. 19 gives detail of all variances of 50% or greater.

TITLE	NUMBER	MEN	WOMAN
Senior Manager	61	61	0
Principal Engineer	63	63	0
Operations Engineer	16	16	0
Area Manager	41	41	0
Principal Chemist	5	5	0
Principal Scientific Officer	10	10	0
Principal Water Quality Officer	9	9	0
Assistant Customer Accounts Manager	З	3	0
Principal Finance Officer	29	28	1
Principal Administrative Officer	9	9	0
Technical Services Officer	5	5	0
Systems Engineer	5	5	0
Planner	13	12	1
Project Leader (Computing)	7	7	0
Personnel Officer	9	9	0
Estates Surveyor	5	5	0
Solicitor	4	4	0
HQ Specialists	8	8	0
	<u> </u>		_
	302	300	2

SENIOR MANAGEMENT, MAN-MANAGEMENT, SENIOR SPECIALIST JOBS

FIG. 18

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UNDER REPRESENTATION BY 50% OR GREATER BY SEX

Engineering	-	Total number of different jobs = 10 and women under represented in 7, i.e. 70% cases
Operations	-	Total number of different jobs = 32 and women under represented in 20, i.e. 63% cases
Science	-	Total number of different jobs = 20 and women under represented in 13, i.e. 62% cases
Finance	-	Total number of different jobs = 7 and women under represented in 4, i.e. 57% cases
Administration	-	Total number of different jobs = 7 and men under represented in 4, i.e. 57% cases
Secretarial	-	Total number of different jobs = 6 and men under represented in 6, i.e. 100% cases
Office Support	-	Total number of different jobs = 4 and men under represented in 2, i.e. 50% cases
Outdoor/Physical	-	Total number of different jobs = 6 and women under represented in 4, i.e. 67% cases
Estates & Recreation	-	Total number of different jobs = 3 and women under represented in 3, i.e. 100% cases
Senior Management	_	Women have nil representation
HQ Specialists	-	Only 1 female incumbent in 10, single-occupant, stand-alone jobs.

FIG. 19

Factors which might influence the choice of incumbent for a job

Having established the extent to which the sexes are divided at the workplace it became desirable to see if this related to factors other than Job Title and duties.

Differences in the participation rate, by sex, in the various jobs might have been influenced by the relative quality of each set of workers.

It seemed appropriate to analyse the entire white-collar workforce by Qualification-level, Age and Length of Service. These factors are often thought to be of paramount importance in determining what a job-holder can bring to a job.

Qualifications

The relevance of a qualification to a specific job appears to have 2 distinct facets, occupationally at Anglian Water. On the one hand there is the subject(s) studied and on the other the depth of study or level achieved.

For those jobs which are profession-specific, for example, 'Micro-biologist', a particular set of qualifications is a paramount prerequisite.

For other jobs, for example 'District Manager', a level of education is desirable but its absolute direction is more flexible. Hence of the 79 District Managers, 23 are professional engineers or chemists. Another 28, however, have an HNC in a variety of subjects including Business Studies, Chemistry and the various strands of Engineering.

In practice, either by design or accident, the overwhelming majority of job-holders appear to have ended up by the age of 30 years in a job where their main qualification is pertinent to the duties and responsibilities of the job. The relatively few exceptions are mostly associated with women returning to work after a career break. Recognising all of this it became possible for the sake of the study to utilise the phenomenon and produce a table of qualification levels. See Fig. 20. This was then utilised to compare men with women within every specific job where both were present and make quantified judgments, Fig. 21.

PERSONAL QUALIFICATIONS LEVELS AT ANGLIAN WATER

HIGHEST PERSONAL QUALIFICATION

Professional Post Graduate Degree Bachelors Degree - 1st Class Honours Bachelors Degree - 2nd Class Honours Bachelors Degree - 3rd Class Honours HND Bachelors Degree - Ordinary HNC, BEC-H, TEC-H OND ONC, BEC-G, BEC-N, TEC, C&G-T C&G-C, C&G-1, C&G-2, C&G-3 GCE 'A' Level Trade Certificate GCE 'O' Level, CSE Grade 1 RSA-3 RSA-2 RSA-1 CSE None, Not Given

Note: Where there is more than one qualification on the same line these are held to be of approximately the same value as each other.

FIG. 20

Overall results of Qualifications - analysis by sex

To further facilitate comparisons the qualification levels are shown aggregated into 5 summary groupings.

Group	Qualification	M	en	Wor	nen
Number	level	No.	<u>%</u>	<u>No.</u>	<u>%</u>
One	Professional	467	20.1	12	1.4
	Post Graduate	57	2.4	8	0.9
	1st Class Degree	6	0.3	1	0.1
	2nd Class Degree	89	3.8	20	2.3
	_				
	Sub-total	619	26.6	41	4.7
Two	3rd Class Degree	40	1.7	7	0.8
	HND	28	1.2	0	0.0
	Ordinary Degree	46	2.0	5	0.6
	HNC etc.	324	13.9	19	2.2
	OND	15	0.6	1	0.1
				—	
	Sub-total	453	19.4	32	3.7
Three	ONC etc.	199	8.5	32	3.7
	C&G Certificate	108	4.6	7	0.8
	A level	73	3.1	67	7.8
	Sub-total	380	16.2	106	12.3
Four	Trade Certificate	62	2.7	0	0.0
	0 Level	235	10.1	288	33.6
	RSA3	1	0.0	16	1.9
	RSA2	2	Ò.1	16	1.9
	RSA1	1	0.0	20	2.3
	Sub-total	301	12.9	340	39.7
Five	CSE	16	0.7	55	6.4
	None Given	559	24.0	283	33.0
	Sub-total	575	24.7	338	39.4
	GRAND TOTAL	2328	100%	857	100%
			·		

Note: Employees are counted by their highest qualification in the table

FIG. 21

Interpretation of the Qualifications analysis

As a generality AW white-collar men, on a pro rata basis, are much better qualified than the white-collar women. The following table at Fig.22 highlights the major differences.

MAJOR QUALIFICATION LEVEL DIFFERENCES BY SEX

20.1% of all men are professionally qualified compared with 1.4% of all women - a ratio of 14.4:1

26.6% of all men are qualified to Group One qualification level compared with 4.7% women - a ratio of 5.7:1

19.4% of all men are qualified to Group Two qualification compared with 3.7% women - a ratio of 5.2:1

Adding together Group One and Group Two shows that 1072 or 46% of all men are qualified to OND standard or better. The figures for women are 73 or 8.5%

There is an approximate parity of qualification between the sexes at Group Three level. 16.2% of men compared with 12.3% of all women.

At the two lower qualification summary levels there is a pro rata preponderance of women. Adding together Group Four and Group Five figures produces 79% of all women compared with 38% of men - a ratio of 2.1:1

Hence only 21% of women are qualified above '0' level standard compared with 62% of all men.

FIG. 22

A detailed analysis of qualifications, by sex, by occupational grouping, is shown at Appendix 1.

A separate section at Appendix 3 shows details of the 41 women holding a Group One qualification.

A person can join the workforce at 16 years of age and must leave it at the age of 65 years at the latest - a possible maximum time span of 49 years.

The contribution to the work by an employee is to an extent conditioned by his or her age. Not only does the acquisition of useful experience vary at different periods of occupational life but also qualification levels to an extent relate to age. It was felt useful to produce the following age divisions or bandings for the purposes of analysis, Fig. 23.

EMPLOYEE AGE-BANDS

Ago No.	e-Band Years	Employee Description
10.	<u>itears</u>	Employee Description
1	16 - 20	Non-graduate school-leavers. Possibly continuing to study. Alternatively just acquiring experience. Relatively low-skilled work.
2	21 - 30	Possibly joining as graduates with no work experience. Alternatively may be longer service but unqualified or part- qualified. May be post-graduate level. If aiming at professional status then may reach this at around 25 years of age. Hence at 30 could be professional with 5 years post professional experience. 1st senior job.
3	31 - 40	Mature experienced employee. Could be Manager if possessing appropriate attributes. Still gathering experience. May have developed good people skills. Key team member.
	(41 - 50 (((Long experienced person. May be senior management. Might have strong alternative interests outside of work. Possibly eminent in chosen field.
4	(51 - 60 ((Reached apex of career. Met most occupational experiences. May be 'grey head' to rest of a department.
	(61 - 65	Reliable, steady, employee. May be used as stop gap resource sometimes.

FIG. 23

Age

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AGE-BAND DISTRIBUTION BY SEX

	Age-Band	Me	_	Wome	
	Years	<u>No.</u>	<u>%</u>	No.	<u>%</u>
1	16 - 20	30	1.3	61	7.1
2	21 - 30	352	15.1	314	36.6
3	31 - 40	805	34.6	188	21.9
4	(41 - 50 (51 - 60 (61 - 65 Sub-total	609 447 85 1141	26.2 19.2 3.7 49.1	181 102 11 	21.2 11.9 1.3 34.3

FIG. 24

MAJOR AGE-BAND DIFFERENCES BY SEX

Approximately 44% of women are aged 30 years or less compared with a figure of approximately 16% for men.

It should be noted that of the 302 employees in top jobs listed at Fig. 18 only 4 are aged under 31 years.)

49% of men are aged 41 years or over compared with 34% women.

In general therefore the male workforce is noticeably older than the female workforce.

A detailed analysis of age, by sex, by occupational grouping is included at Appendix 1.

Length of Service

Information about the number of years spent with an employer or type of enterprise is often taken as an indicator of the experience which will be brought to bear on the work by the employee. The more skilled, responsible or senior the job then the more this may be so.

At the time of compiling the research data the Anglian Water Authority had existed for 10 years. hence the following table was compiled.

Length of	Me	n	Wome	n
Service (Years)	No.	<u>%</u>	No.	<u>%</u>
1	132	5.7	112	13.1
2	57	2.4	55	6.4
3	83	3.6	73	8.5
4	119	5.1	96	11.2
5	15 6	6.7	147	17.2
6 - 10	1781	76.5	344	40.1
	ETC 25	5		

FIG. 25

MAJOR LENGTH OF SERVICE DIFFERENCES BY SEX

Approximately 13% of women had 1 years service or less compared with approximately 6% of all men - a ratio of more than 2:1.

Approximately 76% of men had 6 to 10 years service compared with approximately 40% women - a ratio of almost 2:1.

(It should be noted that of the 302 employees in top jobs listed at Fig.18 only 35 had less than 6 years service with Aw.) A detailed analysis of length of service, by sex, by occupational grouping is given at Appendix 1.

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Pay Levels

Different jobs attract different pay levels according to a variety of factors. These include amongst other things the nature of the work and the contribution expected of the job-holder.

This contribution is itself part conditioned by the items analysed viz qualification level, age and length of service. Consequently the distribution of men and women throughout the pay-grading structure gives further insight into the differences between men's and women's careers.

Pay Grades - AW

White-collar staff are remunerated according to a pay spine within the aegis of the National Joint Staff Conditions for Water Service Staff. This has 47 steps. These are divided into 13 grades. Each job is normally assigned one grade only. Special pay rates apply for 16 years and 17 years old employees. These receive 80% and 90% respectively of the 1st spine point in the pay curve.

There is within grade one a bar after the 7th pay point. This is intended to inhibit further progress within the grade for the holders of the lowest skilled jobs. A typical example might be Courier or Tea Lady/Canteen Assistant.

Incumbents of jobs graded at NJSC 7 and above do not receive payment for overtime working. Fig. 26 overleaf illustrates these arrangements.

Senior management are remunerated according to a different pay scale and this is known as the JNC (Joint National Conditions for Chief and Senior Officers) arrangement. This scale starts at the equivalent of NJSC 11 and proceeds upwards.

WATER INDUSTRY PAY SCALES - 1984/85

Grade 1 £ 3987 4242 4515 4797 4995 5190 5406 _ 5610 5820	16 year old r 17 year old r Bar after 7th non-skilled,	ate = £3588
Grade 2	Grade 3	Grade 4
£ 5820 6042 6249 6465 6684	£ 6684 6912 7143 7392 7656	£ 7656 7992 8265 8562
Grade 5	Grade 6	Grade 7
£ 8562	£ 9486	£ 10500
8865 9168	9813 10152	10956 11337
9486	10500 (Overtime Limit)	11742
	(Overtime Limit)	
Grade 8	Grade 9	Grade 10
£ 11742	£ 13029	£ 14490
12150	13494	15018
12582 13029	13983 14490	15564 16125
	11100	10100
Grade 11	Grade 12	Grade 13
£ 16125	£ 17973	£ 20043
16713	18639	20796
17334 17973	19323 20043	21582 22380
11913	20043	22300

FIG. 26

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DISTRIBUTION OF EMPLOYEES BY SEX THROUGH PAY-GRADES

The 1	L4]	pay	grades are shown divided into 4 summary bands.
Band	1	=	General duty or Technician pay range
Band	2	=	Near Professional, Higher Technician or equivalent pay range
Band	3	=	Professional or equivalent pay range
Band	4	=	Senior Professional, Specialist, Management pay range

Band Number	Pay <u>Grade</u>	No.	<u>en</u> <u>%</u>	Womer No.	<u>n</u> <u>%</u>
4	JNC 13 12 11 10	47 2 44 58 97	2.0 0.1 1.9 2.5 4.2	- - -	- - -
	Sub-total	248	10.7	-	-
3	9 8 7	118 189 178	5.1 8.1 7.6	5 11 10	0.6 1.3 1.2
	Sub-total	485	20.8	26	3.1
2	6 5	270 362	11.6 15.6	7 27	0.8 3.2
	Sub-total	632	27.2	34	4.0
1 .	4 3 2 1	306 275 245 137	13.1 11.8 10.5 5.9	44 73 220 460	5.1 8.5 25.7 53.7
	Sub-total	963	41.3	797	93.0
	Grand total	2328	100%	857	100%

FIG. 27

Interpretation of Pay-grade analysis

Reference to the analysis at Fig. 27 reveals that the overwhelming majority of female employees are remunerated in the lowest of the 4 Bands. The following table at Fig. 28 highlights the main pay differences between the sexes.

MAJOR PAY DIFFERENCES BETWEEN SEXES

No female employee has penetrated the top pay band, hence no woman earns more than £14,490 per annum. On the other hand 10.7% of men do so.

Only 3.1% of women are paid at a grade above the overtime limit. This figure compares with 31.5% of men - a ratio of 10:1.

93% of women are in the lowest of the bands compared with 41% of men - a ratio of more than 2:1.

53% of women are in jobs which are paid within lowest pay-grade of all, Grade 1. The comparable figure for men is approximately 6% - a ratio of almost 9:1.

Finally, a further 26% of women are in Grade 2 jobs compared with 10.5% of men - a ratio of 2.5:1. Hence 79% of women are in the bottom 2 grades compared with 16% of men - a ratio of 5:1.

FIG. 28

A detailed analysis of grade, by sex, by occupational grouping is given at Appendix 1.

Correlation between Qualification, Age and Grade

Having established that there are strong notable differences at summary level between the sexes in terms of qualification level and age, it becomes of interest to compare sub-populations where there is an element of correspondence.

Reference back to Fig. 21 shows that 41 females qualified to Group 1 level, i.e. they possessed either a professional qualification, post-graduate degree, 1st Class or 2nd Class honours or some combination from these. The corresponding figure for men was 619. Reference back to Fig. 23 reminds that there are approximate career age milestones that broadly signpost to career advancement. The first senior job often comes around the age of 30 years. Management jobs tend to be occupied by those in their late thirties and onwards. Finally, reference back to Fig. 27 recalls that salary grades are also grouped into bands. Jumping the boundaries between the bands is related to a fairly recognisable increase in demand for either

knowledge, skill, experience or responsibility - or some combination of these.

Recognition was taken of all of these factors and a total search covering the age and grade of the 660 (619 men + 41 women) possessors of a Group One Qualifcation was completed.

This data was then analysed to the format of the 3 tables at Fig. 29 overleaf.

Table 1 shows what appears at first sight to be a rather inequitable distribution of the sexes to pay-bands.

Table 2, however, reveals that there are very different age biases by sex.

Table 3 attempts to take cognisance of this and re-presents the Table 1 data on that basis.

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The following tables relate to employees holding a Group One level qualification i.e. 41 females, 619 males.

Table 1 - Distribution by Sex across Pay-Bands

 Band 1
 Band 2
 Band 3
 Band 4

 Men
 Women
 Men
 Women
 Men
 Women
 Men
 Women

 No. %
 No. %

Note: %s relate to total numbers in each sex.

Table 2 - Distribution by Age and Sex

Age 21-30 Years			Age 31-40 Years				Age 41-65 Years				
Me	en	Wc	men	M	en	Wo	men	M	en	Wom	ien
<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>
59	9.5	22	53 . 7	271	43.8	16	39.0	289	46.7	3	7.3

Note: %s relate to total numbers in each sex.

Table 3 - Distribution by Age and Sex across Pay-Bands

	Age 21-30 Years		<u>ars A</u>	Age 31-40 Years			Age 41-65 Years		
	Men	Wome	<u>en</u>	Men	Won	nen	Me	en	Women
	<u>No. %</u>	<u>No</u> .	<u>%</u> <u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>	<u>No. %</u>
Pay Band 1	21 35.	6 10 4	5.4 / 8	3.0	4	25.0	8	2.8	2 66.7
Pay Band 2	27 45.	862	.7.3 69	25.4	4	25.0	35	12.1	0, 0.0 X
Pay Band 3	10 16.	962	27.3 129	47.6	8	50.0	98	33.9	1 33.3
Pay Band 4	1 1.	70	0.0 65	24.0	0	0.0	148	51.2	0 1 0.0
	<u> </u>		<u> </u>				<u> </u>		<u> </u>
	59 100.		0.0 271	100.0	16 1	.00.0	289 1	100.0	3 100.0
	<u> </u>		<u></u>						

Note: %s relate to numbers of that sex in age band.

FIG. 29

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Major Differences, Age and Pay, Group One level Qualifications

The female population of this group is much younger pro rata than is the male population. Almost 54% of females are aged 30 years or less compared with approximately 10% of males. This could be an important partial explanation of the relative pay positions of the sexes.

Senior jobs attract a salary in Band 3 and upwards and it is the norm to move into this category at around 30 years of age. Reference to Table 3 shows that only 10 (16.9%) of men achieved this salary status at an earlier age (note, the youngest was 28 years). The comparable figure for females was 27%, however the numerical size of that portion of the group was only 6 and hence raises questions of statistical reliability. Interestingly, the youngest of these women was also 28 years.

On the other hand, only 36% of the younger men compared with 45% of the younger women are in the lowest pay-band. Further, another 46% of the younger men have reached the second pay-band compared with 27% of the women.

Moving to the 31 to 40 year olds and reference to Table 2 shows that the % populations are within striking distance of each other. Men stand at 44% and women stand at 39%. Comparatively speaking, however, women at 25% have about 8 times the representation in Pay-Band 1 as do men.

In the middle 2 pay-bands there is approximate parity of representation on a pro rata basis.

In the upper-most pay-band there are no 31 - 40 year old women. This compares with 65 men (24%).

In the upper age category there are 289 (46.7%) men and only 3 (7.3%) women. Of those men 51% (148) are in the top pay-band. Again the statistical size of the female population is small but it might be significant that 2 out of the 3 are in the lowest pay-band. Further investigation shows the following in respect of these 3 women :

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	Occupation	Age	Grade	Qualification	Service (Years)
1.	Depot Clerk	45	1	2nd Class Hons.	5
2.	Finance Assistant	41	2	Professional	6
з.	Hydrologist	41	7	Professional	10

Employees number one and two have shorter service (career break?). Employee number three is single and has service back to 1974. She is on the upper of the two standard grades for her, very specialist, occupation. No man or woman receives higher pay in that occupation. Appendix 3 shows the occupation, age, grade, qualification level and length of service of the 41 best qualified women.

The relationship between top pay, top qualifications, seniority in age and length of service is fairly strongly highlighted by examination of these factors, as they are found to be, amongst the job-holders of the top 302 jobs already listed at Fig.18. This is reproduced again overleaf but with the extra data added, Fig.30.

As can be seen there is a relatively strong correlation between following one of these occupations and having a Group One qualification. It is likely that AW would desire this to be so excepting perhaps the cases of Area Manager, Principal Administrative Officer and Project Leader (Computing).

There is also a relatively high interrelationship between occupying one of these roles and having a relatively long service period. This quality would not be overtly sought when recruiting. However taking the example of Senior Engineer which is the next post down from Principal Engineer it is noticeable that of the 132 incumbents, 110 have 6-10 years service. This coupled with the fact that 84 of them have a Group One qualification and also that 48 of them are in the age range 41 - 65 makes it highly likely that the pattern will continue. The example chosen is by no means exceptional.

The total summary, for the entire white collar workforce, of numbers by Grade, Qualification, Age and Length of Service is shown at Fig. 31.

SENIOR MANAGEMENT, MAN-MANAGEMENT, SENIOR SPECIALIST JOBS

Title	Number Posts	Group 1 Quals.	LOS 6-10 Years	Age 41-65 <u>Years</u>
Senior Manager	61	56	53	44
Principal Engineer	63	58	60	44
Operations Engineer	16	14	15	5
Area Manager	41	31	36	29
Principal Chemist	5	5	5	3
Principal Scientific Officer	10	10	10	6
Principal Water Quality Officer	9	8	. 9	7
Assistant Customer A/Cs Manager	3	2	3	2
Principal Finance Officer	29	24	24	11
Principal Administrative Officer	9	4	7	6
Technical Services Officer	5	3	4	5
Systems Engineer	5	3	5	3
Planner	13	13	10	8
Project Leader (Computing)	7	4	7	3
Personnel officer	9	5	4	3
Estates Surveyor	5	5	5	4
Solicitor	4	4	3	1
HQ Specialists	8	6	7	6
Total No.	302	255	267	190
%	100%	84%	88%	63%

See Appendix 2 for fuller details.

Note:

For total population i.e. 2328 men + 857 women then :

Group 1 Quals. are held by 619 or 27% men and 41 or 5% women

Length of Service of 6-10 years = 1781 or 76% men and 374 or 44% women

Age 41-65 years = 1141 or 49% men and 294 or 34% women

FIG. 30

TOTAL WHITE-COLLAR WORKFORCE

1

2328 857

<u>Grade</u>	Men	Women	Qualification	Men	Women
JNC 13 12 11 10	47 2 44 58 97		Professional Post Graduate 1st Class Degree 2nd Class Degree	467 57 6 89	12 8 1 20
9 8 7	118 189 178	5 11 10	3rd Class Degree HND Ordinary Degree HNC OND	40 28 46 324 15	7 0 5 19 1
6 5	270 362	7 27	ONC C&GC A level	- 199 108 73	32 7 67
4 3 2 1	306 275 245 137 2328	44 73 220 460 857	Trade Certificate O level RSA3 RSA2 RSA1	- 235 1 2 1	0 288 16 16 20
Tota	al = 318	35	CSE None Given	- 16 559 	55 283
Age (Years) <u>Men</u>	Women		2328	857
61 - 69 51 - 60 41 - 50	0 447	11 102 181	LOS (Years)	Men	Women
31 - 4	- 0 805	188	6 - 10 	1781 156	374 147
21 - 34	- 0 352 -	314	5 4 3 2	119 83 57	96 73 55
16 - 20	0 30	61	ī	132	112

2328 857

FIG. 31

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SUMMARY

This section summarises the data about Jobs and their Grading and their occupation by the sexes as possibly influenced by Qualification, Age, Length of Service and the relative proportions of each sex within the workforce and their distribution to the work.

Numbers

The AW white-collar workforce which numbers 3185 is comprised of 2328 males and 857 females. Hence men outnumber women by 2.7:1. Of itself this could have a powerful effect when internal candidates applied for a vacant post which represented a promotion to them.

A typical shortlist numbers 6 and hence on a pro rata basis and assuming all other factors to be equal, there would be 4 men and 2 women. The likelihood of the appointment of a male candidate would carry a 2:1 probability.

Profesional Roles

There are at least 30 professional disciplines practised in the organisation and this seems a rich enough mix to ensure that, given possession of the appropriate attributes, both sexes rise to positions of eminence in many different fields - albeit perhaps in a ratio of around 2.7:1 in favour of males.

In the event it was found that all 61 of the top management cadre were male. Further, of the 302 senior officers who run the Authority on a day-by-day basis only 2 are women.

Finally, it is clearly demonstrable that the population density of men and of women within the professions varies very widely indeed

White-collar Jobs

Although within the various professions there were 310 different job titles in use it became clear that there were really only 174 different kinds of jobs. 30 of these each have just one person carrying out that particular role. At the other end of the scale there are 226 people who occupy one particular role. Listingeach real separate jobtogether with the number of occupants by sex began to indicate occupational segregation by sex. Because, however, some of the populations were quite small it was necessary to group jobs together into families, hence Occupational Groupings, to facilitate meaningful analysis.

Occupational Groupings

Of the 17 occupational groupings derived, women are significantly under represented in 6 groups and men are under represented in 5 groups. Hence in 11 of the 17 major occupational groupings there is significant segregation according to sex. Pages 16 to 19 explore some commonly held reasons for such divisions. Factors include Social Conditioning, Working Environment, Educational Bias, Pay Level and Domestic Commitments. The results of the analysis could be said to support the popular contentions.

Occupational Segregation by Sex

To better gauge the extent of segregation and also the variety of role enjoyed by each sex, it is necessary to consider the extent of occupancy by sex of each separate, distinct, job.

The results of this exercise are surprising. Men have established a much wider job choice than have women. Out of a total of 174 jobs men have representation in 164. The comparable figure for women is 66.

Even allowing for the fact that men outnumber women by approximately 3:1 and hence deleting all jobs where there are less than 4 incumbents there still remain 125 jobs for possible penetration by women.

Finally, having adopted the operating convention that there is under representation if the participation rate is less than ½ that which is statistically anticipated, one is left with women under represented in 75 jobs and men under represented in 16. These jobs being scattered throughout 16 of the 17 Occupational Groupings. Only Public Relations jobs being excluded.

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Qualifications

It seems likely that AW would be regarded as an extremely qualification conscious organisation. 786 employees i.e. almost 25% have an HND, a Degree, a Post Graduate Degree or Professional Membership of an Institution and sometimes 3 out of these 4. A further 359 have an HNC or an OND, i.e. about 11%.

Liner quelifies are comparison what is the degree of Segregalin?

Men are very much better qualified as a group compared with women. Adding together all of the qualifications cited covers 46% of all men. The comparable figure for all women is 8.4%.

Age

A persons age often plays a significant part in determining suitability for a particular job or role. This is particularly so with respect to senior jobs where there is a higher measure of responsibility assigned and a greater degree of experience required.

In AW the incumbents of senior jobs are almost always 30 years of age or greater. 16.4% of the men are aged 30 or less compared with a figure of 43.7% of the women.

On this basis, 83.6% of the men are elegible for senior jobs - at least on age factor. For women the elegible figure is 56.3% of the population.

Length of Service

From analysis it can be seen that a large proportion of the incumbents of senior jobs have long service with AW. The enterprise was only established 10 years at the date of the manpower data but even so more than 76% of all men had accumulated 6 - 10 years service. The comparable figure for all women was 40%.

Almost 20% of women had 2 years service of less compared with 8% of men.

Pay

Anglian Water has pay rates for staff which are pitched at the median pay level of the Public Service practice. This tends to equate to the upper-quartile level for the Industrial and Service sector. The Pay rates are usually considered to be generous and range from f4,000 to around f23,000 for the 13 standard grades. There are Management grades beyond this. No women receives a salary in excess of £14,490 per annum. On the other hand there are 248 men who do so. 53% of all women are in Grade 1 and constrained to a maximum of £5,820. The comparable % figure for men is 5.9%. It should be noted however, that 7% of women are aged 20 or less compared with

around 1.3% of men.

Correlation between Qualification, Age, Length of Service and Grade Analysis shows that there are strong correlations between all of these factors.

Take for example the 302 officers who run AW on a day to day basis. Of those no less than 84% possess a 2nd Class Honours Degree or better or else are a corporate member of a professional body.

Moreover, 88% of that group has service of between 6 and 10 years. Finally, 63% are aged 41 years or over. Take as an alternative example, the 41 women who possess a 2nd Class Honours Degree or better or else are a corporate member of a professional body. Of the 5 women on the highest pay grade received by women, 4 come from the best qualified group. Of the 11 women paid on the next grade down 7 come from the best qualified group. And every one of them is 30 years or more.

Imbalances between the sexes - Age and Qualifications

There are various striking imbalances which taken together would partly explain the markedly different places which each sex holds in the pay scales.

- 1. Men outnumber women by a ratio of 2.7:1.
- 2. Both sexes are under represented in some job areas but, even after allowing for the preponderance of men, the phenomenon is around 4 times as strong for women as for men.

As a group the men are very much better qualified than the women.
 As a group the women are noticably younger than the men.

5. As a group the men have longer service on average than the women.

The reasons for 1 and 2 above are not readily apparent from the statistical data. There are many jobs which are pitched at a modest level, for example Assistant Chemist, which are open to people on

their way to an ONC or HNC. Such qualifications are within striking distance of an '0' level ability. Further, such a job also opens up a career prospect from a modest beginning. Yet men outnumber women Assistant Chemists by 36:10.

1. 7

Another example, but on a higher plane, is Senior Administration Officer. An HNC or even an ONC Business Studies has often been found an adequate qualification. Yet men outnumber women by 23:2.

Technician - Men = 196, Women = 30 Technical Assistant - Men = 61, Women = 11 are 2 further cases from many possible examples where comparatively modest qualifications are required and where the populations are relatively young.

Conclusion

This section of the thesis has aimed:-

- 1. To illustrate the differences between the deployment of men and the deployment of women in Anglian Water.
- 2. To describe numerically the existing distributions of workforce in terms of numbers, occupations, academic levels, age, length of service, pay grade attained and all of these terms of men and women separately and combined.

As a consequence of the research a number of striking features have become apparent:-

- 1. Some occupations in AW are predominently occupied by males and others by females i.e. there is horizontal segregation. The senior jobs in most occupations where there is both male and female participation are largely filled by males, i.e. there is vertical segregation.
- Masculine and feminine roles and anticipated roles in Anglian Water are reinforced by general differences in academic and professional attainment levels which exist between the sexes.
- 3. Career success in AW, if measured by relative salary level, is strongly related to academic and professional qualifications, age and to a slightly lesser extent, length of service.

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All of these in part explain the relatively different levels of success enjoyed by the men and the women. There are, however, other aspects of the work scenario which require explanation.

It is necessary to consider the principles and practices of Anglian Water in respect of manpower planning, recruitment and selection, and training and development.

Further, it is desirable to consider what each sex in general, seeks from a job/career. It also seems cogent to examine whether each sex, in general, feels fulfilled in their career at AW.

Finally, it is possible that men and women may hold different views as to the relative importance of a job/career as just one of the aspects - albeit a major one - of life.

These topics are dealt with in following sections.

1

PERSONNEL PROCEDURES

PERSONNEL PROCEDURES

This section reviews the administrative arrangements within AW under which employees careers develop within the organisation. Manpower Planning

Manpower planning has been described in a variety of ways depending upon the viewpoint from which it is described. A generalised definition would be : 'Manpower planning is the procedure whereby an organisation attempts to forecast its requirements for human resources and then takes action to ensure their availability'. This procedure often implies a deliberate strategy to develop certain people or groups of people who practise skills which are important to the continuing well-being of the organisation.

AW is able to forecast its demand, in general terms, for all of the key skills and disciplines. The important features in the demand process emerge from :

Population forecasts for the region Usage and disposal of water per head of population Levels of service targets Likely funding availability Changes in technology General efficiency Government policy

There is a well documented plan, for the years until AD 2000, covering most of these features.

The plan does not however at this time specify the workforce - skill by skill.

The present workforce is comparatively young and reference to Fig. 24 shows that the modal age band for both sexes is 31-40 with around 750 employees younger than this.

During the lifetime of AW there has been a constant ready availability of skills of all kinds excepting computer staff and latterly electronic technicians.

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The specific response to these shortage areas has been to devise a special training scheme lasting several years for computer staff. The electronic technician problem is being dealt with by an annual influx of apprentices whose studies include the appropriate EITB approved 'J' segments. Additionally mature craftsmen of appropriate aptitudes are being given the same 'J' segments in the form of continuation training.

On the more general front skill and experience shortfalls are specified for attention in <u>each individual employee's</u> annual 'Staff Appraisal' document.

All of these steps are open to both males and females. There are, however, no female apprentices or craftsmen.

AW does not practise Succession Planning.

Recruitment and Selection

Vacancies occur as a result of somebody leaving, being promoted or because a new job has been created.

AW's policy is to advertise all vacancies. The standard policy is also to obtain and appoint the best person for the job. This almost always results in jobs being advertised externally as well as on the internal notice boards. All job adverts incorporate into the logo words to the effect that AW is an equal opportunity employer and that appointments are made solely on the basis of suitability for the job.

All jobs have a Job Description Form of the type shown at Fig. 5.

All applicants, internal and external, are required to complete an Application Form. This is very conventional in format and specifies a range of biographical detail including information about the sex, marital status and familial responsibilities of the applicant. All the jobs advertised on the Headquarters notice boards over a period of one calendar year were monitored. None of them included any <u>directly</u> discriminatory copy. A high percentage specified membership of an institution, a qualification and/or a minimum number of years experience. In most cases these requirements correlated with the HAY MSL job evaluation factors which determine job grades in AW.

When the closing date for applications is reached, two or more people will select a short list of up to 8 candidates who appear to be the most likely fit with the vacancy.

Some jobs in particular areas - senior management, computing and income - imply a mandatory 'testing' procedure. This is only applied to short-listed candidates - internal and external.

Short-listed candidates are called for a 45 minute interview by a panel. This panel will typically be comprised of the employing officer who has the vacancy to fill, a personnel officer and, possibly, a person from a different discipline.

The more senior the job is that requires filling, the more likely it is that the panel will be either all male or that only the personnel officer will be female.

For senior management vacancies, short-listed applicants will also be required to attend a private dinner party the evening before interview. On those occasions one or more Directors will also be present.

Ultimately a decision to appoint is reached by the panel. There is no right of appeal against that decision.

Training and Development

Each of the five operating Divisions and HQ has a Training Officer. One of their duties is to produce a training plan for local staff. A major document is the annual Appraisal Form for each whitecollar employee. The training recommendations therein are vetted for inclusion in the plan. This procedure relates to all employees of either sex.

AW turns to a number of sources for the provision of the training expertise but there is an increasing tendency to attempt to carry out the training in-house.

Courses most often, for most employees, are one or two days in duration. A policy of the organisation is to average 4 days per year per employee. Note: This does not include educational courses of the kind provided by Technical Colleges.

A major development device is the practice of Job Rotation. This is a voluntary scheme. Several hundred employees have rotated, usually for a 6 month period, to another job. Generally, excepting for management staff, the rotation is to a job in the same division. For management staff the rotation is usually to another division.

AW sponsors any employee who is prepared to attend evening classes in a career-related subject. In the academic year 1986/87, this meant that 273 employees of whom 121 were female used the scheme.

AW is a managing agent for the YTS venture and around half the contractees ultimately enter the substantive workforce. Two-thirds of YTS trainees are girls and most of the placements are into office jobs at a low clerical/typing level.

Summary

AW's manpower planning, recruitment selection and training and development procedures conform with the 'normal' standards of the public sector. Applied, however, in an environment where there exists marked occupational segregation by sex, they are, at the least, likely to help perpetuate the status quo; if only because selection panels are male dominated.

EMPLOYEE AIMS AND PERCEPTIONS

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Employee Aims and Perceptions

At the conclusion of the literature search it was possible to produce a number of propositions to help explain why men's careers and women's career at AW were so divergent :

<u>Proposition 1</u> Men and women have different job aims and different life goals.

- <u>Proposition 2</u> Some jobs include duties and responsibilities which have the effect of making them unattractive to one of the sexes.
- <u>Proposition 3</u> Men and women experience different levels of career fulfilment from each other.

Proposition 2 was explored in part in the previous section of this thesis.

It was decided to put these contentions to the test by posing a number of questions to a sample population drawn from the workforce. Consequently it became necessary to devise and circulate a questionnaire. A copy of this is shown at Figs 32-35 overleaf.

The aims of the questionnaire were :

- 1. To facilitate comparisons by Sex-Age-Grade-Marital Status-Parental Responsibility-Qualification Level.
- 2. To <u>identify job and career aims</u> in respect of Salary Level-Seniority-Training Opportunity-Experience-Management Duties-Interest-Convenient Facilities-Job Security-Compatible Colleagues-Company Style.
- 3. To assess the <u>extent to which job/career aims are being met</u> in respect of Salary-Seniority-Training-Job Interest-Overall.
- To identify people's desired colleague-gender preference. Further, to seek information regarding their personal status with regard to a group.
- 5. To seek perceptions of the job requirements of one's own and also of the opposite sex.
- 6. To record for analysis a number of life priorities.
- 7. To obtain views of the reasons for diverse levels of career success.

PLEASE COMPLETE THE FOLLOWING :

<u>Sex</u>	<u>Age</u>	Grade	
Married/Partner	Single	Ages of children	
$Ouslification level e a 101^{-1}$	evels Dogree ato:		
Qualification level, e.g. '0'	revers, begree etc.	••••••	•••••••••

CAREER/JOB AIMS

This section seeks information about the relative importance placed on certain job aspects. The questions refer to any job that you might have and not just your job at AW. Please tick the appropriate column.

		Top <u>Priority</u>	Very Important	Fairly Important	Not very Important
1.	Having a high salary				••••
2.	Having a senior job				
з.	Training opportunities				
4.	Getting good experience	• • • •			• • • •
5.	Having management/supervisory duties	• • • •	• • • •		· · · · ·
6.	Having interesting work				· · · · ·
7.	Having convenient hours :				
	(a) Flexitime	• • • •	• • • •		
	(b) School holidays off work				
	(c) Part-time work	• • • •	• • • •	• • • •	
	<pre>(d) Different hours at different times of the year</pre>	`•••			
8.	Having special facilities :				
	(a) Help with transport to work				• • • •
	(b) Job sharing opportunities				
	(c) Help with child-minding	••••			
9.	Working at a convenient locatior	· · · ·			
10.	Having a secure job	• • • •		• • • •	
11.	Working with people you like	• • • •			· · · ·
12.	Being consulted about decisions	• • • •			
13.	Working for an understanding Co.				
	Fig.	. 32			
	5 and 100 100 - 9:	3 –			

: 2 :

CAREER/JOB EXPECTATIONS

This section attempts to establish your views on whether your career/job goals are being met or will be met at AW. <u>Please tick as appropriate</u>.

		Very <u>Good</u>	Quite Good	Not very Good	Poor
14.	How does your salary level seem in return for your presen	t			
	abilities?		• • • •		
		Already there or nearly there	Seems likely	Not very likely	Seems impossible
15.	Do you expect to get to a seniority level that matches				
	your abilities?		• • • •	• • • •	• • • •
		Yes	Some, but not enough	Not many	Virtually none
16.	Do you get sufficient opportunities to train or get more experience ?				
		Yes very much so	Quite Interesting most times	Bit lacking in interest	Boring most times
17.	Is your job constructed in such a way as to make your work interesting?				
18.	Finally, in this section, are of a job whilst working at AW? and also why not in your view.	-			
	•••••				
	••••••			• • • • • • • • • • •	
			• • • • • • • • • • • • • •		•••••
				• • • • • • • • • • •	
	FIG	. 33			

JOB DUTIES AND RESPONSIBILITIES

Some jobs include aspects which appear to make them unattractive to one sex or the other. This section attempts to get your opinions on this topic. <u>Please</u> tick as appropriate.

		None whatever	I would soon get used to it	I would put up with it	I would not like it at all
19.	Would you find any difficulty in being the boss of a group mostly made up of the opposite sex?				
	SEXT			••••	
		Prefer all same as me	Prefer mixed group	Prefer all opposite to me	Don't mind at all
20.	Work sections are sometimes made up from one sex whilst others contain both sexes. What is your preference?				
	ů i				
21.	What do members of the opposite opinion? Just write down the m			om work in	your
		•••••	••••••	••••	• • • • • • • • • • • •
		• • • • • • • • • • • •	• • • • • • • • • • • • •	••••	•••••
	•••••	• • • • • • • • • •		• • • • • • • • • •	••••
22.	There are not many women workin in AW. Why do think this is?				ations jobs
	••••••	• • • • • • • • • • •		•••••	•••••
		•••••		•••••	• • • • • • • • • • • • •
	•••••••••••••••••••••••••••••••••••••••			• • • • • • • • • • •	••••
23.	There are no men working in the why do you think that is? Mai:			-	e in AW.
	••••••	•••••		• • • • • • • • • • •	• • • • • • • • • • • • •
				• • • • • • • • • • •	• • • • • • • • • • • •
	•••••	• • • • • • • • • • • •			
	_	T.C. 04			

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FIG. 34

LIFE GOALS

Some writers and some researchers suggest that men and women have different priorities in life. This section tries to get an insight into this.

		Strongly Agree	Tend to Agree	Tend to Disagree	Strongly Disagree
24.	Men regard a successful career as more important than women do?				
25.	Women put home and family before career?	••••	• • • •		
26.	Men put career before home and family?	••••	• • • •		• • • •
27.	A satisfactory partner at home is life's top priority?	••••	• • • •		• • • •
28.	It is quite important to have an absorbing hobby or interest outside of work?				
29.	All in all, happiness is the best measure of success?	• • • •			
30.	In my opinion the main reason and women arises from	for the di	fferent caree	er patterns	for men
				••••••	• • • • • • • • • • • • •
		••••			•••••
	•••••••••••••••••••••••••••••••••••••••	• • • • • • • • • • •		•••••	••••
		• • • • • • • • • •	• • • • • • • • • • • • • •	••••••	•••••

THANK YOU for your time and trouble. Would you now please put this questionnaire in an envelope, mark it restricted, and send it to me through the internal post to Huntingdon.

Ken Birkett

FIG. 35

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Questionnaire - Format

The questionnaire was constructed to comprise 4 sections :

- Section 1 sought to get respondents to <u>prioritise their</u> <u>requirements</u> of a job or career. They were offered a choice from <u>4 categories</u> of importance. This was a deliberate attempt to avoid giving them the possibility of choosing a middle-option.
- 2. Section 2 sought, again on a 4 category basis, to ascertain the <u>extent to which respondents requirements were met</u>, or seemed likely to be met. Note: Because of the variety of response to Question 18, it was necessary to devise an algoritham, to apply to questions 14 to 17 inclusive, to support a structured response from the Question. Details are given at Appendix 6.
- 3. Section 3 sought respondents perceptions about a number of jobfeatures. It attempted to get data to help establish if either sex was more flexible than the other in these areas.
- 4. Section 4 sought an indication of the relative importance that each sex assigned to a career within the context of a life. Further, to get their impression of the priority that the opposite sex assigned to such matters.

Finally, respondents were given an opportunity to express their views on men's and women's career patterns.

Questionnaire - Sample

Initially 200 questionnaires were distributed and initially around 130 returned. A further batch of 50 produced a steady trickle of responses and when these had reached a total of 80 from men and 80 from women the sample was regarded as complete. A further 7 received at varying later dates were not used for analysis.

The following table at Fig. 36 shows the dispersion of respondents through the Grading Structure. Fig. 37 gives the dispersion by Age.

Grade	Women	Men
1	18	5
2	14	5
3	7	2
4	18	7
5	6	4
6	2	2
7	6	5
8	3	5
9	3	5
10	1	7
11		7
12	1	4
13		
JNC		20
Not given	1	2
_		
	80	80
	FIG. 36	

QUESTIONNAIRE RESPONDENTS BY GRADE AND SEX

FIG. 36

QUESTIONNAIRE RESPONDENTS BY AGE AND SEX

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Age(Years)	Women	Men	Age(Years)	Women	Men
16			40	2	3
17	1	1	41	3	4
18			42	5	1
19	1		43	1	5
20	3	2	44	2	1 5 2 3
21	1		45	5	3
22	1	1	46		1
23	6	3	47		2
24	5	1	48	2	2 2 2 2
25	2	1	49		2
26	1	3	50	1	2
27	5	3	51		1
28	4	1	52		1
29	2	1	53		1
30	4	2	54	1	
31	1	1	55	1	1
32	1	3	56		
33	2	3	57		1
34	2	4	58		
35	5	5	59		1
36	1	2	Not given	3	1
37	1	1		—	
38		З		80	80
39	5	5		00	00

FIG. 37

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Questionnaire Respondents - Populations of Interest

The nature of the research, itself, suggested that comparison be made between male and female responses. From this starting point, other comparisons appeared intuitively desirable. Additionally, the data was coded up and input for statistical analysis on the Middlesex Polytechnic computer. As a consequence of the numerous cross-tabulations produced in output together with the initial thoughts, the groups listed at Fig. 38 were chosen for comparative evaluation.

Numbers

(1)	Men as a total group	80
(2)	Senior men (NJSC 6 and above)	35
(3)	Junior men (NJSC 1)	5
(4)	Young men (aged 30 years or less)	19
(5)	Older men (aged 45 years or more)	18
(6)	Single men	21
(7)	Married/partnered men	58
(8)	Fathers (child aged under 14 years)	32
(9)	Qualified men (degree and/or professional)	39
(10)	Non management men (non JNC)	58
(11)	Management men (JNC)	20

(1)	Women as a total group	80
(2)	Senior women (NJSC 6 and above)	16
(3)	Junior women (NJSC 1)	18
(4)	Young women (aged 30 years or less)	36
(5)	Older women (aged 45 years or more)	12
(6)	Single women	12
(7)	Married/partnered women	58
(8)	Mothers (child aged under 14 years)	10
(9)	Qualified women (degree and/or professional)	17

FIG. 38

Details of the statistical confidence to be associated with the sample of 80 men and 80 women can be found at Appendix $5 \cdot$

Comparative Evaluations of Questionnaire Responses

Starting from the groups listed at Fig. 38, it was decided to facilitate the detailed cross-comparisons listed at Fig. 39.

- 1. All men compared with all women
- 2. Management compared with non-management men
- 3. Management compared with all women
- 4. Non-management men compared with all women
- 5. Senior men compared with senior women
- 6. Senior men compared with junior men
- 7. Senior women compared with junior women
- 8. Junior women compared with junior men
- 9. Older men compared with older women
- 10. Older men compared with young men
- 11. Older women compared with young women
- 12. Young women compared with young men
- 13. Married men compared with married women
- 14. Married men compared with single men
- 15. Married women compared with single women
- 16. Single women compared with single men
- 17. Fathers with young children compared with mothers with young children
- 18. Best qualified men compared with best qualified women

FIG. 39

Basic Method of Analysis

The responses to each question by each group were separately totalled by each of the 4 Importance Ratings. These numbers were then converted into percentage values of each of the particular populations of interest.

For example, taking the group 'Young Women (Aged 30 years or less)', the responses to Question 9 were :

Top Priority	=	5 1	in	total
Very Important	=	10 :	in	total
Fairly Important	=	15 :	in	total
Not Very Important	=	6 :	in	total

Hence Group Population = 36 and the % responses were :

Top Priority	=	13.9%
Very Important	=	27.8%
Fairly Important	=	41.7%
Not Very Important	=	16.7%

A further convention has been adopted to facilitate understanding, insight and also display. This has been to aggregate the responses in the 2 strongest expressions of importance columns. Hence 'Top Priority' and 'Very Important' have been taken as firm indications of a serious requirement by the respondent.

This convention has been carried on through to the responses to the questions on page 2 of the questionnaire. Hence at Question 14, 'Very Good' and 'Quite Good' have both been interpreted as evidence of a sound measure of satisfaction.

Finally, the practise has also carried through to Questions 24 to 29 inclusive on Page 4 i.e. 'Strongly Agree' and 'Tend to Agree' can combine to total the affirmative response, just as 'Tend to Disagree' and 'Strongly Disagree' can combine to become the repudiation.

Career/Job Aims - Total Sample

Comparing 'All Men' with 'All Women' it is evident that in general there is a high measure of correspondence between the respective requirements of the sexes. On the basis of Top Priority + Very Important the following table ensues :

Item	Importance <u>Men</u>	Ranking <u>Women</u>
Interesting work	1 ·	2
Opportunity for experience	2	1
Being consulted	3 ·	5, [,]
Job security	4	З
An understanding company	5 、	4 ·
High salary	6	
Training opportunities		6

Hence the top 5 job factor requirements of the sexes are common - albeit in different sequence. It is not until the 6th highest ranking that a different element appears.

There were 18 separate questions to be answered in Section 1 and turning now to the lowest rankings ensuing from the addition of the 'Top Priority' and the 'Very Important' responses the following table emerges :

Item	Importance <u>Men</u>	Ranking <u>Women</u>
Part-time work	18	17
Varying hours at time of ye	ar 17	16
Help with child minding	17	17
Transport to work	16	18
School holidays off	15	18
Job sharing opportunities	14	15

Note: Same ranking number more than once in either column denotes equal percentage response.

Hence the bottom 6 requirements list is identical, in content, for both sexes.

'Top Priority' - Responses

Only 6 questionnaire, Page 1, items received more than a 20% top priority response from one sex or other. These were :

Item	Women <u>%</u>	Men <u>%</u>
Interesting work	53.0*	60.0*
Job security	47.5*	28.8*
An understanding company	33.8*	13.8
Opportunity for experience	25.0*	13.8
Working with people you like	25.0*	11.3
Being consulted	25.0*	8.8

As can be seen not only is the listing identical in content, it is also identical in order. One interesting point, judging by the relative percentages, which does emerge is that women appear to take a stronger view about how desirable a job feature is. The only exception being 'Interesting Work', see Fig. 40.

'Top Priority + Very Important' - Responses

Fig. shows the sum of the Top Priority + Very Important responses by all the separate groups. Apart from the overall similarity the following points arise :

- Even though a high salary is only 6th priority for men, their figure at the 60th percentile comfortably exceeds that of women at the 43rd percentile.
- 2. Men are also noticeably more interested in 'Senior Jobs' and 'Management Duties' than are women. It is intriguing to ponder the reasons for these features. Is it that men are more status-seeking than women? Or, alternatively is is that such duties often attract a higher salary?
- The job factor of highest interest to both sexes, and to a relatively similar degree is 'Interesting Work'. Around 95% of all respondents rated this to be so.
- Women are markedly more concerned with 'Training Opportunities', 71% versus 43%.

3 HIGHEST TOP PRIORITY PERCENTAGES

Q —	A11 <u>M</u>	A11 _W	Man	Non <u>Man</u>	Sen <u>Men</u>	Sen _W_	Jun M	Jun W	01d _ <u>M</u>	01d 	Young M	Young W	Young W.M	Young W.S	Mar <u>M</u>	Mar <u>W</u>	Single <u>M</u>	Single W	Dads	Mums	Grad <u>M</u>	Grad _W	
]			15.0				20.0 20.0														10.3 10.3		
4	, 13.8 5	3	15.0		14.3	25.0			22.2		26.3		26.3						15.6		15.4		
	5 60.0	9 53.8			54.3	75.0	40.0	50.0			68.4	55.6	68.4	41.2	55.2	60.3	42.9	40.9	53.1	40.0	61.5	70.6	
9 1(11 12) 28.8 - 2	3 47.5				25.0			22.2	58.3	57.9		26.3			44.8	47.6 19.0	54.5	25.0	40.0 40.0	10.3	35.3	
		33.8		15.5		25.0			22.2			30.6	26.3	35.3	13.8	31.0		36.4				2:	3.5

Top Priorities

As a further step to pinpoint areas of key importance the 3 highest percentages, for 'Top Priority' responses only, were identified and then entered into the preceding table at Fig. The resulting pattern supports the ranking table at Fig. quite well, albeit with Getting Good Experience dropping to 4th place behind Interesting Work, Having a Secure Job and Working for an understanding Company.

FIG. 40

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TOP	PRIORITY	+	VERY	IMPORTANT	RESPONSES	-	% BY	GROUP	

· · · · ·

		Hi <u>Sal</u>	Sen Job	Tra <u>Opp</u>	Exp	Man Dut	Int	Flx	Sch <u>Hol</u>	Р/Т 	Hrs	Tpt	Job <u>Sh.</u>	Chi <u>Min</u>	Cvt Loc	Job Sec	Nce Ppl	Con slt	Nce Co.
	All Men	60.0	50.0	42.5	81.3	57.5	96.3	20.0	5.0	0.0	1.3	3.8	6.3	1.3	26.3	75.0	50.0	80.0	63.8
	All Women	42.5	37.5	71.3	95.0	40.0	93.8	35.0	2.5	3.8	5.0	2.5	13.8	3.8	45.0	88.8	68.8	83.8	86.3
	Management	75.0	70.0	20.0	80.0	65.0	100.0	5.0	10.0	0.0	5.0	0.0	5.0	0.0	5.0	65.0	35.0	75.0	65.0
	Non Management Men	58.6	44.8	50.0	82.8	55.2	4.8	22.4	3.4	0.0	0.0	5.2	3.4	1.7	31.0	77.6	51.7	79.3	62.1
	Senior Men	60.0	54.3	54.3	82.9	57.1	91.4	17.1	2.9	0.0	0.0	0.0	0.0	.0.0	20.0	68.6	49.9	80.0	48.6
	Senior Women	43.8	56.3	62.5	93.8	50.0	100.0	12.5	0.0	0.0	0.0	0.0	6.3	0.0	25.0	81.3	75.0	87.5	100.0
	Junior Men	100.0	40.0	40.0	100.0	60.0	100.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	60.0	100.0	60.0	60.0	100.0
	Junior Women	38.9	38.9	72.2	88.9	38.9	83.3	50.0	5.6	16.7	0.0	5.6	22.2	5.6	66.7	100.0	88.9	61.1	94.4
Š	Older Men	55.5	55.5	44.4	83.3	50.0	100.0	5.5	5.5	0.0	0.0	0.0	5.5	0.0	22.2	83.3	61.2	100.0	88.9
) 	Older Women	16.6	33.3	83.3	91.7	41.7	83.3	41.7	0.0	8.3	0.0	8.3	16.7	0.0	58.3	91.7	100.0	75.0	100.0
•	Young Men	57.9	47.4	63.2	89.5	57.9	100.0	26.3	0.0	0.0	0.0	5.3	0.0	0.0	31.6	84.2	57.9	78.9	78.9
	Young Women	52.8	36.1	80.6	94.4	38.9	100.0	30.6	0.0	2.8	2.8	2.8	13.9	5.6	41.7	83.3	69.4	77.8	80.6
	Young Women Married	36.8	31.6	78.9	100.0	+ - · -	100.0	21.1	0.0	0.0	5.3	5.3	0.0	0.0	31.6	89.5	63.2	78.9	68.4
	Young Women Single	70.6	41.2	82.4	94.1	41.2	100.0	41.2	0.0	5.9	0.0	0.0	29.4	11.8	52.9	82.4	76.5	88.2	94.1
	Married Men	63.8	53.4	41.4	82.8	62.1	94.8	13.8	6.9	0.0	1.7	1.7	3.4	1.7	24.1	69.0	41.4	82.8	60.3
	Married Women	32.8	37.9	70.7	94.8	41.4	91.4	32.8	3.4	3.4	6.9	3.4	8.6	1.7	39.7	91.4	65.5	81.0	82.8
	Single Men	61.9	47.6	47.6	81.0	47.6	71.4	33.3	0.0	0.0	0.0	9.5	4.8	0.0	28.6	90.5	66.7	71.4	76.2
	Single Women	63.6	36.4	72 . 7 ·	95.5	36.4	100.0	45.5	0.0	4.5	0.0	0.0	27.3	9.1	54.5	81.8	72.7	86.4	95.5
	Fathers	68.8	53.1	37.5	84.4	62.5	90.6	15.6	9.4	0.0	3.1	3.1	3.1	3.1	25.0	68.8	37.5	78.1	50.0
	Mothers	50.0	30.0	60.0	70.0	20.0	90.0	70.0	20.0	0.0	10.0	0.0	20.0	20.0	50.0	100.0	30.0	90.0	80.0
	Graduate Men	61.5	56.4	33.3.	82.1	56.4	97.4	15.4	2.6	0.0	0.0	2.6	2.6	0.0	15.4	64.1	43.6	76.9	56.4
	Graduate Women	58.8	41.2	58.8	94.1	35.3	100.0	29.4	0.0	0.0	0.0	5.9	5.9	0.0	29.4	82.4	70.6	88.2	94.1

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5. Other factors where there is noticeably greater female interest are 'Opportunity for Experience', Flexitime, 'Convenient Work Location', 'Job Security', 'Working with People you Like' and 'Working for an Understanding Company'. Flexitime and Convenient Location may reflect familial responsibilities. On the other hand, Flexitime, Convenient Location, People you Like and an Understanding Company are often related to the quality of employment as opposed to straightforward salary considerations.

Total Sample - Summary

Employee interest overall was highest in respect of :

Opportunity for Experience Interesting Work Job Security Being Consulted about Decisions Working for an Understanding Company.

Employee interest overall was <u>lowest</u> in respect of the convenience factors, Holidays, Part-time work, Varying hours, Transport, Job-Sharing and Child-Minding facilities.

Career/Job Aims - Management versus Non-Management Men

20 of the 80 male respondents were 'Management' i.e. members of the JNC workforce. It became of interest to compare their job requirements as a group with those of the 58 men who were not management. (Two male respondents did not record their grade.) Note, there are no females anywhere within the workforce on management grades. Although the overall pattern was the same a number of strong differences in levels were detected, again on the basis of Top Priority + Very Important :

		Responses
Item	Management	Non-Management Men
High salary	75	59
Senior job	70	45
Training opportunities	20	50
Flexitime	5	22
Convenient location	5	31
People you like	<u> </u>	52

Hence management were significantly more interested in Salary and Seniority. They were significantly less concerned with Training, Flexitime, Convenient Location and working with People they liked. Finally, 65% of the management sample regarded 'Interesting Work' as Top Priority and the remaining 35% regarded the factor as Very Important.

Management versus non-management data is displayed in Appendix 4.

Career/Job Aims - Senior Men versus Senior Women

Grade 6 is the lowest Professional (or the equivalent in experience) grade. 35 of the non-management men in the sample had achieved this level or better. 16 of the women had done likewise.

The overall response profiles of both sexes conformed in general with those of the Total Sample. Hence interest was strongest about Opportunity for Experience, Interesting Work, Job Security, Being Consulted and Working for an Understanding Company.

Factors like Hours, Holidays, Part-time, Transport, Job Sharing and Child Minding attracted low interest. Indeed the responses to those questions were more akin to those of the Management replies than to those of the Total Sample.

There were a few sizeable variations in levels from the Total Sample. These were :

Item	Ser	nior %		Sample %
	Men	Women	Men	Women
Senior job		56		38
Management duties		50		40
Flexitime		13		35
Convenient location		25		45
Understanding company	49	100	64	86

It seems that Senior Women conformed to a pattern more similar to that of the men in the Total Sample than did the total women excepting in the cases of desiring an Understanding Company and requiring a High Salary. In the former case the 100% response by the Senior Women was, to say the least, emphatic and compared with a 49% figure from the Senior Men. In the latter case there was no significant increase in interest.

Senior Men versus Senior Women data is displayed in Appendix 4.

Career/Job Aims - The Junior Men versus Junior Women

Grade 1 is the lowest in the grading structure. 18 of the female respondents and 5 of the males were in that grade. Regrettably the relatively low number of males tends to reduce the confidence levels associated with the accuracy of any deductions from the results for them. The general response patterns again conformed with the total sample responses but there were some very strong divergencies associated with the levels of some of the job factors :

Item		nior %	Total Sample %			
	Men	Women	Men	Women		
High salary	100		60			
Opportunity for experience	100		81			
Flexitime	0	50	20	35		
Job sharing opportunities	20	22	6	14		
Convenient location		67		45		
Job security	100	100	75	89		
People you like		8່9		69		
Being consulted	60	61	80	84		
Understanding company	100	94	64	86		

As can be seen Junior Men are very concerned about Salary, Experience, Job Security and Working for an Understanding Company. They are less concerned than their sex peers about Flexitime and Being Consulted. They were twice as interested in Working for an Understanding Company as Senior Men.

Junior Women are also very concerned about Job Security and Working for an Understanding Company. Additionally they are interested in some other job features to a stronger degree than either Junior Men or Senior Women. These included Flexitime, Convenient Location and Working with People they like.

Both sets of juniors attached reduced importance to Being Consulted. Junior Men versus Junior Women data is displayed in Appendix 4.

Career/Job Aims - Older Men versus Older Women

18 of the male respondents and 12 of the female respondents were aged 45 years or more.

The overall picture from this group was similar to the total sample pattern. Detail variations were as follows :

Item	01	lder %	Total Sample %		
	Men	Women	Men	Women	
High salary		17		43	
Flexitime	6		20		
Convenient location		58		45	
People you like	61	100	50	69	
Being consulted	100		80		
Understanding company	89	100	64	86	

Older Men placed a higher value on Working with People they Liked, Being Consulted and Working for an Understanding Company than did the Total Sample Men. They were less interested in Flexitime.

Older Women were noticeably less concerned with Salary. They placed increased value on Convenient Location. Finally they shared the Older Men's increased interest in Working with People they Liked and Working for an Understanding Company.

The largest factor differentials between Older Men and Older Women related to High Salary (Men 56%, Women 17%), Training Opportunities (Men 44%, Women 83%), Flexitime (Men 6%, Women 42%) and Convenient Location (Men 22%, Women 58%).

Older Men versus Older Women data is displayed in Appendix 4.

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Career/Job Aims - Young Men versus Young Women

19 of the male respondents and 36 of the females were aged 30 years or less.

In outline the response curve generally matched that of the total sample. There were however a few specific variations within factors :

Item	Ye	oung %	Total Sample %			
	Men	Women	Men	Women		
Training Opportunities	63		43			
Understanding Company	79		64			

Young Men placed a higher value on Training Opportunities and Working for an Understanding Company than did the men in the total sample. There were found to be 2 noticeable differences in interest levels between Young Men and Young Women. These were in respect of Training Opportunities (Men 63%, Women 81%) and Management Duties (Men 58%, Women 39%).

Whilst Young Women's desire for a High Salary was only around 10% higher than that of All Women, it was in strong contrast with the Older Women's response at 17%.

Another strong contrast was between the Young Women's response to Convenient Location, 42% and that of the Older Women at 58%.

Finally, Young Women rated Working with People they Liked at 69% compared with Older Women's 100%.

Young Men versus Young Women data is displayed in Appendix 4.

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Career/Job Aims - Young Women - Married versus Young Women - Single

Of the 36 Young Women respondents, 19 were married and 17 were single. This relatively equal distribution made it worthwhile analysing the two sub groups separately.

The by now usual overall pattern emerged but a few marked variations in level were found :

Item	Young %		<u>Total Sample</u> %		
	Married	Single	Women		
High salary	37	71	43		
Flexitime	21	41	35		
Job sharing opportunities	0	29	14		
Convenient location	32	53	45		
Understanding company	68	94	86		

As can be seen the single young women were significantly more interested in all of these factors than were the married young women. The felt needs of the married young women tended towards those of the Married Women population, excepting in respect of Convenient Location.

The single young women had a particularly strong requirement for a High Salary and an Understanding Company.

Young Women-Married versus Young Women-Single data is displayed in Appendix 4.

Career/Job Aims - Married Men versus Married Women

58 of each sex were either Married or Partnered as opposed to being in the Single category.

The usual general pattern of interests applied. One area where there was variation in level was :

Item	Mai	rried %	Total Sample %		
	Men Wom		Men	Women	
High salary		33		43	

This reduction in High Salary interest by the Married Women left them in strong contrast with the Married Men whose percentage marginally increased over that of all men to become 64%.

A similar downward interest in High Salary was observed in the Older Women category.

The other areas of variation between Married Men and Married Women which were to a greater degree than in the total sample related to Flexitime (Men 14%, Women 33%) and Job Security (Men 69%, Women 91%).

Married Men versus Married Women data is displayed in Appendix 4.

Career/Job Aims - Single Men versus Single Women

21 men and 22 women were Single status respondents. The same general pattern of interests emerged from the analysis.

Areas where there were divergent strengths were :

Item	Si	ingle %		Total Sample %		
	Men	Women	Men	Women		
High salary		64		43		
Interesting Work	71		96			
Flexitime	33	46	20	35		
Job sharing opportunities		27		14		
Convenient location		55		45		
Job security	91		75			
People you Like	67		50			
Understanding Company	76		64			

Single Men were less concerned than the total sample of men about Interesting Work and more interested in Flexitime, Job Security, Working with People they Liked and Working for an Understanding Company.

Single Women were more concerned than the total sample of women in High Salary, Flexitime, Job Sharing and Convenient Location.

The only strong differences between Single Men and Single Women were about Job Sharing - men 5%, women 27% - and Convenient Location where men were at the 29% level and women were at the 55th percentile.

There was a marked contrast between Single Women and Married Women over High Salary where the respective percentages were 64% and 33%.

The largest variation between Married and Single Men's responses related to Interesting Work where the figures were 95% and 71% respectively. Another difference relating to these groups was in respect of Job Security. Single Men were much more concerned at 91% than were Married Men at 69%.

Single Men versus Single Women data is displayed in Appendix 4.

Career/Job Aims - Fathers versus Mothers

32 men and 10 women had at least one child under 14 years of age. The overall response pattern was repeated. There were however some very significant variations in levels :

Item	%	%		al Sample %			
	<u>Fathers</u>	Mothers	Men	Women			
Opportunity for experience	9	70		95 -			
Management duties		20		40 🖌			
Flexitime		70		35 🦯			
School holidays		20		З,			
Job security		100		89			
People you Like	38	30	50	69			
Understanding Company	50		64				

Fathers placed noticeably less emphasis on Working with People they Liked and having an Understanding Company than did the 'All Men' population.

Mothers were less concerned about Opportunity for Experience, having Management Duties and Working with People they Liked than were the 'All Women' population. Conversely they were much more interested about Flexitime, School Holidays and Job Security.

The greatest areas of difference between Fathers and Mothers were Management Duties (Men 63%, Women 20%), Flexitime (Men 16%, Women 70%), Convenient Location (Men 25%, Women 50%), Job Security (Men 69%, Women 100%)and Working for an Understanding Company (Men 50%, Women 80%).

Fathers versus Mothers data is displayed in Appendix 4.

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<u>Career/Job Aims - Professional Graduate Men versus Professional</u> <u>Graduate Women</u>

There were 39 men and 17 women qualified to this level amongst the respondents.

The usual general pattern emerged from the analysis. Variations in detail were :

	Profession	Total	Sample			
		<u> </u>		%		
	Men	Women	Men	Women		
High salary		59		43		
Convenient location		29		45		
Training opportunities		59		71		

The women in this sample were more concerned with High Salary than the total sample women. They were less concerned about Convenient location and Training Opportunities.

The largest divergence between the sexes was about an Understanding Company. Males accumulated a 56% response compared with females 94%. The second strongest variation was with respect to Training Opportunities where men returned a 33% figure compared with 59% for women.

Professional/Graduate Men versus Professional/Graduate Women data is displayed in Appendix 4.

Career/Job Aims - Summary

Broad Similarity

The responses of the total sample and also of the 22 sub-populations selected for analysis all conformed to a similar <u>broad</u> pattern. There was a strong concensus view that put Interesting Work at the top of the desirable job factor list. After which there was again <u>broad</u> agreement about the relative standing of the other Job/career attributes cited in the questionnaire. There were however numerous deviations, both in respect of the view of one sample group or another about the <u>relative</u> importance of one or two of the factors and also in terms of the particular <u>strength of the feeling</u> expressed about its ranking.

To illustrate both the broad concensus and the variation in details a number of tables have been developed. The first step was to add together the percentage responses in the Top Priority and the Very Important columns. The basis of taking that step was the inference drawn that a response in either column was an indication of strong interest in the associated job aspect.

This process was applied to all of the questions on the front page and was carried out separately for all 22 respondent sub populations.

Rankings

The resultant combined percentages were then ranked from 100%, or the nearest to it, being Number 1, down through all other levels to the lowest. If there were identical percentages then these shared the same rank and the next number down was not used.

The matrix at Fig. 42 illustrates the outcome.

ITEM RANKINGS BY RESPONDENT GROUP

	Hi Sal	Sen Job	Tra Opp	Exp	Man Dut	Int	Flx	Sch Hol	P/T	Hrs	Tpt	Job Sh.	Chi Min	Cvt Loc	Job Sec	Nce Ppl	Con slt	Nce Co.
All Men	6	8	10	2	7	1	12	14	18	16	15	13	16	11	4	8	3	5
All Women	9	11	6	1	10	2	12	17	15	14	17	13	15	8	3	7	5	4
Management	3	5	10	2	6	1	12	11	16	12	16	12	16	12	-6	9	3	6
Non Management Men	6	10	9	2	7	1	12	14	17	17	13	14	16	11	4	8	3	5
Senior Men	5	7	7	2	6	1	12	13	14	14	14	14	14	11	4	9	3	10
Senior Women	10	8	7	З	9	1	12,	14	14	14	14	13	14	11	5	6	4	1
Junior Men	1	9	9	1	6	1	13	13	13	13	13	11	13	11	1	6	6	1
Junior Women	10	10	6	3	10	5	9	15	14	18	15	13	15	7	1	3	8	2
Older Men	7	7	10	4	9	1	12	12	15	15	15	12	15	11	4	6	1	3
Older Women	12	11	5	3	9	5	9	16	14	16	14	12	16	8	3	1	7	1
Young Men	7	10	6	2	7	1	12	14	14	14	13	14	14	11	3	7	4	4
Young Women	8	11	4	2	10	1	12	18	15	15	15	13	14	9	3	7	6	4
Young Women Married	8	10	4	1	8	1	12	15	15	13	13	15	15	10	3	7	4	6
Young Women Single	8	10	5	2	10	1	10	16	15	16	16	13	14	9	5	7	4	2
Married Men	5	8	9	2	6	1	12	13	18	15	15	14	15	11	4	9	2	7
Married Women	11	10	6	1	8	2	11	15	15	14	15	13	18	9	2	7	5	4
Single Men	7	8	8	2	8	4	11	15	15	15	13	14	15	12	1	6	4	3
Single Women	8	11	6	2	11	1	10	16	15	16	16	13	14	9	5	6	4	2
Fathers	4	7	9	2	6	1	12	13	18	14	14	14	14	11	4	9	3	8
Mothers	8	10	7	5	12	2	5	12	17	16	17	12	12	8	1	10	2	4
Graduate Men	5	6	10	2	6	1	11	13	16	16	13	13	16	11	4	9	3	6
Graduate Women	7	9	7	2	10	1	11	15	15	15	13	13	15	11	5	6	4	2

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FIG. 42

Having completed the matrix at Fig. 42 it became of value to calculate the average ranking for each job aspect. The following table, Fig. 43 ensued. Note: The Difference column gives a measure of the closeness in rankings. Hence No 1 is well clear of No 2 which is even more ahead of No 3. However, there is little difference between No 4 and No 5 and, at the other end of the scale, not much distinction between Nos 14, 15, 16 and 17 etc.

Item	Ranking	Rating	Difference
Interesting Work Getting Good Experience Having a Secure Job Being Consulted about Decisions Working for an Understanding Company Working with People you Like Having a High Salary Training Opportunities Having Management/Supervisory Duties Having a Senior Job Working at a Convenient Location Flexitime Job-Sharing Opportunities School Holidays off Work	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1.64 2.18 3.41 4.00 4.09 6.95 7.05 7.27 8.23 8.91 10.09 11.09 13.09 14.27	Difference 0.54 1.23 0.59 0.09 2.86 0.10 0.22 0.96 0.68 1.18 1.00 2.00 1.18 0.23
Help with Transport to Work Help with Child Minding Different Hours at Different Times in Year Part-time Work	14 15 16 17 18	14.27 14.50 14.82 14.91 15.36	0.23 0.32 0.09 0.45

AVERAGE ITEM RANKINGS

FIG. 43

The following pages summarise the relative strengths of regard for the various factors, expressed by the respondent groups.

Essentially, after the first 3 items, the commentary highlights the groups whose views were furthest from the total average view of all of the groups taken together.

'Interesting Work' - Ranking = No 1

Sixteen of the 22 groups regarded this as their first requirement. Another 3 groups ranked it as second. The percentage respondents, in these 19 groups, who regarded Interesting Work as either Top Priority or Very Important varied from 100% down to 90% - according to respondent group.

One of the other groups - Single Men - regarded it as joint 4th requirement at 71.4%. The two remaining groups - Junior Women and Older Women - ranked it as 5th at 83.3%.

Note: Because 33% of the Junior Women are also Older Women it can be shown that the source of the <u>relative</u> disinterest is the Older Women.

'Getting Good Experience' - Ranking = No 2

Four of the 22 groups regarded this as their first requirement. Another 13 groups ranked it as second. The percentage varied from 100% down to 80%.

Three other groups rated it as third most important and their percentages varied from 93.8% down to 88.9%.

Older Men scored it 4th at 83.3% and Mothers placed it 5th with 70.0%.

'Having a Secure Job' - Ranking = No 3

This job aspect was voted joint first consideration by Junior Men - 100% (but note population only 5). Interestingly though this perception was also shared by Junior Women - 100% (and there were 18 of these). Also Single Men gave it first rating at 90.5% as did Mothers at 100%.

Lowest ranking was by the Management respondents who rated it 6th at a 65% return level.

Ranking it just above this at 5th were Senior Women at 81.3%, Young Women (Single) 82.4%, Single Women at 81.8% and Graduate/ Professional Women at 82.4%.

'Being Consulted About Decisions' - Ranking = No 4

Older Men put it in first place at 100%.

This factor was 8th in importance to Junior Women at 61.1%, 7th in ranking to Older Women at 75.0%, 6th to Young Women at 77.8% and 6th to Junior Men at 60.0%.

'Working for an Understanding Company'- Ranking = No 5

Senior Women, Older Women and Junior Men all elected this as their number one ranking at 100%.

On the other hand, Senior Men placed it 10th at 48.6%. Fathers scored it 8th with 50.0% and Married Men 7th at 60.5%.

'Working with People you Like' - Ranking = No 6

Only Older Women elevated this aspect to No 1 rating, 100%. No group placed it 2nd.

Mothers gave it lowest relative rating at No 10 with 30.0%. Five other groups placed it 9th. These were Management at 35.0%, Senior Men at 49.9%, Married Men at 41.4%, Fathers at 37.5% and Graduate/ Professional Men at 43.6%.

'Having a High Salary' - Ranking = No 7

Only Junior Men placed this 1st, 100%. No group placed it 2nd. Older Women regarded it as No 12 at 16.6%, Married Women as No 11 at 32.8%, Senior Women as No 10 at 43.8% and Junior Women as No 10 at 38.9%.

'Training Opportunities' - Ranking = No 8

No group placed this within the top 3 requirements. Young Women ranked it highest at No 4 with 80.6%. Lowest relative ratings were 10th and these related to All men at 42.5%, Management at 20.0%, Older Men 44.4% and Graduate/ Profesional Men at 33.3%.

'Having Management/Supervisory Duties' - Ranking = No 9

The highest placing calculated for this aspect was 6th. This ensued from the returns of Management, Senior Men, Junior Men and Fathers. Percentages varied between 65% and 57.1%.

Lowest group interest was expressed by Mothers, placing No 12, 20%, followed by Single Women, No 11, 36.4%.

'Having a Senior Job' - Ranking = No 10

The greatest deviation from the average ranking was recorded in respect of Management who rated it 5th at 70%. They were followed by Male Graduate/Professionals at 6th with 56.4%. After which came Senior Men, Older Men and Fathers who placed it 7th.

'Working at a Convenient Location' - Ranking = No 11

The highest importance, relatively, was accorded by Junior Women who placed this aspect 7th at 66.7%. They were followed by Older Women 8th, 58.3% and Mothers 8th, 50.0%.

The total female sample, All Women, ranked the item 8th at 45%. This compared with the total male sample, All Men, ranking at 11th, 26.3%.

'Flexitime' - Ranking = No 12

Mothers placed more importance on this job factor, regarding it as No 5, 70%. They were followed by Junior Women 9th at 50% and Older Women who also ranked it 9th with 41.7%.

Lowest rating was from Junior Men 13th at 0.0%.

'Job Sharing Opportunities' - Ranking = No 13

There were no strong variations in ranking for this factor. Ten of the 22 populations rated it 13th. Another 6 rated it 14th and a further 4 rated it 12th.

.'School Holidays off Work' - Ranking = No 14

Greatest deviations were in respect of Young Women who placed this item 18th, 0.0%. They were followed by All Women at 17th, 2.5%. Mothers expressed it at 12th, 20%

'Help with Transport to Work' - Ranking = No 15

There were no strong variations in ranking for this aspect. Six of the 22 populations rated it 15th. All other groups perceived it between 13th and 17th.

'Help with Child minding' - Ranking = No 16

Mothers ranked this highest at 12th, 20%.

Married Women ranked it lowest at 18th, 1.7%.

All other groups rated it close to the average ranking.

'Different Hours at Different Times in Year' - Ranking = No 17

There was no stronger than average support for this job aspect from any group.

'Part-time Work - Ranking = No 18

Fifteen of the 22 groups rated this as lowest need.

Conclusions

 Above all, the members of the AW white-collar workforce desire Interesting Work. There was a high degree of similarity of desire for this job feature from most of the 22 populations analysed.

Essentially there were 2 groups that afforded it a slightly lower importance. One was Single Men who gave preference to Job Security, Getting Good Experience and Working for an Understanding Company.

The other group was Older Women which gave preference to Working for an Understanding Company, Working with People you Like, Job Security and Getting Good Experience.

 The job aspects - Interest, Experience, Security, Being Consulted and Working for an Understanding Company were fairly clearly the dominant category of requirements of the workforce at large.

Encapsulating these features into one sentence; it would seem that the workforce, men and women, young and older, wellqualified or not, want fulfilling work with security of tenure and in such a way that they feel that they matter to the organisation.

Interestingly, Management as a group was markedly less concerned about Job Security than the other groups.

3. The next category of importance down included Working with People you Like, Having a High Salary and having Training Opportunities. There was little to choose between these three when averaging the responses of all 22 groups.

Paraphrasing these features into a sentiment; having obtained an interesting job in a secure environment the employees would hope to be working with compatible colleagues and at a good rate of pay and with opportunity to further their skills through training. Management as a group was rather less interested in Working with People you Like and Training Opportunities. It conversely had a greater than average interest in Having a High Salary. As a generality the female groupings placed noticeably less importance on Salary than did the male groupings.

4. The third category of importance included Having Management/ Supervisory Duties and Having a Senior Job.

These features can be combined into the concept of 'Status'. It is not clear whether this desire is a free standing need or whether it is seen as associated with other desirable features such as Interest.

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Both these factors tended to be higher rated by male groups than by female groups.

This was particularly true of the Management group.

- 5. The next group of items in terms of importance rating embraced Working at a Convenient Location and Flexitime. These can both be regarded as a Convenience factor. Almost all of the female groups placed a higher regard on Convenient Location than did their male counterpart group. Broadly speaking both sexes regarded Flexitime with similar priority level. Mothers were the exception who placed this factor particularly high.
- The remaining job aspects which were a combination of potentially flexible conditions of service coupled with some 'caring' facilities, attracted little support.

Intuitively, a stronger measure of interest from some of the female groupings might have been anticipated. This did not prove to be the case.

This entire section of the thesis has examined what the various selected factions of the white-collar workforce desired <u>for themselves</u> from an occupation. The following pages examine the extent to which their needs are being fulfilled.

QUESTIONNAIRE ANALYSIS

Career/Job Fulfilment

The questionnaire, at Page 2, was designed to detect the extent to which the respondents career/job aims were being met, or felt likely to be met. They were asked for a response to the general question 'Are you likely to get most of what you want out of a job whilst working here?'. They were also asked specifically about degrees of satisfaction in respect of :

> Interesting work Opportunity for experience/training Salary level Seniority vis-a-vis personal abilities.

The answers to the 4 specifics were then examined and assessed, by application of the algorithm at Appendix 6 to support a structured response to the general question (No 18) about overall likely fulfilment.

Basic Method of Analysis

The responses to each question, 14 to 17 inclusive, by each of the groups listed at Fig. 38 were separately totalled by each of the 4 possible responses. These numbers were then converted into percentage values of each of the particular populations of interest. For example, taking the group 'Young Women (Aged 30 years or less)', the responses to Question 15 were :

Already there or nearly there	= 1 in total
Seems likely	= 13 in total
Not very likely	= 20 in total
Seems impossible	= 2 in total

Hence Group Population = 36 and the % responses were, in the same order, 2.8%, 36.1%, 55.6% and 5.6%

As with the analysis of the Career/Job Aims section, the convention of adding together the 2 affirmative expressions has been followed. Hence, for example, for Question 15 the 'Already there or nearly there' responses have been added together with the 'Seems Likely' responses.

This practice has been applied to the responses to Questions 14 - 17 and also to the analysed results of the Question 18 responses. The general description 'Aims Met + Largely Met' has been used on the resulting histograms at Appendix 4.

A further step was to also add together the two remaining response categories.

Finally, all of the 'Aims Met + Largely Met' responses for the questions have been added together and then averaged to produce a category called 'Satisfied'. The balances have been treated likewise and labelled 'Dissatisfied'. This practice in total has been applied separately to each of 20 respondent sub-populations selected for study and comparison in this thesis section.

Histograms displaying all of this by comparative groupings are included at Appendix 4.

Career/Job Fulfilment - Total Sample

Comparing 'All Men' with 'All Women', it is evident that the males are noticeably more optimistic (Question 18) about achieving their job desires, <u>in general</u>, than are the females. The figures are 71.3% males versus 45.1% females.

Looking at specifics and starting with salary, both sexes recorded a high degree of satisfaction. The figures were 88.8% for males and 75% for females.

It was in respect of Seniority vis-a-vis abilities that the largest specific difference emerged between men and women. 70.1% of men expected to reach an appropriate level whereas only 45% of women held that expectation.

The sexes held a similar view of the extent of sufficient opportunity for gaining experience or training. The figures were 73.8% of men and 71.3% of women.

In terms of job interest 80.0% of men and 72.5% of women were satisfied.

Averaging all of the 'Aims Met' + 'Nearly Met' responses to Questions 14 to 18 inclusive produces figures of 76.8%, male, and 61.8%, female, i.e. around 4 out of 5 males compared with around 3 out of 5 females are satisfied with their job/career and prospects. Consequently, and as a general observation, it seems that there is a relatively high level of job satisfaction amongst the respondents; however, this is more strongly expressed by the men than women. Men, however, have distinctly greater expectations for their future than do the women.

Career/Job Fulfilment - Respondent Sub-Populations

The following tables at Fig. 44 show job/career satisfaction figures - first by some interesting respondent groupings - second in descending order of satisfaction level.

	%		%
Group	Satisfied	Group	Satisfied
All Men	76.8	Fathers	87.5
All Women	61.8	Prof/Grad Men	85.1
Management	84.0	Senior Men	84.6
Non-Man.Men	74.1	Management	84.0
		Married Men	83.5
Senior Men	84.6	Older Men	81.1
Senior Women	71.3		
Junior Men	20.0	All Men	76.8
Junior Women	40.0	Non-Man.Men	74.1
		Senior Women	71.3
Older Men	81.1		
Older Women	50.0	All Women	61.8
Young Men	60.0	Single Women	61.8
Young Women	59.5	Married Women	61.7
_		Young Men	60.0
Married Men	83.5		
Married Women	61.7	Young Women	59.5
Single Men	58.1	Single Men	58.1
Single Women	61.8	Prof/Grad Women	57.7
		Older Women	50.0
Fathers	87.5		
Mothers	40.0		
Prof/Grad Men	85.1	Junior Women	40.0
Prof/Grad Women	57.7	Mothers	40.0
		· · ·	

Averages of Responses to Questions 14 - 18 Inclusive

FIG.44

Junior Men

20.0

As can be seen from the right-hand column of Fig. 44 the first 8 groups are all male in composition. The highest degree of satisfaction amongst the female groups being the 71.3% figure associated with Senior Women.

There are 3 respondent populations where the Satisfied figure is lower than 50.0%, i.e. there are more Dissatisfied than Satisfied in those groups.

The figures in the left-hand column provoke a number of observations relative to the groupings :

Management and Senior Men experience relatively high measures of satisfaction. So do Senior Women compared with their sex peers. Juniors of both sexes are dissatisfied with their job/career.

Older Men are markedly more satisfied as a group than Older Women. Note: regard needs taking of the fact that some respondents are in several groups. Details of the composition of the respondents are given at Appendix

There is a very distinct difference between the figures for Fathers, 87.5% and Mothers, 40.0%.

There is also a very distinct difference between Professional/ Graduate Men, 85.1%, and Professional/Graduate Women, 57.7%. The overall average of the averages for all respondent groups is 64.93%.

Career/Job Fulfilment - Questions 14-18 - Aims Met + Largely Met

The following table at Fig. 45 shows a summary of the percentage responses - Aims Met + Largely Met - to the Questions 14 to 18 inclusive.

	Sal.	Sen-	Exp-		
Group	Level	iority	erience	Interest	Prospects
		%	%	%	%
All Men	88.8	70.1	73.8	80.0	71.3
All Women	75.0	45.0	71.3	72.5	45.1
Management	95.0	80.0	75.0	95.0	75.0
Non-Man. Men	87.9	65.5	70.7	75.9	70.7
Senior Men	91.4	82.9	82.9	85.7	80.0
Senior Women	87.5	50.0	68.8	87.5	62.5
Junior Men	20.0	20.0	20.0	20.0	20.0
Junior Women	61.1	22.2	44.4	50.0	22.2
Older Men	94.4	72.2	72.2	94.4	72.2
Older Women	83.3		33.3	66.7	33.3
Young Men	73.7		52.6	52.6	63.2
Young Women	72.2	38.9	80.6	63.9	41.7
	00.1	77 0		60 7	
Married Men	93.1	77.6	81.0	89.7	75.9
Married Women	74.1	48.3	67.2	77.6	41.4
Single Men	81.0	47.6	47.6	57.1	57.1
Single Women	72.7	40.9	81.8	59.1	54.5
Fathers	93.8	78.1	90.6	90.6	84.4
Mothers	30.0	30.0	90.0 70.0	50.0	20.0
Prof/Grad Men	89.7	30.0 87.2	84.6	87.2	20.0 76.9
Prof/Grad Women	64.7	35.3	76.5	70.6	41.2

RESPONSES BY GROUP TO QUESTIONS 14-18 INCLUSIVE

FIG. 45

The data in Fig. 45 gives the detailed, question by question, responses. They are displayed by peer groups, viz Senior Men -Senior Women and also contrast groups viz Seniors - Juniors etc. The following pages follow in a similar pattern but on the basis of one question at a time.

Career/Job Fulfilment - 'Salary Level' - Aims Met + Largely Met

The following tables at Fig.46 show salary level satisfaction figures - first by some interesting respondent groupings - second in descending order of salary level satisfaction.

Group	<u>%</u>	Group	<u>%</u>
All Men	88.8	Management	95.0
All Women	75.0	Older Men	94.4
Management	95.0	Fathers	93.8
Non-Man. Men	87.9	Married Men	93.1
		Senior Men	91.4
Senior Men	91.4		
Senior Women	87.5	Prof/Grad Men	89.7
Junior Men	20.0	All Men	88.8
Junior Women	61.1	Non-Man. Men	87.9
		Senior Women	87.5
		Older Women	83.3
Older Men	94.4	Single Men	81.0
Older Women	83.3		
Young Men	73.7		
Young Women	72.2	All Women	75.0
		Married Women	74.1
		Young Men	73.7
Married Men	93.1	Single Women	72.7
Married Women	74.1	Young Women	72.2
Single Men	81.0		
Single Women	72.7		
		Prof/Grad Women	64.7
		Junior Women	61.1
Fathers	93.8		
Mothers	30.0		
Prof/Grad Men	89.7		
Prof/Grad Women	64.7		
		Mothers	30.0

Junior Men 20.0

FIG. 46

The right-hand column of Fig. ⁴⁶ shows that the first 8 groups are all male in composition. The highest degree of salary satisfaction amongst the female groups being the 87.5% associated with Senior Women.

There are just 2 groups, Mothers and Junior Men, where the figure drops below 50% and hence indicates a group where there are more who are dissatisfied with their salary than there are who are satisfied.

The figures in the left-hand column indicate that relatively speaking Juniors are less happy than all other groups, other than Mothers, about their salary level and this applies particularly to the male Juniors.

Again there is a very distinct difference in salary satisfaction level between Fathers, 93.8%, and Mothers, 30.0%.

Also, again, there is a distinct difference between Professional/ Graduate Men, 89.7%, and Professional/Graduate Women, 64.7%.

The overall average of the averages for all respondent groups is 76.47%. This figure appears to indicate a high measure of contentment in the workforce about salary levels.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Career/Job Fulfilment - 'Appropriate Seniority' Level - Aims Met + Largely Met

The following tables at Fig. 47 show seniority level satisfaction figures - first by some interesting respondent groupings - second in descending order of seniority level satisfaction.

<u>%</u>	Group	<u>%</u>
70.1	Prof/Grad Men	87.2
45.0	Senior Men	82.9
	Management	80.0
65.5		
	Fathers	78.1
82.9	Married Men	77.6
50.0	Older Men	72.2
	All Men	70.1
22.2		
	Non-Man. Men	65.5
72.2		
	Young Men	57.9
38.9	Senior Women	50.0
77.6		
48.3		
47.6	Married Women	48.3
40.9	Single Men	47.6
	All Women	45.0
	Single Women	40.9
78.1		
30.0		
87.2	Young Women	38.9
35.3		35.3
	Older Women	33.3
	Mothers	30.0
	Junior Women	22.2
	- 70.1 45.0 80.0 65.5 82.9 50.0 20.0 22.2 72.2 33.3 57.9 38.9 77.6 48.3 47.6 40.9 78.1 30.0	-Prof/Grad Men45.0Senior Men80.0Management65.5Fathers82.9Married Men50.0Older Men20.0All Men22.2Non-Man. Men72.2Senior Women33.3Senior Women77.6All Wen48.3Single Men40.9Single Men50.0Single Men77.6Single Men48.3All Women77.6Single Men40.9Single Men35.3Prof/Grad Women78.1Older Women35.3Prof/Grad WomenMothersNothers

ountor	WOMOTI	
Junior	Men	20.0

The right-hand column of Fig. 47 shows that the first 9 groups are all male in composition. The highest degree of female satisfaction about an appropriate personal status is experienced by Senior Women, but even there the figure is only 50.0%. Hence half of the Senior Women and more than half of all of the other female groups are dissatisfied with their status vis-a-vis their personal attributes.

Additionally, Single Men, 47.6%, and Junior Men, 20.0%, have a preponderence of members whose needs in this respect are neither Met nor Largely Met.

The figures in the left-hand column point up some particularly strong contrasts :

Women are markedly less optimistic about achieving their feltdeserved status than are men. The figures being 70.1% for men and 45.0% for women.

Junior people of both sexes do not see themselves being likely to be rewarded with an appropriate level of job.

The pattern of a distinct difference between Fathers and Mothers responses is again repeated as it also that of Professional/ Graduate Men compared with Professional/Graduate Women.

The overall average of the averages for all respondent groups is 54.15%. This figure appears to indicate a considerable measure of disquiet about the individual prospects of members of some groups within the workforce.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Career/Job Fulfilment - 'Experience Opportunity' - Aims Met + Largely Met

The following tables at Fig. ⁴⁸ show Experience Opportunity satisfaction figures - first by some interesting respondent groupings - second in descending order of Experience Opportunity satisfaction.

Group	<u>%</u>	Group	<u>%</u>
All Men All Women Management	73.8 71.3 75.0	Fathers	90.6
Non-Man.Men	70.7	Prof/Grad Men Senior Men Single Women	84.6 82.9 81.4
Senior Men Senior Women Junior Men Junior Women	82.9 68.8 20.0 44.4	Married Men Young Women	81.0 80.6
Older Men	72.2	Prof/Grad Women Management All men	76.5 75.0 73.8
Older Women Young Men Young Women	72.2 33.3 52.6 80.6	All men Older Men All Women Non-Man.Men Mothers	73.8 72.2 71.3 70.7 70.0
Married Men Married Women Single Men Single Women	81.0 67.2 47.6 81.8	Senior Women Married Women	68.8 67.2
Fathers Mothers Prof/Grad Men	90.6 70.0 84.6	Young Men	52.6
Prof/Grad Women	76.5	Single Men Junior Women	47.6 44.4
		Older Women	33.3

Junior Men 20.0

From inspection of the right-hand column of Fig. 48 it is apparent that there are some female groups in the upper half of the table. This is a breach from the pattern in respect of Questions 14 and 15. It appears that women feel more satisfied about getting opportunities for experience than they do about reaping the ultimate rewards which could ensue from that experience.

Junior people of both sexes again feature amongst the least satisfied.

From the left-hand column it is clear that the Older Men, 72.2%, again contrast strongly with the Older Women, 33.3%. This is an interesting insight from the 45+ years age group.

The overall average of the averages for all respondent groups is 67.3%. Within this the distribution of the separate group percentages is a much more homogeneous mix of the sexes than that associated with the earlier questions, 14 and 15.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Career/Job Fulfilment - 'Interesting Work' - Aims Met + Largely Met

The following table at Fig. 49 shows Interesting Work satisfaction figures - first by some comparable respondent groups - second in descending order of Interesting Work satisfaction.

Group	<u>%</u>	Group	<u>%</u>
All Men All Women Management Non-Man. Men	80.0 72.5 95.0 75.9	Management Older Men Fathers	95.0 94.4 90.6
Senior Men Senior Women Junior Men Junior Women	85.7 87.5 20.0 50.0	Married Men Senior Women Prof/Grad Men Senior Men All Men	89.7 87.5 87.2 85.7 80.0
Older Men Older Women Young Men Young Women	94.4 66.7 52.6 63.9	Married Women Non-Man.Men All Women Prof/Grad Women	77.6 75.9 72.5 70.6
Married Men Married Women Single Men Single Women	89.7 77.6 57.1 59.1	Older Women Young Women	66.7 63.9
Fathers Mothers Prof/Grad Men Prof/Grad Women	90.6 50.0 87.2 70.6	Single Women Single Men Young Men Mothers Junior Women	59.1 57.1 52.6 50.0 50.0

Junior Men 20.0

The right-hand column of Fig. 49 is again led by male groups. The only female group in the first 8 is the Senior Women set. Even so, their figure of 87.5% is relatively high.

The levels trail away to the point where Junior Men are the least satisfied group. This has been a regular feature of the results from this section of the questionnaire. Other marginally satisfied groups are Junior Women and Mothers.

The left-hand column highlights a number of contrasting perceptions between peer groups. Hence Juniors find their work less interesting than do Seniors.

Similarly Older Men are more satisfied in this respect than are Younger Men. Fathers are more fulfilled with this aspect than are Mothers.

The overall average of the averages for all respondent groups is 71.3%. This is higher than the corresponding figures for questions 15 and 16. It could indicate that a high proportion of jobs are constructed in such a way as to give continuing interest to the job-holder.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Career/Job Fulfilment - 'Likely Career Fulfilment' - Aims Met + Largely Met_____

The following table at Fig. ⁵⁰ shows Likely Career Fulfilment satisfaction figures - first by some comparable respondent groups - second in descending order of Likely Career Fulfilment satisfaction.

Group	<u>%</u>	Group	<u>%</u>
All Men All Women	71.3 45.1	Fathers Senior Men	84.4 80.0
Management Non-Man. Men	75.0 70.7		
Non-Man. Men	/0./	Prof/Grad Men Married Men	76.9 75.9
Senior Men	80.0	Management	75.0
Senior Women	62.5	Older Men	72.2
Junior Men	20.0	All Men	71.3
Junior Women	22.2	Non-Man.Men	70.7
Older Men	72.2	Young Men	63.2
Older Women	33.3	Senior Women	62.5
Young Men	63.3		
Young Women	41.7		
		Single Men	57.1
		Single Women	54.5
Married Men	75.9		
Married Women	41.4		
Single Men	57.1		
Single Women	54.5		
		All Women	45.1
		Young Women	41.7
Fathers	84.4	Married Women	41.4
Mothers	20.0	Prof/Grad Women	41.2
Prof/Grad Men	76.9		
Prof/Grad Women	41.2		
		Older Women	33.3
		Junior Women	22.2

FIG. 50

Junior Men

Mothers

20.0

20.0

From the right-hand column it is apparent that females are much less sanguine about the possibility of fulfilling their Job/career requirements than are the males.

The Senior Women, 10th in the table hold the most optimistic view. 62.5% of them felt that their aims might be met or largely met.

Of the 8 groups where there were more dissatisfied than satisfied, i.e. the group figures were less than 50%, only one was male.

At the foot of the table, as with other questions in this section, there are Juniors, Mothers and Older Women.

Several strong contrasting views are indicated from the lefthand column. Men are markedly more optimistic about a satisfactory job than are the Women. Seniors of both sexes hold out greater prospect than the Juniors. Older Men see a better likelihood than do the Older Women.

Mothers are pessimistic relative to Fathers. Professional/ Graduate Men are noticeably more optimistic about their prospects than are the Professional/Graduate Women.

The overall average of the averages for all respondent groups is 55.43%. This could perhaps indicate a considerably-felt uncertainty about the possibility of a largely fulfilling job in the future.

CAREER/JOB FULFILMENT - SUMMARY OF THE ANALYSIS

- Around 4 out of 5 males are satisfied in general terms with their job/career at present. This compares with around 3 out of 5 females who hold a similar view.
- 84% of Management note this is an entirely male group are satisfied <u>in general terms</u> with their job/career at present.
- 3. 71% of men expect, ultimately, to get most of what they want from a job with the organisation.
- Women are less optimistic and only 45% expect, ultimately, to find most of their job needs met.
- 5. 75% of Management anticipate that, ultimately, most of their job requirements will be satisfied.
- 6. Within the total sample population there are some groups that are consistently less happy, probably dissatisfied, with their job. Most notable amongst these are Junior Men, Junior Women and Mothers.
- 7. From inspection of the % satisfied rankings of most of the question responses, it is clear that males, by various sub-populations, are altogether more job-satisfied than females.
- 8. Histograms illustrating the response levels and the contrasts between them are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS

Job Duties and Responsibilities

Some jobs are occupied by a predominence of one sex. It seemed possible that this was related to some aspect of the job itself. The questionnaire, at Page 3, sought to investigate this area.

Being in charge of People

The structure of a water authority is such that there are many hundreds of jobs where the job-holder is responsible for the performance of other employees. This responsibility is rewarded by the assignment of a higher pay-grade. Hence if a particular group, or groups, of people found this kind of activity irksome or difficult this could be reflected in job segregation (e.g. by sex) and also in the grading distribution.

Developing this theme further, it is frequently not possible, or even desirable, for the supervisor to be able to dictate that subordinates shall be drawn from a particular sex. Hence a supervisor might find him or herself required to control a group drawn entirely, or mostly, from the opposite sex. In Anglian, as can be seen from reference back to Figs.7/11 this could be particularly likely in a relatively large number of jobs.

Question 19 sought to gain an insight into the attitudes of various employee groups about this particular job-feature.

Respondents were, therefore, asked 'Would you find any difficulty in being the boss of a group mostly made up of the opposite sex?'. They were given a choice of 4 answers ranging through 'None whatever', 'I would soon get used to it', 'I would put up with it' or 'I would not like it at all'.

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Basic Method of Analysis

The responses by each of the groups listed at Fig. 38 were separately totalled by each of the 4 possible responses. These numbers were then converted into percentage values of each of the particular populations of interest.

For example taking the group 'All Women' the responses were :

None Whatever	=	47 in total
I would soon get used to it	=	31 in total
I would put up with it	Ξ	1 in total
I would not like it at all	=	1 in total

Hence group population = 80 and the % responses were, in the same order, 58.8%, 38.8%, 1.3% and 1.3%.

In order to get a perspective of a possible meaning of these responses it is helpful to interpret them as a job interview panel might. Hence, 'Would you find any difficulty in being the boss of a group mostly made up of the opposite sex?' :

Answer to question		Interpretation
None whatever	=	None whatever
I would soon get used to it	=	At first
I would put up with it	=	Some
I would not like it at all	=	Great deal

Developing this notion one step further, it might be said that any response other than the first is an indication of some doubt about readily coping with such a situation as described in the question. Hence one of the analytical steps taken has been to compare the 'None whatever' responses with the sum of the other 3 responses. These are then portrayed as 'None' versus 'Some'. All of the answers have been processed by discrete response and also in the manner described. The resulting histograms for all interest groups are included at Appendix 4.

DIFFICULTY CONTROLLING THE OPPOSITE SEX - QUESTION 19

The following table at Fig.51 shows a summary of the percentage responses in the form 'No difficulty' versus 'Some difficulty'. They are listed in least difficulty order.

	No	Some
Group	Difficulty	Difficulty
	%	%
Older Men	83.3	16.7
Fathers	81.3	18.7
Management	80.0	20.0
Management	80.0	20.0
Non-Man. Men	79.3	20.7
Senior Men	77.1	22.9
All Men	76.3	23.7
Single Men	76.2	23.8
Married Men	75.9	24.1
Professional/Graduate Men	74.4	25.6
Young Men	73.7	26.3
Senior Women	68.8	31.2
Married Women	62.1	37.9
Junior Men	60.0	40.0
Mothers	60.0	40.0
All Women	58.8	41.2
Professional/Graduate Wom	58.8	41.2
Young Women	55.6	44.4
Older Women	50.0	50.0
Single Women	50.0	50.0

Junior Women

.

38.9

61.1

DIFFICULTY CONTROLLING THE OPPOSITE SEX - QUESTION 19

The following table at Fig. 52 shows a summary of the percentage responses in the form 'No difficulty' versus 'Some difficulty'. They are sorted into peer groupings.

	No	Some
Group	Difficulty	Difficulty
	%	%
All Men	76.3	23.7
All Women	58.8	41.2
Management	80.0	20.0
Non-Man. Men	79.3	20.7
Senior Men	77.1	22.9
Senior Women	68.8	31.2
Junior Men	60.0	40.0
Junior Women	38.9	61.1
Older Men	83.3	16.7
Older Women	50.0	50.0
Young Men	73.7	26.3
Young Women	55.6	(44.4
Married Men	75.9	24.1
Married Women	62.1	37.9
Single Men	76.2	23.8
Single Women	50.0	50.0
Fathers	81.3	18.7
Mothers	60.0	40.0
Professional/Graduate Men	74.4	25.6
Professional/Graduate Wome	en 58.8	41.2

Fig. 51 shows that men expressed noticeably greater confidence in their ability to control colleagues of the opposite sex. The first 10 respondent groups in the table are male in composition.

In other words even in the 10th group of males, a higher proportion of members expressed complete confidence than did the females in their top group, 'Senior Women'.

At the top of the table 83.3%, or 15 out of the 18 who constituted the Older Men group, said they would have no difficulty.

At the bottom of the table 38.9%, or 7 out of the 18 who constituted the Junior Women group, said they would have no difficulty.

Fig. 52 highlights some interesting differences in the responses from what might be regarded as peer groups.

Every male group was more confident about this particular kind of responsibility than was its female counterpart group. Hence pro rata :

More	Senior	Men	than	Senior	Women	forecast	no	difficulty
11	Junior	Men	"	Junior	Women		11	*1
**	Older	Men		Older	Women	**	11	11
	Married	Men	"	Married	Women	11	11	11

and so on.

This feature could be an important factor in determining the outcome of the job selection interview process.

QUESTIONNAIRE ANALYSIS

Preferred Gender of Colleagues

As has been determined elsewhere in this project, some jobs are occupied by a predominence of one sex whilst others are peopled by an homogenous mix. It seemed possible that this situation might, in part at least, have evolved from people practising some gender preference. In other words if an employee had such a preference then he or she might exercise it by applying or not for a job within a group which either conformed or not to one's specific inclination.

From an employers point of view, it would seem that the most flexible employee attitude might be the most desirable and certainly the most easily utilised.

Question 20 sought information about employees colleague-gender preferences. Respondents were asked 'Work sections are sometimes made up from one sex whilst others contain both sexes. What is your preference?'.

They were given a choice of 4 answers ranging through 'Prefer all same as me', 'Prefer mixed group', 'Prefer all opposite to me' or 'Don't mind at all'.

Basic Method of Analysis

The responses by each of the groups listed at Fig. 38 were separately totalled by each of the 4 possible responses. These numbers were then converted into percentage values of each of the particular populations of interest.

For example, taking the group 'Married Women' the responses were :

Prefer all same as me = 0 in total Prefer mixed group = 33 in total Prefer all opposite to me = 3 in total Don't mind at all = 22 in total Hence group population = 58 and the % responses were, in the same order, 0%, 56.9%, 5.2% and 37.9%.

One way of viewing the responses is to hold that the response 'Don't mind at all' indicates 'No preference'. And any other answer indicates a 'Preference'. Hence these 3 categories can be added to indicate the total numbers who do have a preference one way or another.

This approach has been adopted and all of the answers have been processed both by discrete response and also in the manner described. The resulting histograms for all interest groups are included at Appendix 4.

PREFERRED GENDER OF COLLEAGUES - QUESTION 20

The following table at Fig. 53 shows a summary of the percentage responses in the form 'No preference' versus 'Preference'. They are listed in least preference order.

	No	
Group	Preference	Preference
	%	%
Single Men	71.4	28.6
Young Men	68.4	31.6
Senior Men	65.7	34.3
Non-Man. Men	65.5	34.5
Junior Men	60.0	40.0
All Men	57.5	42.5
Older Men	55.6	44.4
Married Men	53.4	46.6
Single Women	50.0	50.0
Fathers	50.0	50.0
Mothers	50.0	50.0
Junior Women	44.4	55.6
Young Women	44.4	55.6
Professional/Graduate Men	43.6	56.4
All Women	41.3	58.7
Professional/Graduate Wome		58.8
Married Women	37.9	62.1
Senior Women	37.5	62.5
Management	35.0	65.0
Older Women	33.3	66.7

PREFERRED GENDER OF COLLEAGUES - QUESTION 20

The following table at Fig. 54 shows a summary of the percentage responses in the form 'No Preference' versus 'Preference'. They are sorted into peer groupings.

	No	
Group	Preference	Preference
	%	%
All Men	57.6	42.5
All Women	41.3	58.7
Management Non-Man. Men	<u>35.0</u> 65.5	65.0 34.5
Senior Men	65.7	34.3
Senior Women	37.5	62.5
Junior Men	60.0	40.0
Junior Women	44.4	55.6
Older Men Older Women	55.6 33.3	44.4 66.7
Young Men	68.4	31.6
Young Women	44.4	55.6
Married Men	,53,4	46.6
Married Women	37.9	62.1
Single Men Single Women	71.4 50.0	28.6 50.0
Single women	30.0	50.0
Fathers	50.0	50.0
Mothers	50.0	50.0
Professional/Graduate Men	43.6	56.4
Professional/Graduate Women	41.2	58.8

-Fig. 53 indicates that fewer men, 42.5%, have a preference about the sexual composition of their work group, than do women, 58.7%.

The first 8 groups in the No Preference column are male in composition.

In the highest placed female groups, Single Women and Mothers, only half of the respondents expressed No Preference.

It would seem that, given the opportunity, women are more discriminating in their choice over this matter.

Fig. 54 shows that this trait is not just a statistical reality at total sample level. No male group is more discriminating about the sexual composition of the group than is its female counterpart group. Hence pro rata :

More	Senior	Men	than	Senior	Women	responded	No	Preference
	Junior	Men		Junior	Women	11	"	11
11	Older N	Men		Older V	Nomen	11	11	**

and so on. In the case of Mothers versus Fathers there was no difference at 50% each.

This feature could be an important factor in determining whether an employee decided to apply for a particular vacancy or not.

QUESTIONNAIRE ANALYSIS

What do the opposite sex mainly require from work? - Question 21

It is common practice, in most sectors of employment in the UK, to attempt to match a vacant job with an available, suitable, potential job-holder. This process is carried out with varying degrees of rigour and precision but almost invariably at some point somebody is asked to exercise human judgment. Often this judgment will include an assessment of what the candidate is likely to be seeking from a company/career/job. The consequences of that step can presage either success or failure for the candidate.

Recruitment selection panels are frequently made up of one sex only. If the members have a preconceived, possibly erroneous, perception of a candidate's job requirements then he or she may have difficulty in persuading them of the reality.

Question 21 of the questionnaire sought to ascertain respondents perceptions by asking the question 'What do members of the opposite sex mainly require from work in your opinion?'

Basic Method of Analysis

Because of the limitations of the questionnaire process they were asked for main headings only. A typical response was 'Money, Interest, Status'.

The opinions from each sex, about the opposite sex, were then accumulated separately for comparison with the actual responses, from that sex, about job/career requirements from Section 1 of the questionnaire.

74 of the male respondents contributed a total of 182 comments/views/ job factors which they believed reflected females requirements of a job. Fig. 55 shows these collected into 10 topic groupings. It then became necessary to process the female responses from Section 1 of the questionnaire into comparable groupings so as to facilitate comparison.

The approach taken was to combine various of the 18 question topics from Page 1 of the questionnaire such that the pattern broadly equated with the mens answers from Question 21.

Hence Getting Good Experience and Training Opportunities were combined to become Development Opportunity and the respective responses, 76 and 57, were averaged to become 67.

Similarly, Working for an Understanding Company and Being Consulted about Decisions were combined to become Good Firm, average response = 68.

Further, Having Management/Supervisory Duties and Having a Senior Job combined to become Status, average 31.

Finally, Job Sharing Opportunities, Different Hours at Different Times of the Year, Part-time Work, Help with Child Minding, School Holidays off Work and Help with Transport to Work combined to become Special Facilities, average 4.

Fig. 56 illustrates the transition, from the women's original responses to the 18 questions in Part 1 of the questinnaire, down to the 10 groupings which are comparable with the men's responses to Question 21.

The next step was to express the responses to each topic as a percentage of the total responses and hence get some measure of relative strength of feeling.

Fig. 57 illustrates the final outcome and compares what the total group of female respondents said they wanted from a job, with what the total group of male respondents felt that females wanted from a job.

In order to help illustrate the different levels of views, the responses have been divided into Category levels, the break-points of which are coincident with significant change in the number of 'votes' for the topic.

Precisely the same process has also been followed in respect of the females answers (194 responses from 73 respondents) to Question 21 and the males answers to Section 1 of the questionnaire.

Fig. 58 shows the original female responses to Question 21 collected into 10 topic groupings. Following which Fig. 59 illustrates the transition from the men's original responses to the 18 questions in Part 1 of the questionnaire, down to the 10 groupings which are comparable with the women's responses to Question 21. Finally, Fig. 60 illustrates the final outcome which compares what the total group of male respondents said they wanted from a job, with what the total group of female respondents felt that the males wanted from a job.

WHAT DO THE OPPOSITE SEX MAINLY WANT FROM WORK?

Men's Answers from Question 21

		No. of			No. of
	Responses	Respons	ses	Responses	Responses
1.	Interesting Work :		5.	Secure Job :	12
	Interest Fulfilment Involvement Satisfaction	39 4 2 1	6.	<u>Companionship</u> :	10
	Creative Work	1 47	7.	Special Facilities :	
2.	Money :	46		Limited Responsibility Fit in with Family Regular Hours No Sexual Harass.	4 2 1 1
з.	Development Opportu	nity :		Phone Calls Allowed	1
	Equal Opportunity Prospects Experience Training	7 2 2	. 8.	Male Managers	1 10 10
		22	9.	Status :	
4.	<u>Good Firm</u> : Good Environment Understanding Co.	10 6 16		Appreciation Status Responsibility Respect Independen Recognition	2 2 1 1 1 1 1 8
			10.	Convenient Location :	1
				· · · ·	<u> </u>
				Total	= 182

WHAT DO YOU WANT FROM WORK?

Women's Answers on the basis of Top Priority + Very Important from Section 1 of Questionnaire - Questions 1-13 inclusive.

	Topic	No. of Responses		Revised Topic Groupings	Average Responses
1.	Experience	76	1.	Interesting Work	75
2.	Interesting Work	75	2.	Secure Job	71
з.	Secure Job	71	з.	Good Firm	68
4.	Understanding Co.	69	4.	Development Opportunity	67
5.	Being consulted	67	5.	People I Like	55
6.	Training Opportunities	57	6.	Convenient Location	36
7.	People I Like	55	7.	High Salary	34
8.	Convenient Location	36	8.	Status	31
9.	High Salary	34	9.	Flexitime	28
10.	Management Duties	32	10.	Special Facilities	4
11.	Senior Job	30			
12.	Flexitime	28			
13.	Job Sharing	11		Total	469
14.	Hours to Suit	4			
15.	Part-time Work	3			
16.		3			
17.	•	2	Note	: Nos 1 and 6 in L.H. co	מתחונ
18.	Transport to Work	2	noue	combined to become No	
				R.H. column.	
	Total	655		Nos 4 and 5 in L.H. co combined to become No R.H. column	
				Nos 10 and 11 in L.H. combined to become No R.H. column	
				Nos 13, 14, 15, 16, 17	7 and 18

in L.H. column combined to become No 10 in R.H. column

QUESTIONNAIRE ANALYSIS - THE RESULTS

QUESTION 21 - WHAT DO THE OPPOSITE SEX MAINLY WANT FROM WORK?

MEN'S ANSWERS ABOUT WOMEN FROM SECTION 3 WOMEN'S ANSWERS ABOUT THEMSELVES FROM SECTION 1

		RES	PONSES			RESI	PONSES
Cate-			% of	Cate-			% of
gory	Topic	<u>No</u> .	Total	gory	Topic	No.	Total
1	Interesting Work	47	25.8	1	Interesting Work	, 75	16.0
	Money	46	25.2		Secure Job	71	15.1
	Ĵ				Good Firm	68	14.5
					Develop. Opport'y	67	14.3
2	Develop. Opport!y	22	12.1				
				2	People I Like	55	11.7
3	Good Firm	16	8.8				
	Secure Job	12	6.6				
	Companionship	10	5.5	3	Convenient Location	36	7.7
	Special Facilities	10	5.5		High Salary	34	7.2
	Flexitime	10	5.5		Status	31	6.6
	Status	8	4.4		Flexitime	28	6.0
4	Convenient Location	1	0.5	4	Special Facilities	4	0.9
4	convenient Location	T	0.5	-4	Special facilities	4	0.9
	-	······ ·			-		
	:	182	100.0			469	100.0

WHAT DO THE OPPOSITE SEX MAINLY WANT FROM WORK?

Women's Answers from Question 21

-

		No of					No. of
	Responses	Respon	ses		Responses	Res	ponses
1.	Money :		62	5.	<u>Status</u> :		
2.	Interesting Work : Satisfaction Interest Involvement Fulfilment Achievement Occupy Mind Challenge Efficiency Good Output Motivation	28 8 2 1 1 1 1 1 1 1		6.	Status Recognition Power Pride Management Role Independence Respect <u>Good Firm</u> : Good Conditions	15 3 1 1 1 1	23
з.	Secure Job :		45 32	7.	<u>Companionship</u> : Good Pals Compatibility	1	
4.	Development Opport	cunity :			00111109	-	2
	Prospects Experience Training	21 2 1	24	8.	Special Facilities Reasonable Hours Mobile Duties		2
				9.	Flexitime :		0
				10.	Convenient Locatio	<u>n</u> :	0
					Т	otal	= 194

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FIG. 58

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WHAT DO YOU WANT FROM WORK?

Men's Answers on the basis of Top Priority + Very Important from Section 1 of the Questionnaire - Questions 1-13 inclusive.

		No.			
		of			Average
	Topic	Response	s Re	evised Topic Group	ings Responses
		-			
1.	Interesting Work	77	1.	Interesting Work	77
2.	Experience	65	2.	Secure Job	60
з.	Being Consulted	64	з.	Good Firm	58
4.	Secure Job	60	4.	Development Oppor	tunity 50
5.	Understanding Co.	51	5.	High Salary	48
6.	High Salary	48	6.	Status	43
7.	Management Duties	46	7.	People I Like	40
8.	Senior Job	40	8.	Convenient Locati	on 21
9.	People I Like	40	9.	Flexitime	16
10.	Training Opportunitie	s 34	10.	Special Facilitie	s 2
11.	Convenient Location	21			
12.	Flexitime	16			
13.	Job Sharing	5		Total	415
14.	School Holidays Off	4 .			
15.	Transport	3			
16.	Hours to Suit	1			
17.	Child Minder	1	Note	e: Nos 3 and 5 in	L.H. column
18.	Part-time Work	0		combined to be	come No 3 in R.H.
				column.	
				•	
	Total	576		Nos 2 and 10 i	n L.H. column

Nos 7 and 8 in L.H. column combined to become No 6 in R.H. column.

combined to become No 4 in R.H.

column.

Nos 13, 14, 15, 16, 17 and 18 in L.H. column combined to become No 10 in R.H. column

QUESTIONNAIRE ANALYSIS - THE RESULTS.

QUESTION 21 - WHAT DO THE OPPOSITE SEX MAINLY WANT FROM WORK?

W	OMEN'S ANSWERS ABOUT FROM SECTION 3	MEN		MEN	S ANSWERS ABOUT THE FROM SECTION 1	MSEL	VES
		RES	PONSES			RES	PONSES
Cate-			% of	Cate-		······	% of
gory	Topic	<u>No</u> .	<u>Total</u>	gory	Topic	<u>No .</u>	<u>Total</u>
1	Money	62	32.0	1	Interesting Work	77	18.5
					Secure Job	60	
					Good Firm	58	14.0
2	Interesting Work	45	23.2				
				2	Develop. Opport'y	50	12.0
3	Secure Job	32	16.5	2	High Salary	48	
Ũ	Develop. Opport	-	12.4		Status	43	
	Status	23	11.8		People I Like	40	9.6
4	Good Firm	4	2.1	3	Convenient Location	21	5.1
	Companionship	2	1.0		Flexitime	16	3.9
í	Special Facilities	2	1.0				
•	Flexitime	0	0.0				
	Convenient Location	0	0.0	4	Special Facilities	2	0.5
		194	100.0			415	100.0

FIG. 60

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QUESTIONNAIRE ANALYSIS - THE RESULTS

QUESTION 21 - SUMMARY

- Men believed that women predominently required Money and Interest from a job. Approximately 25% of the males' responses were related to each of these topics/factors.
- 2. As can be seen from Fig. 56, 75 of the 80 women regarded Interesting Work as either 'Top Priority' or 'Very Important'. Hence men have an accurate perception in this respect.
- 3. In so far as Money is concerned, there is room for doubt. The language of the questionnaire was 'Having a High Salary'. Whereas a typical male response to Question 21 was 'Money' or 'Cash' or 'Income' etc. Hence regard must be taken of a possible difference in inflexion. Nevertheless, only 34 of the 80 women respondents regarded High Salary as Top Priority or Very Important. Additionally, as can be seen from Fig. 56 there are many other job features which influence the quality of a job which, in women's perceptions, take precedence over salary level.
- 4. Men appear to have made a sensible estimation of women's desire for Development Opportunity.
- 5. Men underestimate women's hopes for a Secure Job with a Good Firm. The reality is that women value these very nearly as highly as Interesting Work. Yet men felt that women's needs in this respect would be markedly lower.
- 6. Women's responses indicated that Money was easily men's main requirement from a job, in their view. If Money was taken to be synonymous with a High Salary, then this is clearly not so.

- .7. Women recognised men's needs in respect of Interesting Work, Development Opportunity and a Secure Job.
- 8. Women underestimated men's wish to work for a Good Firm.
- 9. Women underestimated men's 'people needs' which, although lower than their own, were higher than the women thought.
- Women did not recognise men's appreciation, albeit lowish, of Flexitime.

In Conclusion

Both sexes overestimate the <u>relative</u> importance of salary in the overall make-up of a good job from the other sex's point of view.

Both sexes underestimate the importance that the opposite sex place on Working for a Good Firm.

Both sexes recognise that men's need for status exceeds that of women.

QUESTIONNAIRE ANALYSIS

Occupational Segregation

Earlier sections of this thesis highlighted the very significant degree of segregation by sex related to various occupational groupings. Fig. 12 demonstrated this in summary form.

It became desirable to seek opinion from the questionnaire respondents and two job/career areas were chosen for the purpose :

- Engineering/Operations because these are key career areas in the water industry and yet females are very much underrepresented therein.
- Secretarial/Typing because these are <u>relatively</u> unfruitful areas in terms of a career path and yet females are in the overwhelming predominence.

<u>Question 22</u> asked 'There are not many women working in Engineering jobs or in Operations jobs in AW; Why do you think this is?' Respondents were advised that main headings would be an appropriate form of response.

Every respondent gave a reason(s) and there were 164 headings put forward by men and 148 by women.

<u>Question 23</u> asked 'There are no men working in the Secretarial and Typing workforce in AW; Why do you think this is?' Respondents were advised that main headings would be an appropriate form of response.

Every respondent gave a reason(s) and there were 158 headings put forward by men and 142 by women.

Basic Method of Analysis

The responses, although couched in a wide variety of terms, readily aggregated into a number of clearly identifiable summary groupings. Hence - Tradition, Attitude of Society, Historic, Culture, Conditioning and so on have been grouped in the analysis to become 'Social Conditioning'. The following pages show these groupings at Fig. 61 and Fig. 62.

WHY ARE NOT MANY WOMEN WORKING IN ENGINEERING OR OPERATIONS?

The following table at Fig. 61 shows a summary comparison between men's answers and women's answers to Question 22.

MEN'S ANSWERS

WOMEN'S ANSWERS

	Response	No. <u>Resp</u>	of onses		Response	No. Resp	of onses
1.	Educational Bias		47	1.	Educational Bias		42
2.	Social Conditioning		46	2.	Social Conditioning		30
з.	Female Factors :			з.	Female Factors :		
	<pre>Female disinterest Lack appropriate aptitudes False concept of th work Few career women available Few women in these fields Few women apply Women's career attitudes Women unwilling to train for it</pre>	10 9 4 1 1 1 1		5. 6.	Female disinterest Few female applicants No concept of the work Low female expectation Women less experienced Women pursuing marriag Prejudice Physical Shortcomings Women Not Encouraged Few Opportunities	ns 2 1 1	
4.	Prejudice		12	8.	Wrong Job Environment		4
5.	Physical Shortcoming	3	11	9.	Hours at Work		3
6.	Wrong Job Environmen	t	6	10.	Family Commitments		2
7.	Women Not Encouraged		6				148
8.	Family Commitments		6				•
9.	Hours of Work		2				
			164				

FIG. 61

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WHY ARE THERE NO MALE SECRETARIES OR TYPISTS IN AW?

The following table at Fig.62 shows a summary comparison between men's answers and women's answers to Question 23.

MEN'S ANSWERS

WOMEN'S ANSWERS

	Response	No. of Responses		Response	No. Respor	
1.	Social Conditioning	69	1.	Social Conditioning		61
2.	Educational Bias	24	2.	Male Factors :		
3.	Male Factors Male prejudice Men prefer women secretaries Low male interest Low male aptitude Few men apply Fellow male views	5 5 4 3 1		Low male interest Men consider menial Few men apply Low male aptitude Prefer mostly male colleagues Male attitudes	11 4 3 2 1 6	27
		23	з.	Relatively Low Pay		17
4.	Limited Career Prospe	cts 15	4.	Educational Bias		15
5.	Relatively Low Pay	13	5.	Limited Career Prospec	ots	14
6.	Low Status Job	6	6.	Prejudice :		
7.	Job Suits Career Brea			Prejudice Female bias	3 1	
8.	Wrong Job Environment	2		Discrimination Men Not Encouraged	1 1	
9.	Physical Shortcomings	1		Men Not Encouraged	Ŧ	6
10.	Men Prefer Mixed Work	groups 1	7.	Physical Shortcomings		1
	Total response	 s = 158	8.	More Women Available Total reponse		1 142
				iotar reponse	. — .	⊥~+ <i>⊂</i>

FIG. 62

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QUESTIONNAIRE ANALYSIS

Some Perceived Reasons for Occupational Segregation

Few Women in Engineering or Operational Jobs

- Both male and female respondents saw the present imbalance arising from the same set of factors. Of these factors the majority of the weight was shared between Educational Bias and Social Conditioning. Around 53% of the total responses supported this view.
- 2. Both sexes appeared to hold that women themselves contributed to the situation in a variety of ways - these have been shown summarised under 'Female Factors'. One exception in this group is 'Lack of appropriate aptitudes', a view which was expressed by 9 (11%) men.
- Both respondent groups recorded that women suffered from Prejudice

 the 26% female respondents who felt this outweighed the 15%
 male respondents with similar sentiments.
- 4. There was a similarity of view by the sexes to the effect that females suffered Physical Shortcomings when measured against the requirements of the jobs under question.
- 5. The remaining factors Job Environment, Hours of Work, Family Commitments and Women Not Encouraged were mentioned by both groups but at a minority level.

General Point

6. <u>Educational Bias</u> was <u>felt</u> to be a particularly strong contributory factor. What can be said as absolutely <u>factual</u> at AW is that there is a most profound <u>Educational Inequality</u> between the sexes. Reference back to Fig. 21 reveals the extent of this.

No Male Secretaries or Typists

- Both respondent groups saw Social Conditioning as the overriding cause of the situation. But whereas in the case of the Engineering and Operational jobs, an almost equal weight was given to Educational Bias - this time it was not so.
- 30% of the men but only 19% of the women felt that Educational Bias was a cause of the imbalance in this sector of the workforce.
- Both sexes believed that men themselves contributed to the imbalance in a variety of ways - these have been shown summarised under 'Male Factors'.
- 4. It seems a widely held view that Relatively Low Pay and Limited Career Prospects are also significant contributory factors to the scarcity of men in these jobs.
- 5. 7.5% of the male respondents saw Secretarial and Typing Posts as Low Status Jobs and hence unattractive to men.
- 6. 7.5% of the female respondents felt that Prejudice (presumably against men) contributed to the situation.
- 7. Both sexes mentioned Physical Shortcomings this was presumed to mean inadequate manual dexterity at a keyboard - but in any case this was a very low level response.

General Point

- 8. Social Conditioning was cited as far and away the prime factor of influence. It is interesting therefore to contemplate Hakim's⁴ alternative explanations for occupational segregation :
 - (a) The structure of a labour force divided into fairly clearly defined typically male and typically female occupations determines the attitudes and expectations of employees and workers

OR

(b) Attitudes about 'suitable' work for women and men have produced these strong demarcations.

QUESTIONNAIRE ANALYSIS

Life Goals

At the conclusion of the literature search a number of propositions were produced to help explain why men's careers and women's careers at AW were so divergent. One of these was :

'Men and Women have different job aims and different life goals'

Job aims has been dealt with elsewhere in this thesis and was explored by Page 1 of the questionnaire.

This section of the thesis is concerned with 'life goals' and information was sought from respondents by means of Page 4 of the questionnaire. The intention being to determine whether or not the proposition was valid.

Information/Perceptions Sought

Question 24 was intended to elicit views from each sex about the relative importance attached by <u>men and</u> by <u>women</u> to a successful career.

Question 25 sought opinions of each sex on the relative priority attached by <u>women</u> to familial responsibilities versus career endeavours.

Question 26 sought opinions of each sex on the relative priority attached by men to familial responsibilities versus career endeavours.

Question 27 hoped for an insight into the <u>relative</u> importance each sex placed on a significant personal domestic relationship.

Question 28 was aimed to acquire information from the sexes about the <u>relative</u> importance that they attributed to having an interest outside of both the career and possibly the family.

Question 29 was an attempt to establish the relative strengths of each sexes views on success as a more general concept i.e. wider than career success.

Basic Method of Analysis

The analysis was carried out so as to facilitate comparison between the various respondent sub-groupings listed at Fig. 39.

The responses to each question by each group were separately totalled by each of the 4 Agreement Ratings. These numbers were then converted into percentage values of each of the particular populations of interest.

For example, taking the group 'Single Women', the responses to Question 26 were :

Strongly Agree	=	2 in total
Tend to Agree	=	7 in total
Tend to Disagree	=	11 in total
Strongly Disagree	=	2 in total

Hence Group Population = 22 and the % responses were :

Strongly Agree	=	9.1%
Tend to Agree	=	31.8%
Tend to Disagree	=	50.0%
Strongly Disagree	=	9.1%

A further convention has been adopted to facilitate understanding, insight and also display. This has been to aggregate 'Strongly Agree' and 'Tend to Agree' to become the affirmative 'Agree'. Further, to aggregate 'Tend to Disagree' and 'Strongly Disagree' to become the repudiation 'Disagree'.

Histograms displaying all of this by comparative groupings are included at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Men Regard a Successsful Career as more Important than Do Women?

The following table at Fig. 63 shows a summary of the percentage responses to Question 24 in the form 'Agree' versus 'Disagree'. The left-hand columns are sorted by comparable respondent groups - the right-hand columns are listed in descending order of Agreement.

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Group	Agree <u>%</u>	Disagree <u>%</u>	Group	Agree %	Disagree %
All Men	83.8	16.2	Older Men	100.0	0.0
All Women	67.5	32.5	Management	95.0	5.0
Management	95.0	5.0			
Non-Man. Men	79.3	20.7			
			Married Men	89.7	10.3
			Prof/Grad Men	84.6	15.4
Senior Men	82.9	17.1	All Men	83.8	16.2
Senior Women	81.3	18.7	Senior Men	82.9	17.1
Junior Men	40.0	(60.0)	Senior Women	81.3	18.7
Junior Women	72.2	27.8	Fathers	81.3	(18.7)
Older Men	100.0	0.0	Non-Man. Men	79.3	20.7
Older Women	50.0	(50. <i>0</i>)	Junior Women	72.2	27.8)
Young Men	68.4	31.6			
Young Women	63.9	36.1			\sim
			Young Men	68.4	(31.6)
			Single Women	68.1	31-9-
Married Men	89.7	10.3	All Women	67.5	32.5
Married Women	67.2	32.8	Married Women	67.2	32.8
Single Men	66.7	(33.3)	Single Men	66.7	33.3
Single Women	68.1	31.9	Young Women	63.9	36.1
Fathers	81.3	18.7	Prof/Grad Women	58.9	40.1
Mothers	50.0	50.0	Older Women	50.0	50.0 ·
Prof/Grad Men	84.6	15.4	Mothers	50.0	50.0
Prof/Grad Women	58.9	(40.1)			
		\smile			

Junior Men

40.0 60.0

Inspection of the left-hand columns of Fig. 63 shows that 83.8% of the male respondents and 67.5% of the female respondents agreed that men place more importance on career success than do women.

95% of Management as a group held this view and 100% of the Older Men did likewise.

In terms of divergence of feeling by comparable groups, the major variances were :

Junior Men versus Junior Women Older Men versus Older Women Fathers versus Mothers Prof/Grad Men versus Prof/Grad Women.

The right-hand columns rank the groups in terms of the extent of unanimity of view. Hence, 100% of the Older Men agreed and it is not until the 7th place in the table that a female group - Senior Women appears. 81.3% of that group agreeing with the question.

At the bottom end of the table, only 40% of Junior Men agreed i.e. more disagreed than agreed.

Histograms showing response levels and emphasis of feeling are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Women Put Home and Family Before Career?

The following table at Fig. 64 shows a summary of the percentage responses to Question 25 in the form 'Agree' versus 'Disagree'. The left-hand columns are sorted by comparable respondent groups - the right-hand columns are listed in descending order of Agreement.

Group	Agree <u>%</u>	Disagree 	Group	Agree 	Disagree <u>%</u>
All Men	91.3	8.7	Management	100.0	0.0
All Women	77.5	(22.5)	Older Men	100.0	0.0
Management	(100.05	0.0	Prof/Grad Men	94.8	5.2
Non-Man. Men	87.9	12.1	Senior Women	93.9	6.1
			Married Men	93.1	6.9
			Senior Men	91.4	8.6
Senior Men	91.4	8.6	All men	91.3	8.7
Senior Women	93.9	6.1			
Junior Men	80.0	20.0			
Junior Women [:]	72.2	27.8	Prof/Grad Women	88.3	11.7
			Non-Man. Men	87.9	12.1
			Fathers	87.5	12.5
Older Men	100.0	0.0	Single Men	85.8	14.2
Older Women	83.3	16.7	Young Men	84.2	. 15.8
Young Men	84.2	15.8	Older Women	83.3	16.7
Young Women	69.5	30.5	Junior Men	80.0	20.0
	,	<u> </u>	Mothers	80.0	(20.0)
Married Men	93.1	6.9			
Married Women	79.3	20.7	Married Women	79.3	20.7
Single Men	85.8	14.2	All Women	77.5	22.5
Single Women	72.8	27.2>	Single Women	72.8	27.2
			Junior Women	72.2	27.8
Fathers Mothers Prof/Grad Men Prof/Grad Women	87.5 80.0 94.8 88.3	12.5 20.0 5.2 11.7	Young Women	69.5	30.5
rior/drau wollen	00.0	LT•/			

The left-hand columns of Fig. 64 reveal that 91.3% of the male respondents and 77.5% of the female respondents agreed that women give home and family priority over a career.

100% of the Management group and 100% of the Older Men group held this view.

There were no striking divergences of view between comparable groups.

The right-hand columns rank the groups in terms of unanimity of view. It is a measure of the widespread agreement over the matter that even at the bottom of the table 69.5% of the Young Women group agreed.

On balance the male groups held the view more strongly than the female groups and only one - Senior Women - of the first seven groups is female in composition. 93.9% of them agreed.

Histograms showing response levels and emphasis of feeling are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Men Put Career Before Home and Family?

The following table at Fig.65 shows a summary of the percentage responses to Question 26 in the form 'Agree' versus 'Disagree'. The left-hand columns are sorted by comparable respondent groups - the right-hand columns are listed in descending order of Agreement.

Group	Agree %	Disagree %	Group	Agree <u>%</u>	Disagree %
All Men All Women Management	47.5 48.8 65.0	52.5 51.2 35.0	Management Older Men	65.0 61.2	35.0 38.8
Non-Man. Men	41.3	58.7	Married Men Married Women	51.7 51.7	48.3
Senior Men Senior Women Junior Men Junior Women	48.6 37.5 20.0 44.5	51.4 62.5 80.0 (55.5)	Older Women Fathers	50.0 50.0	(50.0) 50.0
			All Women Prof/Grad Men	48.8 48.8	51.2
Older Men Older Women Young Men Young Women	61.2 50.0 31.6 33.4	38.8 50.0 68.43 66.6	Senior Men All Men Junior Women Non-Man. Men	48.6 47.5 44.5 41.3	51.4 52.5 55.5 58.7
Married Men Married Women	51.7 51.7	48.3 48.3	Prof/Grad Women Single Women Mothers	41.2 40.9 40.0	58.8 59.1 / 60.0
Single Men Single Women	38.1 40.9	61.99 159.1	Single Men Senior Women Young Women	38.1 37.5 33.4	61.9 62.5 66.6
Fathers Mothers Prof/Grad Men Prof/Grad Women	50.0 40.0 48.8 41.2	50.0 60.0 51.2 58.8	Young Men	31.6	68.4
			Junior Men	20.0	80.0

From the left-hand columns at Fig. 65 it can be seen that 47.5% of the male respondents and 48.8% of the female respondents agreed that men gave their career precedence over home and family. In other words the respondents who agreed were - just - in the minority.

Management was the group which, at 65.0%, agreed most strongly with the view.

The only strongly contrasting opinions from comparable groups were those from Junior Men, 20.0%, and Junior Women, 44.5%.

The right-hand columns rank the groups in terms of unanimity of view. As can be seen the male and the female groups are fairly well interspersed throughout the table.

After the first six groups all of the others had a majority who disagreed that men put career before domestic considerations; 80% of the Junior Men disagreeing.

Histograms showing response levels and emphasis of feeling are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

A Satisfactory Partner at Home is Life's Top Priority?

The following table at Fig.66 shows a summary of the percentage responses to Question 27 in the form 'Agree' versus 'Disagree'. The left-hand columns are sorted by comparable respondent groups - the right-hand columns are listed in descending order of Agreement.

Group	Agree <u>%</u>	Disagree %	Group	Agree <u>%</u>	Disagree %
All Men All Women Management	73.8 66.3 70.0	26.2 (<u>33.7</u>) 30.0	Older Men	94.4	5.6
Non-Man. Men	74.1	25.9	Junior Women Older Women	83.3 83.3	16.7 16.7
Senior Men Senior Women Junior Men Junior Women	77.2 56.3 40.0 83.3	22.8 43.7 60.0 16.7	Senior Men Prof/Grad Men Non-Man Men Married Men All Men	77.2 74.4 74.1 74.1 73.8	22.8 25.6 25.9 25.9 26.2
Older Men Older Women Young Men Young Women	94.4 83.3 63.2 61.1	5.6 16.7 36.8 38.9	Single Men Management	71.4 70.0	28.6 30.0
Married Men Married Women Single Men Single Women	74.1 67.2 71.4 63.6	25.9 32.8 28:6 36.4	Fathers Married Women All Women Single Women Young Men Young Women Mothers	68.7 67.2 66.3 63.6 63.2 61.1 60.0	31.3 32.8 33.7 36.4 36.8 38.9 40.0
Fathers Mothers Prof/Grad Men Prof/Grad Women	68.7 60.0 74.4 52.9	31.3 40.0 25.6 47.1	Senior Women Prof/Grad Women	56.3 52.9	43.7 47.1

Junior Men

60-..0

40.0

Looking at the left-hand columns of Fig.⁶⁶ show that 73.8% of the male respondents and 66.3% of the female respondents agreed that life's top priority was a satisfactory partner at home.

As a group, Management, with a 70.0% affirmative response were about 'middle of the road' in their viewpoint.

There were some notable divergences of feeling by comparable groups. These groups were :

Senior Men versus Senior Women Junior Men versus Junior Women Older versus Young - Both sexes Prof/Grad Men versus Prof/Grad Women

The right-hand columns rank the groups in terms of unanimity of view. It is interesting to note that nine of the first eleven groups in the table are male in composition.

At the bottom of the table, Junior Men was the only group where a majority disagreed.

Histograms showing response levels and emphasis of feeling are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

It is Quite Important to have an Absorbing Hobby or Interest Outside of Work?

The following table at Fig. 67 shows a summary of the percentage responses to Question 28 in the form 'Agree' versus 'Disagree'. The left-hand columns are sorted by comparable respondent groups - the right-hand columns are listed in descending order of Agreement.

Group	Agree I)isagree %	Group	Agree	Disagree
All Men	91.3	8.7	Junior Men	(100.0)	0.0
All Women	80.0	20.0	Prof/Grad Men	94.9	5.1
Management	90.0	10.0	Young Men	94.8	5.2
Non-Man. Men	91.4	8.6	Older Men	94.5	5.5
			Fathers	93.8	6.2
			Non-Man. Men	91.4	8.6
Senior Men	88.6	11.4	Married Men	91.4	8.6
Senior Women	81.3 ′	18.7	All Men	91.3	8.7
Junior Men	(00.0)	0.0	Single Men	90.5	9.5
Junior Women	188.9	11.1	Management	90.0	10.0
	\subseteq				
Older Men	94.5	5.5	Junior Women	88.9	11.1
Older Women	83.3	16.7	Senior Men	88.6	11.4
Young Men	(94.8)	5.2	Older Women	. 83.3	16.7
Young Women	80.6	19.4	Single Women	81.8	18.2
			Senior Women	81.3	18.7
			Young Women	80.6	19.4
Married Men	91.4	8.6	All Women	80.0	20.0
Married Women	79.3	20.7			
Single Men	90.5	9.5			
Single Women	81.8	18.2	Married Women	79.3	20.7
			Prof/Grad Womer	76.5	23.5
Fathers	93.8	6.2			
Mothers	40.0	60.0	Mothers	60.0	40.0
Prof/Grad Men	94.9	5.1			
Prof/Grad Women	76.5	23.5			

The left-hand columns of Fig. 67 record that 91.3% of the male respondents and 80.0% of the female respondents subscribed to the importance of a strong interest outside of work.

Junior Men, at 100%, were unanimous in the view.

The only reportable divergences of opinion between comparable groups were :

Fathers versus Mothers Prof/Grad Men versus Prof/Grad Women

The right-hand columns rank the groups in terms of unanimity of view. Ten of the eleven male groups head the table.

The values in the table are quite closely banded, an indication of the widespread agreement over the issue. Only three groups registered a figure of less than 80% agreeing.

Histograms showing response levels and emphasis of feeling are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

All in All, Happiness is the Best Measure of Success?

The following table at Fig. 68 shows a summary of the percentage responses to Question 29 in the form 'Agree' versus 'Disagree'. The left-hand columns are sorted by comparable respondent groups - the right-hand columns are listed in descending order of Agreement.

Group	Agree <u>%</u>	Disagree %	Group	Agree %	Disagree %
All Men	92.5	7.5	Older Men	100.0	0.0
All Women	90.0	10.0	Older Women	100.0	0.0
Management	95.0	5.0	Single Women	95.4	4.6
Non-Man. Men	91.4	8.6	Management	95.0	5.0
			Junior Women	94.4	5.6
			Senior Women	93.8	6.2
Senior Men	91.4	8.6	Married Men	93.1	6.9
Senior Women	93.8	6.2	All Men	92.5	7.5
Junior Men	80.0	20.0	Prof/Grad Men	92.3	7.7
Junior Women	94.4	5.6	Young Women	91.6	8.4
			Non-Man. Men	91.4	8.6
			Senior Men	91.4	8.6
Older Men	100.0	0.0	Fathers	90.6	9.4
Older Women	100.0	0.0	Single Men	90.4	9.6
Young Men	89.5	10.5	All Women	90.0	10.0
Young Women	91.6	8.4			
			Young Men	89.5	10.5
Married Men	93.1	6.9	Married Women	87.9	12.1
Married Women	87.9	12.1	Prof/Grad Women	82.3	17.7
Single Men	90.4	9.6	Junior Men	80.0	20.0
Single Women	95.4	4.6	Mothers	80.0	20.0
Fathers	90.6	9.4			
Mothers	80.0	20.0			
Prof/Grad Men	92.3	7.7			
Prof/Grad Women	82.3	17.7			

The left-hand columns of Fig.⁶⁸ indicated that 92.5% of the male respondents and 90% of the female respondents held that happiness was the best measure of success.

Older Men and Older Women led the field on this view, both with complete 100% unanimity.

There were no striking divergences of viewpoint between comparable groups.

The right-hand columns rank the groups in terms of unanimity of view. As can be seen there was a very high measure of agreement throughout the groups. Fifteen of them recorded a 90%, or more, in favour result.

The entire range of results was compressed into a 20 percentage points variation, i.e. 100% = top of the table, 80% = bottom of the table.

Histograms showing response levels and emphasis of feeling are shown at Appendix 4.

QUESTIONNAIRE ANALYSIS - THE RESULTS

Summary - Questions 24 - 29

The following table shows the relative measures of agreement with the six questions and also the extent of similarity of view between the sexes. The information is listed in increasing order of agreement by the total sample i.e. on the first column.

Hence there was least agreement with Question 26 of the questionnaire and most agreement with Question 29.

Further, men's and women's views were nearest coincident over Question 26 and were most divergent over Question 24.

		Agree			
Qu. No.	Total	Men <u>%</u>	Women <u>%</u>	Difference Men/Women <u>%</u>	Question
26	48.15	47.5	48.8	1.3	Men put career before home and family?
27	70.05	73.8	66.3	7.5	A satisfactory partner at home is life's top priority?
24	75.65	83.8	67.5	16.3	Men regard a successful career as more important than do women?
25	84.4	91.3	77.5	13.8	Women put home and family before career?
28	85.65	91.3	80.0	11.3	It is quite important to have an absorbing hobby or interest outside of work?
29	91.25	92.5	90.0	2.5	All in all, happiness is the best measure of success?

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LIFE GOALS - SUMMARY OF THE ANALYSIS

- 1. 75% of the the total respondents believed that men place more importance on career success than do women. 95% of Management which is a key group in making appointments to jobs, recorded that this was so. The view in general was held somewhat more strongly by the male groups than the female groups. Senior Women were the strongest female supporters of the opinion. There were a few specific groups of respondents who were less sure.
- 2. 84% of the total respondents agreed that women give home and family priority over a career. Management, at 100%, were unanimous about it. The view in general was held somewhat more strongly by the male groups than the female groups. Senior Women were the strongest female supporters of the opinion.
- 3. 48% of the total respondents were slightly in the minority in believing that men gave their career precedence over home and family. Of the sub-groups, Management held the view that it was so more strongly than any other. At the other end of the spectrum, 80% of the Junior Men were sure that this view was not correct.
- 4. 70% of the total respondents held that life's top priority was a satisfactory partner at home. The view in general was held somewhat more strongly by the male groups than the female groups.
- 5. 86% of the total respondents agreed the importance of having a strong interest outside of work. Junior Men were unanimous that this be so. The view in general was held somewhat more strongly by the male groups than the female groups.

6. 91% of the total respondents affirmed that happiness is the best measure of success. Older Men and Older Women were unanimous about it. The lowest level of support for the view was proffered by Junior Men and Mothers - even so they were both 80% in support of the opinion.

General Points

- 7. Older Men as a group headed the % degree table in 4 of the questions and were second in another. Junior Men as a group were at the foot of the % Agree table in 4 of the questions.
- 8. The only Question with which there was not a majority in terms of total respondents men and women was No 26, 'Men put career before home and family'.

QUESTIONNAIRE ANALYSIS

Question 30 - Men's Careers/Women's Careers - Why so Different?

The questionnaire concluded by asking respondents to state the main reason for the different career patterns for men and for women, in their opinion.

79 of the 80 male respondents mentioned between them 143 headings. 77 of the 80 female respondents produced 134 headings.

Basic Method of Analysis

The responses, although couched in a wide variety of terms, readily aggregated into a number of clearly identifiable summary groupings. Hence - School Curriculum, Counselling at School, Educational Pattern and so on have been grouped in the analysis to become 'Educational Bias'. The following page shows these groupings at Fig. 70.

THE MAIN REASONS FOR THE DIFFERENT CAREER PATTERNS OF THE SEXES - QUESTION 30

The table at Fig.70 shows a summary comparison between men's answers and women's answers to Question No.30.

MEN'S ANSWERS

WOMEN'S ANSWERS

1

	Personae	No. of Responses	No. of Response Responses
	Response		
1.	Social Conditioning :	52	1. Social Conditioning : 43
2.	Family Commitments :		2. Male/female Differences :
	Women's familial role Career breaks Child bearing Child rearing Men at work longer Dual-role women	$ \begin{array}{c} 16\\ 7\\ 4\\ 3\\ 2\\ 35 \end{array} $	Male domination10Different perceptions9Different life9priorities4Different expectations2Different ambitions1Female interests1Different pay needs1
3.	Male/Female Differences Different career commitment levels	8	Husbands career mobility 1 Women not assertive 1 30
	Different aspirations	8	
	Greater male drive	2 18	3. Educational Bias 20
			4. Family Commitments :
4.	Prejudice : Prejudice • Male/Employer prejudic Male bias Attitude of sexes to	5 e 3 2	Career breaks 11 Women's familial role 5 16 5. Prejudice :
	each other Out of date attitudes Employer opportunism	1 1 1 13	Employer bias 5 Prejudice 4 Sex discrimination 2 Unequal opportunities 2
5.	Physical Differences :	11	Attitudes 2 15
6.	Educational Bias	10	
7.	Women not Encouraged	2	6. Physical Differences : 5
~		2	7. Women not Encouraged 2
8.	Lack of Facilities	2	
			8. Lack of Facilities 2
		143	9. Lack of Understanding 1

QUESTIONNAIRE ANALYSIS

Some Perceived Reasons for Career Divergence - Men versus Women

- Both sets of respondents, male and female, saw the same broad categories of reasons for the career differences. The <u>major</u> factor as seen by both sexes is Social Conditioning. This was variously described as The System, Upbringing, Stereotyped Roles, Women seeking to Conform and so on. 34% of the total responses were to this effect.
- 2. After the agreement between the sexes about Social Conditioning, the order of significance of the remaining factors was different according to the sex of the respondents. Men registered a strong response to the effect that Family Commitments inhibited women's careers. Women were markedly cooler about this and recorded a strong vote in respect of Male/Female Differences.
- 3. For the female respondents, Educational Bias had more significance than the male respondents attributed to the factor.
- 4. Both groups rated Prejudice as an important factor and, from the wording in the detail of the responses, both felt that this militated against women.
- 5. The remaining factor of significance was held to be Physical Differences with the male responses somewhat outweighing the female responses on this topic.
- Lack of Encouragement for Women and Lack of Facilities (presumably to help Women) were both mentioned by both sexes, albeit at a low response level.

General Point

7. The headings registered by respondents at Question 30 were, by and large, those recorded for Questions 22 and 23. There were however differences of emphasis and order/weight.

TRADE UNION REPRESENTATIVES' PERCEPTIONS

TRADE UNION REPRESENTATIVES' PERCEPTIONS

Employment Relations/Industrial Relations matters are often conducted between 3 groups of people :

- 1. The employees of the organisation.
- 2. Trade union representatives of those employees.
- 3. Management representatives of the organisation.

The views and perceptions of the employees and the managers were sampled by the questionnaire shown at Figs. 32/35.

Because of the importance of Trade Union influence in the workforce - 75% of employees are members - a further questionnaire was designed and distributed. Fig. 71 shows the format of this.

In essence the questionnaire sought to pinpoint the principal reasons for career divergence - from a TU representative's point of view; and then to acquire their opinions on action and remedy. From the answers, it was hoped to infer :

- (a) where they saw responsibility for the <u>existing</u> career divergence belonging;
- (b) where they saw responsibility for <u>change</u> in the future belonging.

Basic Method of Analysis

The responses, although couched in a variety of terms, readily aggregated into a number of clearly identifiable headings.

Ten representatives returned questionnaires and their answers are summarised in Fig. 72.

TU Officials Questionnaire

Why are Men's careers so different from Women's careers at AW?

1. What are the principal reasons for the differences in the relative career success of the sexes at AW? Main headings please.

2. What, if anything, should the Employers do about it? Main headings please

3. What, if anything, should the TUs do about it? Main headings please

4. What, if anything, should men do about it? Main headings please

5. What, if anything, should women do about it? Main headings please

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TRADE UNION REPRESENTATIVES' RESPONSES

Summary of	the	respondents' answers to the 5 questions.	
Question 1	-	What are the principal reasons for the differences in the relative career success of the sexes at AW?	NO. OF RESPONSES
Answers 1	-	Male/Employer Prejudice Educational Bias/Technical Work Career Breaks for Family Reasons Social Conditioning More Males Employed	7 7 4 2 1
Question 2	-	What, if anything, should the Employer do about it?	
Answers 2	-	Attack Prejudice/Promote Equal Opportunities Encourage Women to Train Appoint More Females	5 7 7 2
Question 3	-	What, if anything, should the TUs do about it?	
Answers 3	-	Attack Prejudice Encourage Women to Train Encourage Women to be Active Trade Unionists	8 4 3 3
Question 4	-	What, if anything, should men do about it?	
Answers 4	-	Change their Behaviour towards Women Encourage Women in their Careers Attack Prejudice	7 4 3
Question 5	-	What, if anything, should women do about it?	2
Answers 5	-	Change their Behaviour Train More Attack Prejudice Become Active TU Members	8 4 3 2

TU QUESTIONNAIRE ANALYSIS

- (1) TU representatives believed that the major reasons were male and or employer prejudice, (note, most employing officers in AW are men) and educational bias leading to disadvantage in an arena of technical work.
- (2) They felt that the employer should break down prejudice and also encourage women to train. Note, positive discrimination in training is lawful.
- (3) TUs, it was felt, should also attack prejudice and encourage training. Additionally women should make themselves heard within the TU movement.
- (4) Men should change their behaviour towards women, and, women should modify their own behaviour.
- (5) Women should take upon themselves the initiative of training more in their career.

SUMMARY

It seemed widely held amongst respondents that women were kept back by prejudice and also by lack of training and the right kind of education. In the case of training, it was implied that they, themselves, shared the blame for inadequacy.

It was also implied that they would improve their lot if they took a more active role in employment relations through the TU route.

MANAGEMENT'S PERCEPTIONS

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MANAGEMENT'S PERCEPTIONS

Management as a cadre have a prime influence on the working lives of themselves and of all of the other employees. They will usually have a set of corporate beliefs which will be their frame of reference but within that they have considerable licence for personal action and interpretation.

Consequently it became of interest to see if <u>as a group</u> their own values were at variance from those of the wider workforce. A number of differences were detected :

- 1. They placed a greater importance on High Salary.
- 2. They placed a higher value on Seniority.
- 3. They had a lower regard for Convenience Factors such as flexitime and handy location.
- 4. They experienced greater Career/Job Fulfilment now.
- 5. They had higher Expectations for their future.
- 6. They had less difficulty controlling the opposite sex.
- 7. They had a stronger preference for mixed sex work groups.
- 8. They believed, more strongly as a group, that men placed more importance on a successful career than did women.
- 9. They believed, more strongly as a group, that women put home and family before career.
- 10. They believed, much more strongly as a group, that men put career before home and family.

SUMMARY

The nature of the answers indicates that the management group of respondents held a number of beliefs more strongly than either their non-management male counterparts or their female colleagues. Consequently, if they used their own values in judging the needs of others they may well form erroneous conclusions. CONCLUSIONS

CONCLUSIONS

The Literature

Many researchers and writers have considered the nature of men's and women's careers, particularly in a society such as ours. This thesis has touched on and quoted from the work of around 100 of those authors and these are summarised into 13 interest areas at Pages 35 and 36. See complete bibliography.

Many of the themes have recurred during this study but not necessarily with the original emphasis.

Occupational Segregation

Hakim³, working from Population Census reports, suggested that legislative action might be necessary to reverse a trend towards vertical segregation, i.e. to counter the situation where senior jobs are occupied by men and junior jobs by women. She also, however, deduced a complementary trend towards less horizontal job segregation by sex, i.e. men and women were penetrating work areas formerly the province of the other sex.

Within AW there has been found to exist both types of segregation, horizontal and vertical, to an extent which can properly be described as profound.

Job penetration by men and by women at AW

Out of a total number of 174 different white-collar jobs men are represented in 164. Women are represented in 66. See Fig. 14. Hence men have a much more diverse choice of job than do women.

To an extent this is influenced by the 3:1 predominence of men in the white-collar workforce. However, even after making the statistical adjustment of removing from consideration all those jobs where there are less than 4 incumbents, there still remains an immense imbalance. There were found to be 125 jobs with more than 3 job holders and of these there were no women in 64. Finally, at single job-type level, of the 125 jobs where there were at least 4 job holders men were fewer than statistically anticipated in 28 and women were fewer than statistically anticipated in 86.

All of this seems to imply that segregation is the rule rather than the exception.

Occupational groupings and segregation

Various writers comment upon the severe absence of one sex, usually women, in various professional disciplines viz Anderson²¹ quotes that only 0.2% members of the Institute of Mechanical Engineers are female.

In order to test for correspondence with such facts the AW jobs were brought together into occupational groupings, e.g. Engineering, Science, Finance and so on; 17 such job collectives emerged. See Fig. 12.

Women were found to be particularly under represented in Engineering and Operations jobs. Men were particularly under represented in Administration, Secretarial and Office Support jobs.

In other areas such as Science and Finance there was an approximate, appropriate balance of the sexes within the total groupings of such jobs but the preponderance of those at senior level were occupied by men. In other words, there was vertical segregation.

Vertical Segregation

There were 61 posts classified as 'Senior Management', all of them occupied by men. Immediately behind the top jobs there are other jobs which are either senior positions within an occupational working group or else a stand-alone senior specialist. Together with the senior management posts they number 302. Anglian Water is in effect run on a day-by-day basis by those job-holders. 300 of them are male and hence only 2 are female. See Fig. 18.

Reasons for job segregation

Novarra¹ attributed the cause of segregation to historical tradition and subsequently social conditioning. Brimelow⁸ deduced that if there was an equal commitment to familial responsibilities by each partner in a marriage then we would see radical change. Harman³⁷ felt that educational bias was a key reason. Others attributed a variety of other factors including male prejudice and different job requirements of the sexes.

At macro or summary level in AW there are a number of broad correlations with the commonly perceived wisdom about what is a man's job and what is a woman's job. Hence the study has shown that men occupy Engineering jobs (718 out of the 774 posts) and Operations jobs (689 out of the 714 posts). In the former there is an emphasis on engineering qualifications and in the latter there is a combination of engineering know-how, sometimes adverse environmental conditions and a requirement to manage male manual workers. The women who have managed to penetrate these job fields are almost entirely occupied at a low grade level.

Conversely of the 217 employees who earn their living at a typewriter or similar terminal, 216 are women. Many of them spend the majority of their day supporting the endeavours of a male boss. In effect they can be described as 'office wives'.

Some areas of this study have made it possible to demonstrate positive rather than 'felt' differences between the men and the women who constitute the workforce. One such area relates to qualifications.

Qualification Levels

Anglian Water might, reasonbly, be described as an extremely qualification conscious organisation. However, job advertisements in the sectors of the press which feature vacancies in water undertakings confirm that the same emphasis is common right across the water industry. Thus, all 30,000 or so white-collar employees operate in such an environment. At AW, of the 2328 male employees, 733 i.e. 31.5% have either an HND, a Degree, a Post Graduate Degree or Professional Membership of an Institute and sometimes 2 or 3 out of these 4. The comparable statistic for female employees is 53 out of 857, i.e. 6.2% - see Fig. 21.

Most advertisements in respect of a job vacancy at grade 6 or above, and there are 1036 such jobs, are likely to ask for such a qualification. As can be inferred from the statistics these qualification demands are usually met. Therefore, in a short list of internal candidates for a senior vacancy, it is much more likely that there will be a man who can satisfy the qualification criterion.

Since a high percentage of vacancies at higher levels are filled from the existing workforce the qualification factor alone may have a powerful influence on the relative participation rates by the sexes, particularly in senior jobs.

The situation is repeated at the next level down, i.e. the senior technician level. These jobs exist in various disciplines, science, accounting and computing and engineering and so on. The qualifications asked for here are at the ONC, OND, HNC and their equivalents level including Part Professional. 538 men, i.e. 23.1% have such a qualification compared with 52, 6.1% of the women. In round terms there are about 400 senior technician jobs for which they can compete.

It is only at the A level and O level qualification strata that women are in the ascendency. Generally speaking, these basic qualifications need to be used as the foundation for higher awards and the possibility of a more senior job at AW. More than 1000 men have been educated beyond 'A' level/ONC etc compared with around 70 women. The extent to which either sex can do this once they are in full-time employment depends on a number of factors. The main route to a degree must still be via full-time education, and soit is likely that most employees so qualified had achieved this status before commencing work. This would not seem to augur well for those members of the workforce who do not have a degree or the equivalent. Hence, from the present workforce women may well stay at a disadvantage.

Age Levels

The contribution to the work by an employee is to an extent conditioned by his or her age. It would not normally be expected, for instance, that a school leaver was capable of making complex corporate decisions. Hence, the age patterns of the male and the female workforces were investigated to see if there were any meaningful differences.

In general the male workforce was found to be noticeably older than the female workforce. 44% of women were aged 30 years or less compared with around 16% of the men.

The corrollary to this is that 44% of the women were very unlikely to be appointed to the 302 top jobs to which reference has already been made. Only 4 of those jobs were filled by a person aged under 31 years. Further of the 248 jobs graded at Grade 10 or above at AW, i.e. paid £14,490 at the time, only 1 was filled by somebody under 31 years of age - he was a man! See Fig. 29.

Thus, another real difference emerged between the attributes of the two parts of the workforce.

Of course, if all the employees stayed on for some long time with AW then, unlike the qualifications aspect, anno domini might to some extent deal with this particular disadvantage.

It therefore became of advantage to study the length of service of the various employee groups.

Length of Service

Information about the length of service spent with an employer or type of enterprise is often taken as an indicator of the experience which will be brought to bear on the work by an employee. The length of service distribution of male and of female employees when studied produced another indication of difference between the sexes. At the time of compiling the statistics, Anglian had been in existence 10 years. 76% of the men had greater than 5 years service compared with 40% of the women.

In attempting to put an inference on the possible effects of this difference and indeed the significance of long, relatively speaking, service - it was interesting to compute that of the top 302 employees only 35 had less than 6 years service with AW.

At the other end of the spectrum almost 20% of female employees had less than 3 years service compared with a figure of 8% of comparable men.

Qualifications, Age and Length of Service

In summary, white-collar men in AW are as a population much better qualified, somewhat older and with noticeably more service years when compared with their female counterpart.

One indication of what this might mean in terms of relative career success can be gained by studying these particular attributes in respect of the 302 top employees in the organisation. See Fig. 30.

Of these, 255 had at least a 2nd class honours degree and/or a professional qualification. 267 of them had between 6 and 10 years service with AW and 190 were aged 41 years or over.

These patterns tend to be repeated at the next level of job down in the hierarchy. See Appendix 1.

It would seem therefore that in general terms being relatively young, having relatively short service and in particular not having proceeded beyond the A level educational stage substantially limits the pay and seniority level attained at any time.

Moreover on the balance of probabilities and in the light of the actual statistical evidence this will result in vertical segregation between the present men and the present women in AW; women tending to occupy the jobs in the lower half of the spectrum.

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Reasons for Diversity between the sexes with regard to Qualifications

One reason could be that there has been educational bias. Harman³⁷ and numerous others make this claim. Coote & Gill³⁸ particularly make the point that whilst there may be no discrimination against girls at university level the fact is that the courses open to them are predetermined by the A levels they possess.

Putting this to the test it is interesting to note that at A level Maths in Summer 1983, there were 45,000 boys successful compared with 19,000 girls. Further, at A level Physics there were 31,000 boys successful compared with 8,000 girls. (Source = Statistics of School Leavers. 1983 DES) There were similar divergences at 0 level. For Chemistry 56,000 boys were successful compared with 36,000 girls.

In the same year at GB universities there were 132,750 males and 94,534 females. Of the males, 27,412 were reading Engineering and Technology compared with 2792 females. Further, 37,219 men were reading Biology and Physical Sciences compared with 18,309 women. (Source = University Stats Vol 1) Most of the intake to the universities in 1983 will now be available to organisations including Anglian Water.

In terms of availability there would be a 10:1 preponderance of male Engineering candidates. There are likely also to be significantly larger male graduate populations in disciplines which lead to good jobs in Science, Computing and Accounting at AW.

Another reason for the relatively few women qualified to the necessary level in these disciplines at AW may be that the lower numbers who are available are either not attracted by the job advertisements or else they are not selected when they do apply.

Job advertisements carry a standard message to the effect that AW is an equal opportunity employer and that all applicants will be judged on their suitability only. The corrollary to this, however, is that there is no positive discrimination practised in favour of female candidates. The selection process is applied right across the organisation in a uniform manner and is largely based on a short list selected from the Application Forms who are then interviewed. On the face of it this process promotes an even-handed treatment. A key point, however, may be that the selection panel is most likely to be all male in composition.

Reasons for Diversity between the sexes with regard to Age

One reason could be that the kinds of jobs which have become the province of women are those which can be learned fairly quickly by young persons. For example, typing is taught in many schools and many youngsters, mostly girls, leave school with elementary competence in the skill. After a further year in practice at work coupled with evening classes they are capable of filling many of the junior jobs as copy typists, clerk typists, terminal operators and the like.

To an extent this kind of segregation becomes self-perpetuating. The girls no doubt become role-models for younger friends and sisters.

Another reason may be associated with career breaks for the purposes of child-bearing and child-rearing. Hakim² demonstrated that the economic activity rate of women was high for the 16-24 years group but thereafter declined for some years before picking up again.

What may well be happening is that young girls are joining in the kind of jobs where they progress over the years from Grade 1 to Grade 2 and sometimes to Grade 3 and then leave. At each step up in the grade their old job is filled by others to the same pattern. Again this would perpetuate the tendency to a relatively young female workforce.

A further reason may be that some of the young women upon marriage in their early 20's leave to take up a family residence geographically convenient for their husband's occupation. With the same result as already described. Coote²² and numerous others have written on such matters. Analysis of the Secretarial and Keyboard Skilled workforce at AW (216 females) shows an interesting pattern. Of the total, 96 are aged up to 28 years, 40 are aged 29 to 38 years, 47 are aged 39 to 48 years, 30 are aged 49 to 58 years and the balance of 3 are in their 60's.

Interestingly the break point where there is a marked decline in their numbers is 27/28 years.

To an extent this pattern might be supporting evidence for the family-break theorists.

Analysis of the Income Assistant workforce at AW (106 females, 36 males) also shows a corresponding picture. 56 females are aged up to 28 years, 14 are aged 29 to 38 years, 25 are aged 39 to 48 years, 9 are aged 49 to 58 years and the remaining 2 are in their 60's.

Similarly, though, 24 of the men are aged up to 28 years, 4 are aged 29 to 38 years and the balance of 6 are older.

This might corroborate the notion that men pass on to better jobs but women pass out of the workforce.

Details of qualifications, ages etc. of these areas of the workforce and others are included at Appendix 1.

Reasons for Diversity between the sexes with regard to Service Years

7.1% of the female workforce is aged 21 years or less and hence cannot have more than 5 years service. The equivalent figure for men is 1.3%.

A further reason is likely to relate to the female career break for family reasons. Of the 80 women who responded to the questionnaire (to be discussed shortly), 58 were married and of these 10 had at least one child aged less than 14 years. If these statistics held true for the entire female workforce, then 72.5% of the 857 women, i.e. 621 are married, and of these 17.24%, i.e. 107 have at least one child aged less than 14 years. It seems likely therefore that most of them will have had a recent career break.

Relative Pay Levels of the sexes

The extent of vertical segregation whereby women are so underrepresented in the senior jobs spectrum is reflected in the salary distributions.

At the date of analysis there were 759 jobs which paid upwards of £10,500 (note: this is about half way up the normal grading structure). Of these, 733 were filled by men and 26 were filled by women. In other words, 31.5% of all the men had achieved this pay level compared with 3% of all the women.

If that comparatively modest pay level is an indicator of success, then in AW men as a group are 10 times as successful as women. (See Figs. 26 and 27.)

Men's and Women's Job/Career Requirements and Life Goals

At the conclusion of the literature search it became desirable to create a focus for the development of the research. This focus took the forum of 3 Propositions. These were :

- <u>Proposition 1</u>. Men and women have different job aims and different life goals.
- <u>Proposition 2</u>. Some jobs include duties and responsibilities which have the effect of making them unattractive to one of the sexes.
- <u>Proposition 3</u>. Men and women experience different levels of career fulfilment from each other.

These propositions were tested by a questionnaire process.

Job/Career Requirements of the sexes

One very positive result which emerged from the research is that there is a very high measure of correspondence between the main job/career aims of the sexes; See Figs. 42 and 43. Both sets of employees overwhelmingly wanted Interesting Work, Job Security, A Good Employer and Development Opportunity. This finding corroborates the work of Hay⁴¹ and perhaps more since that work only related to men and women in management.

It was after this first set of characteristics that men and women at AW differed from each other in terms of order of priority. Women gave more importance than did men to Working with People they Liked. This mirrors a finding of Hennig & Jardim⁴³.

Men gave greater higher importance to High Salary and Status.

Men's and Women's sense of Job Satisfaction/Career Fulfilment at AW

Another very positive result which emerged is that the female employees felt very much less satisfied about both their present and their future likely fulfilment than did the males.

Both sexes were responding to questions about :

The degree to which their work was interesting.
The opportunity they received for gaining experience and training.
Their salary level vis-a-vis their abilities.
Their seniority level vis-a-vis their personal abilities.

They were also asked 'Are you likely to get most of what you want out of a job whilst working here?'

By and large the men were happy on all counts. The women, however, were distinctly unhappy as a total group in respect of present seniority level and of their likely prospects for their future at AW. (See Fig. 45) This finding correlates with their occupational status within the organisation.

As a consequence of this piece of analysis a part of Proposition 1 is shown to be invalid, i.e. Men and Women do <u>not</u> have different job aims - at least not in the generality. Conversely, Proposition 3 is shown to be well-founded - men and women at AW <u>do</u> experience different levels of career fulfilment from each other.

Each Sex has an Imperfect appreciation of the Others Job Needs

The female respondents views about the males job needs gave a very exaggerated importance to the salary aspect. The reality is that above all, men want an interesting career with continuing scope for development in a secure and responsible environment.

Males underestimated the value that the females placed on job security with a good company. The men appeared to believe that as long as the women had interesting and well-paid work then that would largely meet their requirements. The reality is that their wishes are mostly similar to men's.

Things like Flexitime, convenient location and straightforward hours of work are appreciated by both sexes, but come well down the list of priorities with them both when specifying the things which are important.

Job Duties and Responsibilities

Many jobs are occupied by a predominence of one sex. In addition to the reasons for this already developed in these conclusions, there were suspected to be other factors.

Being in Charge of People

There are hundreds of jobs where the duties include supervising others in AW. The supervisor may be unable to influence which sex the group members are drawn from. Responsibility is recognised by awarding a higher pay grade to the supervisor. If, therefore, one sex finds this responsibility more irksome than does the other then that sex would tend to become the minority in such jobs. In answer to a question about this, men expressed noticeably greater confidence about their abilities to control colleagues of the opposite sex.

76.3% of all male respondents replied to the effect that they would have no difficulty. The corresponding figure for female respondents was 58.8%.

Putting this the other way around; if asked such a question at interview then 2 out of 5 women would express doubts about their ability in this area, compared with 1 out of 4 men.

This could be an important contributing factor towards the general paucity of women in supervisory and management jobs. Certainly if they did either express or raise such doubts they would be unlikely to be appointed. 1

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Preferred Gender of Colleages

Another reason for some jobs or occupational groups being predominently the province of one sex might be that potential job candidates are practising some gender preference. In other words, if an employee had such a preference then he or she might exercise it by applying or not for a job within a group which either conformed or not with one's specific inclination.

On the other hand, from an employer's point of view, it would seem that the most flexible employee attitude about choice of workmates would be the easiest to accommodate.

Hennig & Jardim⁴³ surveyed 3000 women and 1000 men in business and found that women found it difficult to work with people they did not like. Men by contrast learned to tolerate one another to a great extent and to work effectively with people they may dislike.

As part of this AW study people were asked their choice of gender of working group colleagues. The options they were offered were :

- 1. Prefer all same as me
- 2. Prefer mixed group
- 3. Prefer all opposite from me.
- 4. Don't mind at all.

The results show quite clearly that men are noticeably more flexible in this particular respect than are women. 57.6% of men had no preference (Option 4) compared with 41.3% of women, i.e. around 3 out of 5 men compared with 2 out of 5 women had no preference to declare.

An interesting point which emerged was that the 42.5% of men who had a preference indicated that a mixed group was their choice. 55% of women shared the same wish. This would appear to indicate that a sizeable portion of the men who work in Engineering and in Operations do not work in, from their point of view, an ideally composed group.

Finally, not one respondent expressed a desire to work in a group comprised entirely from their own sex.

Thus from all of the preceding it can be seen that this aspect does not appear to be a contributing factor to job segregation by sex.

Why are there Few Women in Engineering or Operations?

Male respondents believed it was primarily because of Educational Bias, Social Conditioning and, to a lesser extent, Low Female Interest in and Low Aptitude for the work.

Women hold the same views but also suspect Prejudice is an important factor. See Fig. 61.

Why are there No Male Secretaries or Typists in AW?

Overwhelmingly the answer from both sexes was Social Conditioning. Behind this come a variety of opinions/views including Educational Bias, Low Career Prospects, Low Money and Low status. See Fig. 62. All of this plus noticeably less confidence on the part of women to supervise men might be said to <u>uphold</u> Proposition No 2, 'Some jobs include duties and responsibilities which have the effect of making them unattractive to one of the sexes.'

Do Men and Women have Different Life Goals?

Heinen's⁴² research showed that women have similar achievement needs to men. Those needs however were felt to be channelled into socially acceptable directions.

Popular folk-lore or sexual stereotyping has produced a number of social caricatures depicting 'men' and depicting 'women' applying their energies towards differing priorities in life. These priorities may be apportioned between such things as Careers, Partners, Families, Hobbies/Interests and, perhaps overall, Happiness. An endeavour has been made to measure the strength of such feelings of a sample of men and women in AW's workforce.

Men Regard a Successful Career as more Important than do Women?

83.8% of male respondents believed that men placed higher regard on a successful career than did women. Moreover 67.5% of female respondents shared this view.

A corollary of this is that it may be widely held in AW that a man will take his job more seriously than will a woman.

If these statistics extrapolated to the entire white-collar workforce then 2441 of the 3185 would believe that it is so.

This could be an important reason for men more often being selected to fill important jobs.

Women put Home and Family before Career?

Hiller and Philliber⁴⁸ found that 52% of women at the top in the USA were single compared with 4% of men. 61% were childless compared with 3% of men. Can we infer from this that it is familial responsibility which holds women back in their career?.

In AW, in this study, 91.3% of male respondents believed that women put home and family before career. 77.5% of female respondents shared this view. Extrapolating these results to the entire white-collar workforce could mean that 2688 of the 3185 (i.e. 84.4%) believe that for the average woman, career at work takes second place to home and family.

This belief, or fact(?), could influence women when faced with a career decision and it could influence a job selection panel when faced with candidates from each sex.

Men put Career before Home and Family?

47.5% of male respondents and 48.8% of female respondents believed that men put career before family and home. This means in total terms that the 48.15% who believe it are in the minority - albeit a narrow minority.

If we infer that the balance of 51.85% believe that men put home and family before career then this figure is an interesting comparison with the 84.4% who believe (from Question 25) that women put home and family before career. C

Perhaps the most significant statistic to emerge from this question is the fact that 65% of the Management respondents believed that men put career before home and family. (See Fig. 65). Further since 100% of the Management group believed that women put home and family before career, then it would seem that this group has a more extreme view of the female career/family dichotomy than the average employee.

A Satisfactory Partner at Home is Life's Top Priority?

NALGO⁸³ the white-collar trade union has taken an active interest in combating sexual stereotyping, particularly where it is to the disadvantage of women. One piece of popular folklore is that women use the workforce to find a partner and that the male/female relation-ship for them assumes a more dominant place in life than does their career. Further, that their male colleagues do not experience this priority to the same extent. Interestingly, 73.8% of men agreed that

a satisfactory partner at home is life's top priority. The comparative figure for women was 66.3%.

If the comparative percentages are indicative of the effort and thought expended by each sex in the matter of a partner then this would seem to debunk the stereotype.

It is quite Important to have an Absorbing Hobby or Interest outside of Work?

Anderson²¹ opined that society demands that boys are brought up expecting to compete in order to support themselves and their family. Heinen⁴² spoke of women's needs being channelled into socially acceptable directions. It might be that the consequences of this kind of conditioning were the devotion of the majority of men's efforts towards a career and, conversely, a major part of women's effort being directed towards more social interests.

However, 91.3% of male respondents subscribed to the importance of some absorbing alternative outside of work. 80.0% of female respondents felt likewise.

Whether or not the support for the concept is actually carried through into some practical realisation is beyond the scope of this study. Nevertheless, it would appear that men recognise and subscribe to a more diverse lifestyle - they are not, on average, overridingly career-aholics!

All in All Happiness is the Best Measure of Success?

This question was included in an attempt to gain some measure of the extent to which either sex took a philosophical view of life. It might have been thought that women might rationalise career frustration by coming to regard a career as just one of many facets of life. Men on the other hand might have had less need for such value compensations.

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What emerged was that 92.5% of the males subscribed to the happiness overview compared with 90.0% of the females.

Bearing in mind that almost 4 out of 5 male respondents are satisfied with their careers at AW (See Fig. 44), compared with around 3 out of 5 female respondents, the result of posing the question is to raise more questions.

For example, if most of AW men are happy with their career and if their career is a major part of their life, then they might experience happiness and consequently subscribe to its importance?

What <u>can</u> be said about the respondents' answers is that there is not much difference between the expressed views of the sexes on this topic.

As a consequence of the responses to Questions 24-29 of the questionnaire, it would appear that Proposition No 1 is invalid. Men and women do <u>not</u> have different job aims and they do <u>not</u> have different life goals.

Both sexes want fulfilment in their job/career. Both place a high value on a partner a home and a family. Both feel the importance of an alternative interest outside of the job - an element of diversity in life? Both subscribe to wider abstract values such as happiness.

The principal difference of emphasis between them relates to the priority afforded to career as opposed to home and family.

Both men and women recognise the commitment that women make (have to make?) to their domestic role. Brimelow⁸ made a major theme of this.

Reasons then for the Different Career Patterns of the Sexes

Respondents were asked, finally, to state their views of the reasons for career differences. One of the subsets of the male sample was Management; hence their views are also recorded as a discrete group. Additionally, a sample of Trade Union representatives completed a special questionnaire on this and consequently their views, too, are available for analysis.

Men's Explanations for the Different Career Patterns of the Sexes

Men's principal explanations were 'Social Conditioning', 'Family Commitments', 'Male/Female Differences', 'Prejudice', 'Physical Differences' and 'Educational Bias'. (See Fig. 70)

The first 2 reasons were much more strongly held than the others.

This outlook reinforced the male response to the earlier question on women putting home and family before career.

It is interesting to note that only a handful of men were so specific as to isolate child-bearing as a career interrupter for women; especially since, on the face of it, of all the reasons given this is the only one which is not amenable to change and hence the only one which is an 'essential' alternative to career activities. Possibly this is a further manifestation of social conditioning!

Women's Explanations for the Different Career Patterns of the Sexes

Women's principal explanations were 'Social Conditioning, 'Male/Female Differences', 'Educational Bias', 'Family Commitments' and 'Prejudice'. The first 2 reasons were rather more strongly expressed than the others.

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It is interesting that after Social Conditioning, both the order and the magnitude of reasons varies from the men's views. Women attributed a significant portion of the explanation to 'Male Domination' (see Fig. 70. More of them (twice as many as the men) also identified 'Educational Bias' as having an effect.

'Family Commitments' was somewhat lower in the table than the men's response. To an extent this might be said to correlate with the answers to Question 25, 'Women put home and family before career?'. 91.3% of men agreed, compared with 77.5% of women, i.e. whilst both sexes subscribe to the view - women subscribe to it somewhat less.

Management's Explanations for the Different Career Patterns of the Sexes

Management's principal explanations were 'Social Conditioning', 'Family Commitments', 'Male/Female Differences', 'Educational Bias' and 'Physical Differences'. The first 3 reasons were more frequently cited than the others. Broadly speaking, their response matched that of the male respondents taken as a total group.

Trade Union Representatives' Explanations for the Difference Career Patterns of the Sexes

Trade Union Representatives' principal explanations were 'Male/ Employer Prejudice', 'Educational Bias' and 'Career Breaks'. The first 2 reasons being expressed more frequently.

The elevation in importance of 'Male/Employer Prejudice' is clearly an alternative perception from that held by the male and female respondents to the general questionnaire. Possibly this reflects, in part, the adversarial role of a TU representative. On the other hand, all of them represented NALGO a trade union which devotes considerable effort to highlighting social issues.

Anglian Water within the context of the Public Sector

Anglian Water <u>is</u> very typical of the 10 water authorities in England and Wales. It is <u>probably</u> very typical of many other public utilities in the UK.

Work in such enterprises is often arranged into administrative groups referred to as Directorates, e.g. Finance Directorate. Such directorates are based on specific professional disciplines. This practice tends to produce occupation structures which resemble those which exist at AW.

Consequently, it seems likely that these research findings would be widely mirrored in any similar study at such an enterprise.

The Propositions which formed the focus of this research

At the conclusion of the literature search, 3 Propositions were developed and subsequently investigated.

The outcome of the work has produced a measure of correlation with these and also of some refutation of them as follows :

Proposition 1 Men and women have <u>different</u> job aims and different life goals.

- Findings Both sexes desire the same things from a career. Further, there was a strong degree of similarity in terms of life goals. In respect of the latter, however, there was a difference of emphasis. Both sexes strongly agreed that women put home and family before career.
- <u>Proposition 2</u> Some jobs include duties and responsibilities which have the effect of making them unattractive to one of the sexes.
- Findings This was found to be true and the major factors appear to be social conditioning, educational bias, physical differences and family commitments. Many of AW's jobs require a qualification in a subject which does not seem popular with women. These findings offer wide support to the work of many of the writers quoted in the literature search.
- **Proposition 3** Men and women experience different levels of career fulfilment from each other.
- FindingsThis was found to be true. Men at AW feel much more
satisfied with their career and their future
prospects than do their female counterparts.Men's careers are, on the evidence found, much more
likely to lead to a senior and hence well-paid job
than are women's.

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In Summary

Women want satisfying, rewarding and on-going career prospects just as do their male counterparts. They do not achieve them to anything like the same extent.

As a population, within the organisation, they have achieved a much smaller job penetration both in terms of choice of occupation and of level of seniority.

In general, this situation is strongly related to qualification level, age and length of service. Men, as a population, are better qualified, older and have longer service.

This situation, in part at least, appears to derive from social conditioning which is also related to educational bias and women's biological and societal role.

The organisational structure of AW assumes that most employees will operate to a standard set of conditions of service. Those in respect of hours of work and holidays may not match very well with some of the demands related to women's family role.

Summary of the Main Points arising in these Conclusions

- Men have established a very much wider choice of job participation than have women at AW.
- 2. Job segregation by sex is very widespread indeed, both vertically and horizontally.
- 3. Almost all of the responsible and well-paid jobs are held by men.
- 4. There is an immense imbalance, between the sexes, in the matter of qualifications men as a group are much better qualified.
- 5. Many senior jobs require a degree or the equivalent in a numerate or scientific subject. There are fewer females in the UK so qualified.
- 6. Once at work, full-time, it is <u>comparatively</u> difficult to improve personal qualifications.
- 7. The female workforce is <u>comparatively</u> young compared with its male counterpart.
- 8. The female workforce has shorter service with AW than its male counterpart.
- 9. If high pay is an indicator of success then the men as a group are 10 times as successful as the AW women.
- 10. Both sexes desire the same things from a career. They both seek interesting work, job security, a good employer and development opportunity. A high percentage of the men believe they get these at AW. The percentage of women whose career aims are met or largely met is much smaller.

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- 11. Some jobs include duties and responsibilities which have the effect of making them unattractive to one or other of the sexes. This seems to mainly arise from social conditioning, educational bias and prejudice. These phenonema are widely recognised by the workforce.
- 12. Women appear to have stronger preferences in the choice of workmates and lower confidence in their ability to supervise the opposite sex, than do men.

- 13. Men do not fully understand women's job and life priorities and the relative degrees of importance of the various facets. Likewise women do not understand men's requirements.
- 14. The job selection process is male-dominated.
- 15. Both sexes have a broadly comparable view of the effects on women's careers of familial responsibility.
- 16. Both sexes believe that men place more importance than do women on careers - this may lead to the view that women will take their job responsibilities less seriously.
- 17. Both sexes strongly agree that women put home and family before career.
- A sizeable minority, 48.15%, believed that men put career before home and family.
- 19. Both sexes place a high value on having a partner at home men expressed this even more strongly than women.
- 20. Both sexes subscribed to the importance of an absorbing interest outside of work.

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- 21. Both sexes appear to hold philosophical overviews of life certainly in respect of abstract values such as happiness.
- 22. Management as a respondent group frequently recorded views which were at or near the extreme values of the responses.
- 23. Trade Unions believe that women are doing comparatively badly because of prejudice, educational bias and family commitments.

APPENDICES

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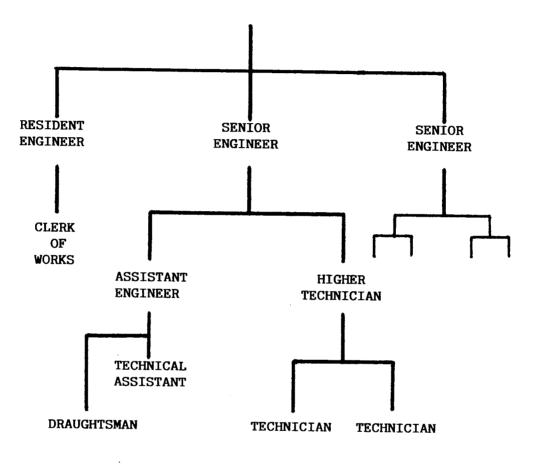
APPENDIX NO. 1

This section contains details about all white-collar employees, excepting the 302 who occupy the management and specialist posts listed at Fig. 18. These are shown separately in Appendix 2.

The data relates to Occupation, Grade, Qualification Level, Age and Length of Service. It is summarised according to the Occupational Groupings listed at Fig. 12.

There are also Family Tree sheets showing a typical hierarchical relationship between the various posts within the groupings.

TYPICAL ENGINEERING HIERARCHY

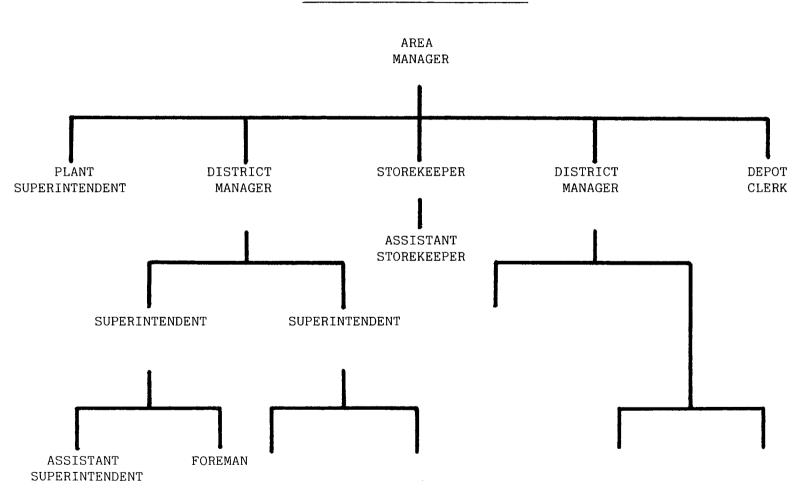


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PRINCIPAL ENGINEER

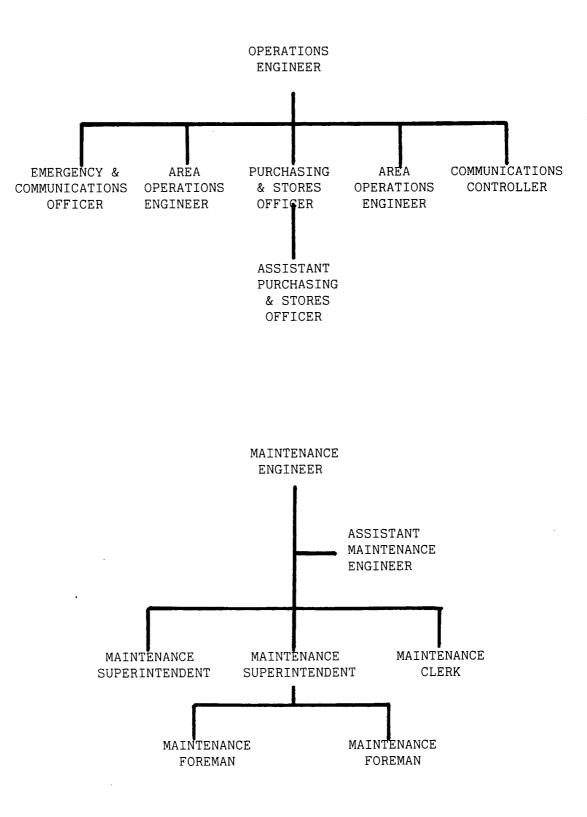
ENGINEERING WORKFORCE

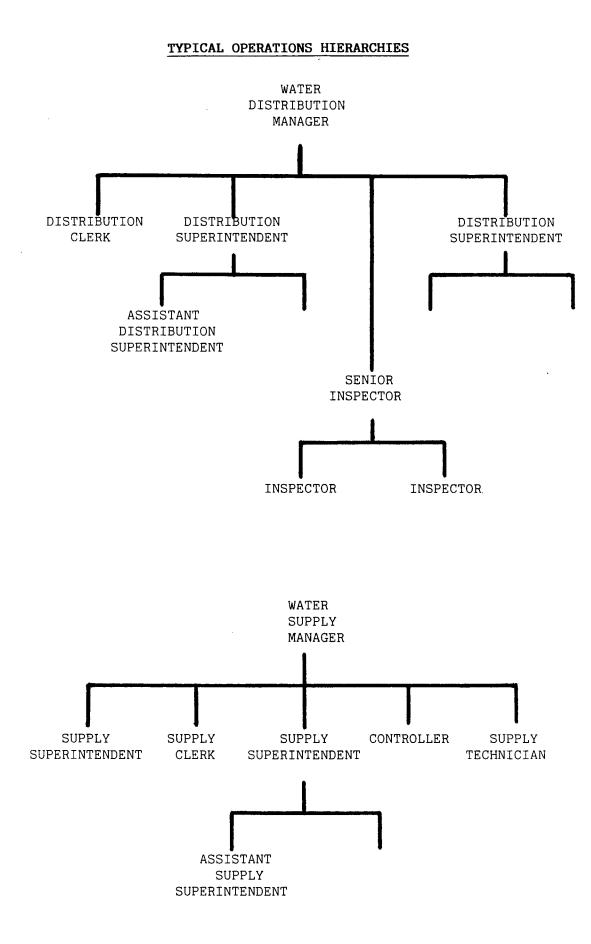
Job Title		Men	Womer	n <u>Total</u>	Total Numbers in each Grade (Women Numbers in brackets)
Principal Engine	er	63 +	0	= 63	1x8, 21x9, 24x10, 7x11, 10x12
Senior Engineer		131	1	132	7x6, 47x7, 54x8, 24x9 (1x8)
Assistant Engine	er	77	6	83	3x3, 9x4, 26x5, 44x6, 1x7 (2x4)(2x5) (2x6)
Higher Technicia	n	116	0	116	1x4, 64x5, 42x6, 9x7
Technician		196	30	226	21x1, 41x2, 88x3, 66x4, 10x5 (5x1)(10x2) (9x3) (6x4)
Technical Assist	ant	61	11	72	11x1, 23x2, 22x3, 14x4, 2x5 (5x1) (4x2) (2x3)
Draughtsman		6	8	14	9x1, 4x2, 1x4 (6x1)(2x2)
Senior Resident	Eng.	12	0	12	6x8, 6x9
Resident Enginee	r	25	0	25	8x6, 17x7
Clerk of the Wor	ks	31	0	31	2 x3, 11x4, 18x 5
	Totals	718	56	774	
Qualifications	Men	Wor	nen	Grade	Men Women
Professional	161	1		JNC	
Post Graduate	14		2	13	10
1st Class Hons. 2nd Class Hons.	2 41	1	5	12 11	10 7
				10	24
3rd Class Hons. HND	20 14	-	L	9	51
Pass Degree	13			8	60 1
HNC/TEC-H/BEC-H	147		1	7	74
OND	11			6	9 9 2
ONC/TEC/BEC	81	9	5	5	118 2
C&G-C/1/2/3	27		•	4	94 8
GCE 'A' Levels	11		4	3	104 11
GCE 'O' Levels Trade Certificat	60		15	2 1	52 16 25 16
RSAs	e 12			T	25 16
CSE	4	:	3		
None	100	10			
				LOS	
<u>Age (Years)</u>	Men	<u> </u>	Vomen	(Years)	Men Women
61-65	22			6-10	5 46 26 ·
51-60	100		5	5	48 12
41-50	178		9	4	35 2
31-40	260		13	3 2	26 6 17 2
21-30	149		24	1	17 2 46 8
16-20	9		5		



TYPICAL OPERATIONS HIERARCHY

TYPICAL OPERATIONS HIERARCHIES





OPERATIONS WORKFORCE - SHEET ONE

Job Title	Men		Women	<u>Total</u>	Total Numbers in each Grade (Women Numbers in brackets
Area Manager	41	+	0 =	= 41	4x9, 15x10, 21x11, 1x12
District Manager	79		0	79	21x7, 50x8, 8x9
Superintendent	113		0	113	1x3, 5x4, 87x5, 20x6
Assistant Superintender	it 46		0	46	43x4, 3x5
Foreman	10		0	10	1x3, 9x4
			•		
Plant Supervisor	9		0	9	7x2, 2x3
Storekeeper	13		0	13	1x1, 9x2, 3x3
Assistant Storekeeper	2		0	2	2 x 1
Depot Clerk	10		11	21	4x1, 6x2, (9x1) (2x2)
Operations Engineer	16		0	16	1x8, 7x9, 7x10, 1x11
Area Ops. Engineer	11		0	11	2x6, 4x7, 5x8
Purchasing & Stores Off	. 9		1	10	4x5, 4x7, 1x8 (1x9)
Ass. Purch. & Stores Of	f. 5		3	8	4x3, 1x4 (3x3)
Emergency & Comms.Off.	4		0	4	4x6
Comms. Controller	38		3	41	9x1, 25x2, 4x3 (3x1)
			_		
	406		18	424	

.

OPERATIONS WORKFORCE - SHEET TWO

Job Title	<u>Men</u>		Women	Total	Total Numbers in each Grade (Women Numbers in brackets)
Water Distrib. Man.	2	+	0	= 2	2 x8
Distrib. Superint.	32		0	32	5x4, 19x5, 8x6
Assist. Distrib. Super.	6		0	6	6x4
Distribution Clerk	2		2	4	2x1 (2x1)
Senior Inspector	17		0	17	17x4
Inspector	90		1	91	1x1, 3x2, 83x3, 3x4 (1x5)
Water Supply Manager	7		0	7	3x7, 2x8, 2x9
Supply Superintendent	, 24		0	24	5x4, 17x5, 2x6
Assist. Supply Super.	24 8		0	24 8	4x3, 4x4
Assist. Supply Super.	0		Ŭ	0	4x3, 4x4
Supply Technician	2		0	2	2 x4
Supply Clerk	1		. 1	2	1x2, (1x1)
Controller	12		1	13	4x1, 8x2 (1x2)
Maintenance Engineer	15		0	15	1x6, 3x7, 9x8, 2x9
Assist. Maint. Eng.	3		0	3	3x7
Maintenance Super.	49		0	49	1x4, 29x5, 19x6
Maintenance Foreman	9		0	9	9x4
Maintenance Clerk	4		2	6	3x1, 1x2 (1x1), (1x2)
			_		
	283		7	2 90	
C/F from Sheet 1	406		18	424	
	68 9		25	714	

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OPERATIONS WORKFORCE - SHEET THREE

Qualifications	Men	Women	Grade	Men	Women
Professional	92	1	1	26	16
Post Graduate	2		2	60	4
1st Class Hons.	1		3	102	3
2nd Class Hons.	6	1	4	110	
3rd Class Hons.	4		5	159	1
HND	4		6	56	
Pass Degree	6		7	38	
HNC/TEC-H/BEC-H	77		8	70	
OND	1		9	23	1
ONC/TEC/BEC	47		10	22	
C&G-C/1/2/3	75		11	. 22	
GCE 'A' levels	1		12	1	
GCE 'O' levels	34	8			
Trade Certificate	47			68 9	25
RSA3					
RSA2		2			
RSA1					
ĊSE	9	2			
None Given	283	11			
	6 89	25			
			LOS		
Age (Years)	Men	Women	(Years)	Men	Women
16–20		1	1	15	3
21-30	33	2	2	8	1
31-40	204	7	3	12	6
41-50	208	8	4	22	1
51-60	202	7	5	29	1
61-65	42		6-10	603	13

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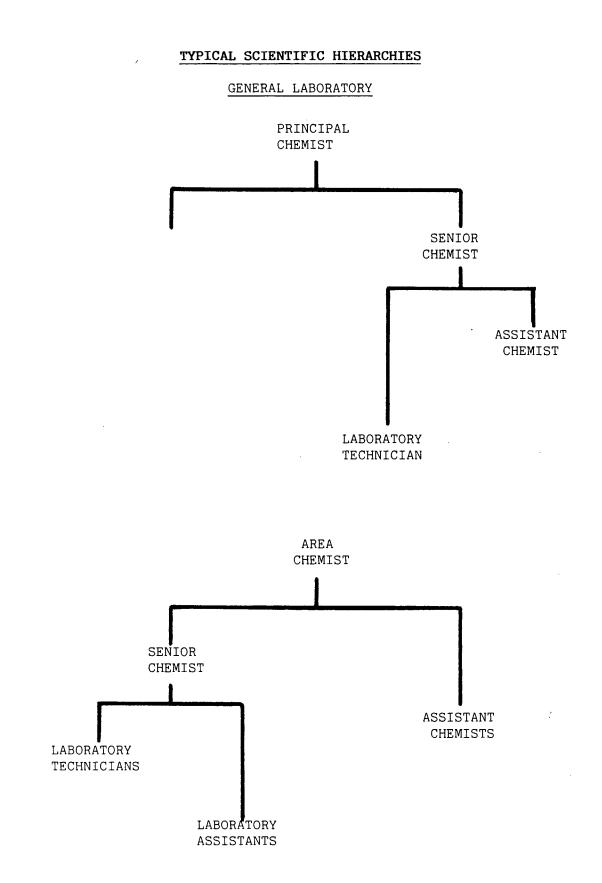
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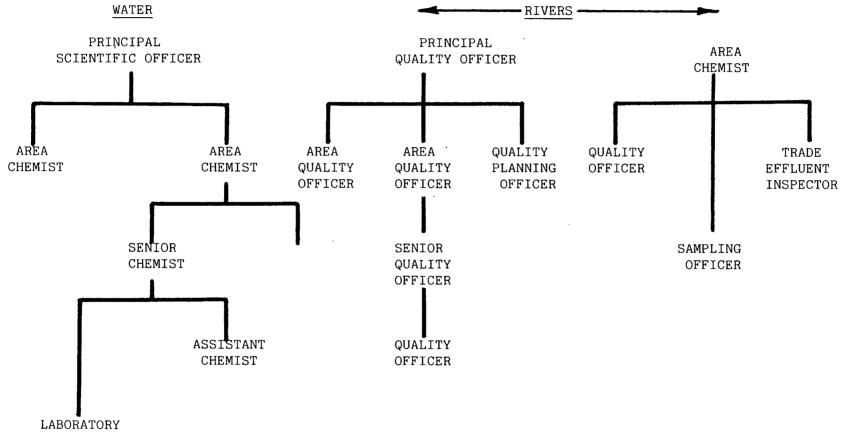
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TYPICAL SCIENTIFIC HIERARCHIES



TECHNICIAN

SCIENTIFIC WORKFORCE - SHEET ONE

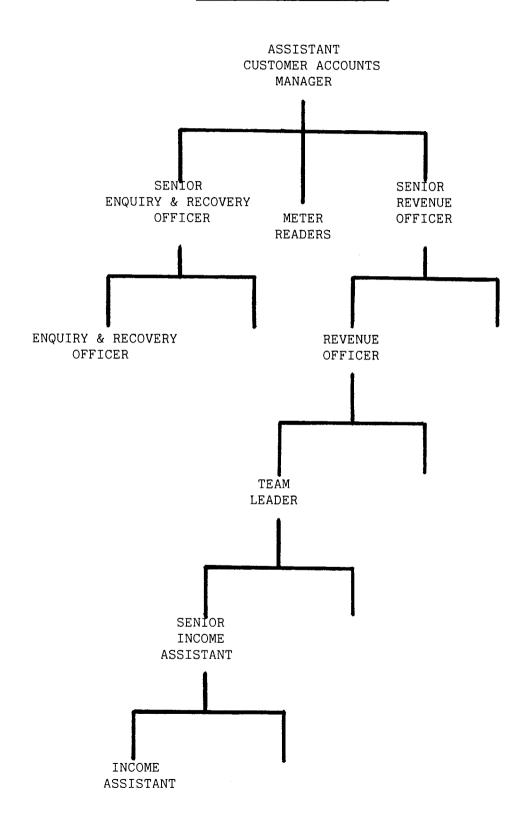
Job Title	Men	Women	<u>Total</u>	Total Numbers in Grade (Women Numbers in brackets)
Prin. Scientific. Off.	10	+ 0 =	10	7x9, 3x10
Principal Chemist	5	0	5	1x9, 4x10
Area Chemist	11	3	14	3x7, 7x8, 1x9 (1x6) (2x8)
Senior Chemist	2 9	1	30	5x5, 22x6, 2x8 (1x5)
Assistant Chemist	36	10	46	1x2, 5x3, 26x4, 4x5 (1x2), (3x3), (5x4), (1x5)
Laboratory Technician	35	43	78	9x1, 17x2, 9x3, (20x1), (18x2), (4x3), (1x4)
Laboratory Assistant	2	6	8	1x1, 1x2, (5x1), (1x2)
Princ. Water Qual. Off.	9	0	9	2x9, 3x10, 4x12
Area Water Qual. Off.	8	0	8	6x6, 2x8
Sen. Water Qual.Off.	6	0	6	6x8
Water Quality Officer	26	2	28	18 x4, 7 x6, 1x7 (2x4)
Effluent Inspector	27	1	28	2x4, 14x5, 9x6, 2x7 (1x5)
Sampling Officer	5	0	5	5x2
Biologist	8	о	8	1x5, 7x6
Assistant Biologist	4	1	5	1x3, 3x4 (1x4)
Fish Diseases Scientist	5 6	0	6	4x6, 2x7
Assist. Fish Dis. Sci.	3	0	3	3x5
Fisheries Assistant	19	0	19	14x2, 5x3
Microbiologist	5	0	≠ 5	5 x6
Hydrogeologist	4	1	5	3x6, 1x7 (1x7)
Hydrologist	4	2	6	3x6, 1x7 (1x6), (1x7)
	<u> </u>	_		
	262	70	332	

SCIENTIFIC WORKFORCE - SHEET TWO

Qualifications	Men	Women	Grad	le <u>Men</u>	Women
Professional	43	3	1	10	25
Post Graduate	26	3	2	38	20
lst Class Hons.	3		З	20	7
2nd Class Hons.	29	8	4	49	9
3rd Class Hons.	10	2	5	27	3
HND	5		6	66	2
Pass Degree	16	3	7	10	2
HNC/TEC-H/BEC-H	50	8	8	17	2
OND	2		9	11	
ONC/TEC/BEC	15	9	10	10	
C&G-C/1/2/3	1		11		
GCE 'A' levels	7	16	12	4	
GCE '0' levels	17	9			_
CSE	1			262	70
None Given	37	9			
	262	70			

Age(Years)	Men	Women	LOS (Years)	Men	Women
16-20	1	6	1	18	11
21-30	79	44	2	4	. 7
31-40	119	9	3	11	5
41-50	45	7	4	11	4
51-60	13	3	5	18	15
61-65	5	1	6-10	200	28
					—
	262	70		262	70

TYPICAL INCOME HIERARCHY



INCOME WORKFORCE

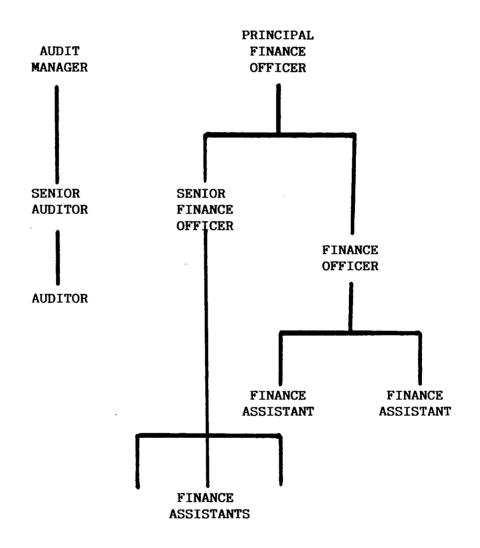
					Totol Num	hong in coch	Crada
Job Title		Men	Womer	n <u>Total</u>		bers in each ers in brack	
Ass. Customer Acc	. Manager	3 +	0	= 3	(1x10) (2	x11)	
Senior Revenue Of	ficer	10	3	13	3x7 (3x7) (7x	8)	
Revenue Officer		7	2	9	2x5 (6x5) (1x	.6)	
Team Leader		9	24	33	16x2, 3x3 (5x2)(2x3		
Sen. Income Assis	tant	6	5	11	2x3, 3x4 (5x3) (1x	4)	
Income Assistant		36	106	143	77x1, 26x (22x1)(13		
Sen. Enquiry & Re	covery Of	f. 7	0	7	(7x3)		
Enquiry & Reçover	y Officer	26	3	29	3x2 (26x2)		
Meter Reader		4	0	4	(4x2)		
	Totals	108	143	251			
Qualifications Professional Post Graduate 1st Class Hons. 2nd Class Hons.	Men 5	<u>Women</u> 1		<u>Grade</u> JNC 13 12 11	<u>Men</u> 2	Women	
3rd Class Hons. HND		2		10 9	1		
Pass Degree HNC/TEC-H/BEC-H OND	2 3 1	1 1		8 7	7 3	3	
ONC/TEC/BEC	10	7		6 5	1 7	2	
C&G-C/1/2/3	1	,		4	3	8	
GCE 'A' Levels	15	10		3	14	8	
GCE 'O' Levels Trade Certifcate	41	74		2	4 8 22	45 77	
RSAs	1	2		T	22	//	
CSE None	.29	14 31					
				LOS			
Age (Years)	Men	Women	-	(Years)	Men	Women	
61-65 51-60	1 26	2 13		6-10	43	36	
51-60 41-50	20 15	25		5	17	39	

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17 11 23 14 17 14 4 3 2 1 41-50 31-40 7 21-30 16-20

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TYPICAL FINANCE HIERARCHY



FINANCE WORKFORCE

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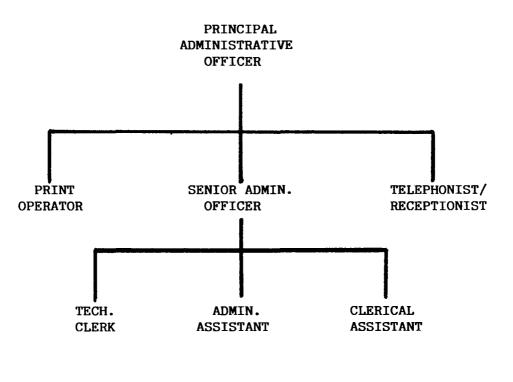
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16-20

Job Title	Men	Women	<u>Total</u>	<u>Total Numbers in each Grade</u> (Women Numbers in brackets)
Principal Finance Officers	28 +	1 =	29	13x9, 5x10, 10x12 (1x9)
Senior Finance Officers	32	2	34	8x6, 11x7, 10x8, 1x9, 1x10, 1x11 (1x7) (1x9)
Finance Officers	9	0	9	9x6
Finance Assistants	72	80	152	16x1, 15x2, 7x3, 17x4, 13x5, 4x6 (17x1)(38x2)(11x3)(5x4) (9x5)
Audit Managers	3	0	3	3x11
Senior Auditors	10	0	10	5x7, 2x8, 3x10
Auditor	1	0	1	1x4
Totals	155	83	238	

Qualifications	Men	Women	Grade	Men	Women
Professional	44	3	JNC		
Post Graduate			13		
1st Class Hons.			12	10	
2nd Class Hons.	1	1	11	4	
3rd Class Hons.	1		10	9	
HND	1		9	14	2
Pass Degree	1		8	12	
HNC/TEC-H/BEC-H	15		7	16	1
OND			6	21	
ONC/TEC/BEC	17	7	5	13	9
C&G-C/1/2/3				10	c
GCE 'A' Levels	18	13	4 3	18 7	5 11
GCE 'O' Levels	33	27	2	15	38
Trade Certificate	33	27	1	16	17
RSAs	2	4	*	10	17
	-				
CSE		5			
None	22	23			
			LOS		
Age (years)	Men	Women	(Years)	Men	Women
61-65	1	_	6-10	103	40
51-60	22	5	5	14	15
41-50	36	16	4	13	11
31-40	64	20	3	4	7
21-30	25	34	2	5	1
			1	16	9

TYPICAL ADMINISTRATION HIERARCHY



TYPICAL OFFICE-SUPPORT HIERARCHY

OFFICE MANAGER



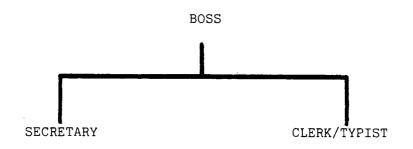
ADMINISTRATION WORKFORCE

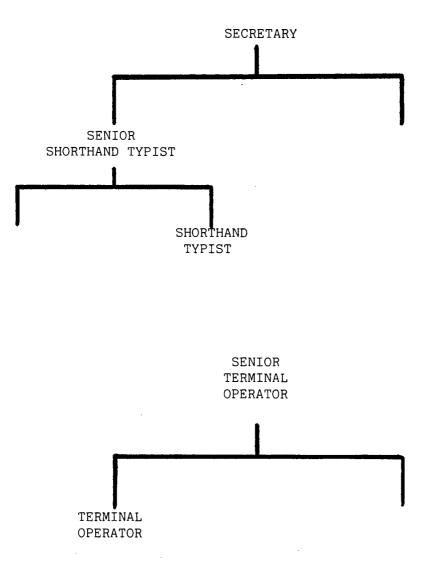
Job Title	Men		Women]	<u>lotal</u>	Total Numbers in each Grade (Women Numbers in brackets)
Principal Admin. Off.	9	+	0	=	9	4x9, 4x10, 1x11
Senior Admin. Off.	23		2		25	4x5, 9x6, 7x7, 3x8 (1x6), (1x7)
Admin. Assistant	23		41		64	2x2, 5x3, 7x4, 5x5, 4x6, (11x1), (4x2), (14x3), (11x4), (1x5)
Clerical Assistant	13		63		76	6x1, 6x2, 1x3 (42x1), (21x2)
Technical Clerk	3		16		19	1x2, 2x4 (16x2)
Telephonist/Recept'ist	0		26		26	(25x1), (1x2)
Print Operator	0		4		· 4	(3x1) $(1x2)$
	—					
	71		152		223	

Qualifications	Men	Women	Grade	Men	Women
Professional	11		1	6	81
Post Graduate	2		2	9	43
1st Class Hons.			3	6	14
2nd Class Hons.			4	9	11
3rd Class Hons.	2	1	5	9	1
HND			6	13	1
Pass Degree		1	7	7	1
HNC/TEC-H/BEC-H	10	2	8	3	
OND			9	4	
ONC/TEC/BEC	10	1	10	4	
C&G_C/1/2/3	1	4	11	1	
GCE 'A! Levels	7	7	12		
GCE 'O' Levels	13	45	13		
Trade Certificate					
RSA3		4			
RSA2		4		71	152
RSA1		6			
CSE	1	11			
None Given	14	66			
	71	152			

			LOS		
Age(Years)	Men	Women	(Years)	Men	Women
16–20	1	5	1	2	12
21-30	8	44	2	3	5
31-40	17	37	3	4	10
41-50	23	44	4	1	19
51-60	20	21	5	6	27
61–65	2	1	6-10	55	79
	71	152		71	152







SECRETARIAL, KEYBOARD-SKILLS BASED WORKFORCE

Job Title	Men	Women	<u>Total</u>	<u>Total Numbers in each Grade</u> (Men Numbers in brackets)
Secretary	+	44 =	44	3x1, 31x2, 9x3, 1x5
Senior Shorthand Typist		6	6	5x2, 1x3
Shorthand Typist		61	61	56x1, 5x2
Clerk Typist		74	74	73x1, 1x2
Senior Terminal Operator		7	7	7x2
Terminal Operator	1	24	25	24x1 (1x1)
Totals	1	216	217	

Qualifications	Men	Women	Grade	Men	Women
Professional Post Graduate 1st Class Hons. 2nd Class Hons.			JNC 13 12 11		
3rd Class Hons. HND Pass Degree HNC/TEC-H/BEC-H OND		1	10 9 8 7 6		
ONC/TEC/BEC C&G-C/1/2/3 GCE 'A' Levels		2 2 11	5 4 3		1 10
GCE 'O' Levels Trade Certificate RSAs	1	97 27	2 1	1	49 156
CSE None		18 58			
			LOS		
<u>Age (Years)</u>	Men	Women	(Years)	Men	Women
61–65			6-10		8 9
51-60 41-50		28 44	5 4	1	27 26
31-40		42	3		16
21-30	1	79	2 1		15 43
10.00					

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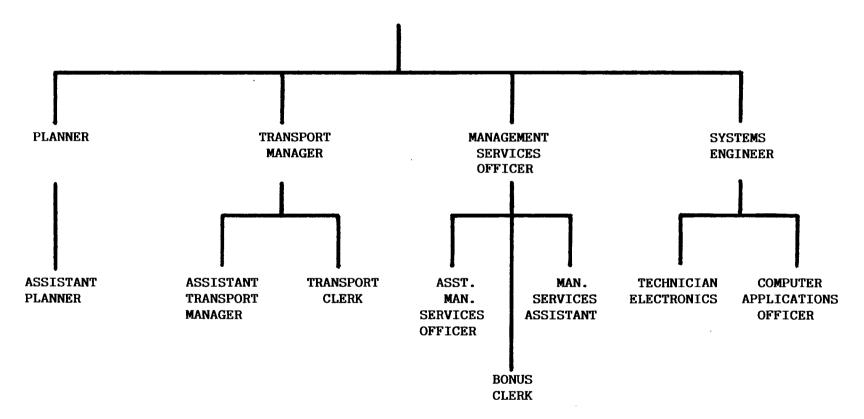
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16-20

TYPICAL TECHNICAL SERVICES HIERARCHY

TECHNICAL SERVICES OFFICER



TECHNICAL SERVICES WORKFORCE

Job Title	M	len	Women	Total			n each Grade in brackets)
Tech. Services Off Systems Engineer Comp.Application O Tech. Electronics		5 + 5 3 9	0 0 0	= 5 [^] 5 3 9	2x10, 3x 5x10 3x8 1x3, 8x4		
Planner Assistant Planner		12 3	1 2	13 5			, 4x12, (1x8) (1x5), (1x7)
Man. Services Off. Assist.Man.Service Man. Services Assi Bonus Clerk	s Off.	11 8 27 2	1 2 3 3	12 10 30 5	7x7, 1x8	9, 4x10, 3, (1x4) 4, 13x5, L)	, (1x5)
Transport Manager Assist.Trans. Mana Transport Clerk	ger	5 7 1 	0 2	5 7 3	4x7, 1x8 5x5, 2x6 1x1, (2)	5	
Qualifications	Men	98 Wom	14 en	112	Grade	Men	Women
		<u></u>	<u></u>				
Professional Post Graduate 1st Class Hons.	33 7	:	3		1 2 3	3 7	3 2 3
2nd Class Hons. 3rd Class Hons. HND	2		1 1		4 5 6	16 19 3	1 2
Pass De gree HNC/TEC-H/BEC-H	4		1		7 8	16	1 2
OND	13		L		9	6 3	2
ONC/TEC/BEC C&G-C/1/2/3	12 1	:	1		10 11	13 8	
GCE 'A' levels	T				12	4	
GCE '0' levels	10	:	2		13		
Trade Certificate RSA3	1					98	14
RSA2			1				14
RSA1 CSE							
None Given	15		4				
	98	1	4		LOS		
Age(Years)	Men	Wom	en		(Years)	Men	Women
16-20 21-30 31-40 41-50 51-60 61-65	8 30 36 20 4 		6 2 5 1 -		1 2 3 4 5 6-10	6 3 6 75 	$ \begin{array}{c} 1\\ 1\\ 4\\ 7\\ -14 \end{array} $

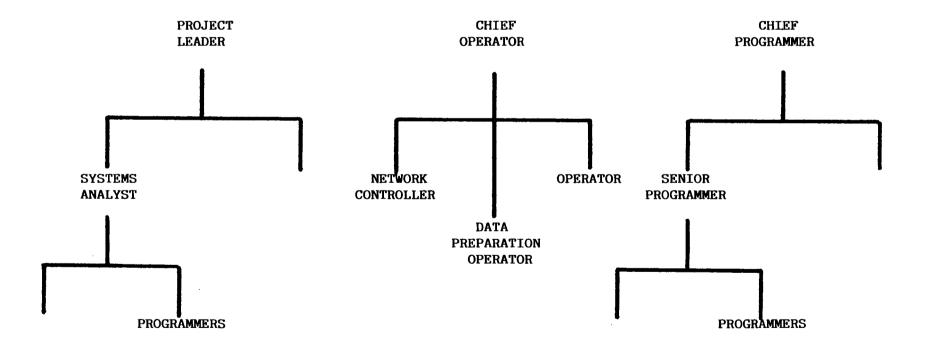
OFFICE-SUPPORT WORKFORCE

Job Title		Men	Women	Total	Total Numbers in each Grade (Men Numbers in brackets)
Canteen Assistant	5	0 +	18 =	18	18 ×1
Caretaker		10	0	10	(10x1)
Cleaner		1	40	41	40x1 (1x1)
Courier		3	0	3	(3x1)
	Totals	14	58		

Qualifications	Men	Women	Grade	Men	Women
Professional Post Graduate 1st Class Hons. 2nd Class Hons.			JNC 13 12 11		
3rd Class Hons.			10		
HND Pass Degree HNC/TEC-H/BEC-H OND		1	9 8 7		
ONC/TEC/BEC			6 5		
C&G-C/1/2/3 GCE 'A' Levels	1	1	4		
GCE 'O' Levels	2	1	2		
Trade Certificate RS As		1	1	14	58
CSE	1				
None	10	54			
			LOS		
°Age (Years)	Men	Women	(Years)	Men	Women
61-65	1	7	6-10	7	36
51-60	4	17	5	2	5
41-50	6	14	4	1	4
31-40	3	19	3	2	6
21-30		1	2 1		4 3
16-20			-		-

TYPICAL COMPUTER SERVICES HIERARCHY

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COMPUTER SERVICES WORKFORCE

Job Title		Men	Wome	n <u>Total</u>	the second s	umbers in e Numbers in	
Project Leader		7 +	0	= 7	7 x 10		
Systems Analyst		9	3	12	2 x7, 2 x (1x7)(1	8, 5x9 x8)(1x9)	
Chief Programmer		1	0	1	1 x9		
Senior Programmer	•	5	0	5	3x7, 2x	9	
Computer Programm	ler	11	2	13	4x3, 1x (2x3)	4, 6x6	
Network Controlle	r	2	0	2	2 x 7		
Chief Operator		2	0	2	2 x8		
Computer Operator		12	9	21	9x3, 2x (6x1)(2	5, 1x6 x2)(1x6)	
Data Preparation	Operator	0	2	2	2 x1		
	Totals	49	16	65			
Qualifications	Men	Women		Grade	Men	Women	
Professional Post Graduate 1st Class Hons.	2 2			JNC 13 12			
2nd Class Hons.	4			11 10	7		
3rd Class Hons. HND	2			9	8	1	
Pass Degree HNC/TEC-H/BEC-H OND	2			8 7	4 7	1 1	
ONC/TEC/BEC	4			6 5	7 2	1	
C&G-C/1/2/3	1			4	1		
GCE 'A' Levels	10	4		3	13	2	
GCE 'O' Levels Trade Certificate		4		2 1		2 8	
RSAs	1	•					
CSE None	9	2 6					
Age_(Years)	Men	Women		LOS (Years)	Men	Women	
Age (lears)	Men	women		(10415)	Men	women	
61-65	1			6-10	21	6	
51-60 41-50	1 7	5		5	10	2	
31-40	21	5		4 3	3 5	3 1	
21-30	19	5		2	2	3 3	
16-20	1	1		1	8	ۍ	

OUTDOOR/PHYSICAL JOBS WORKFORCE

Title	Men	Women
Bailiff Fitter	15	
Forester	6 1	
Driver Lock/Sluice Keeper	3 6	3
Plant Operator	9	
		-
-	40	3

<u>Total</u> <u>43</u>

Qualifications	Men	Women	Grade	Men	Women
Professional			1	14	3
Post Graduate			2	22	
1st Class Hons.			3	1	
2nd Class Hons.	•		4	2	
3rd Class Hons.			5	1	
HND Bass Desmaa			6 7		
Pass Degree HNC/TEC-H/BEC-H			8		
OND		-	9		
ONC/TEC/BEC			10		
C&G-C/1/2/3			11		
GCE 'A' levels			12		
GCE 'O' levels	3		13		
Trade Certificate	2				
RSA3					-
RSA2				40	3
RSA1					
CSE					
None Given	35	3			
	—	-			
	40	3			

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Age(Years)	Men	Women	LOS (Years)	Men	Women
16-20			1	2	
21-30	1	1	2	·	
31-40	11		3	2	1
41-50	14	1	4	4	
51-60	10	1	5		
61–65	4		6-10	32	2
		-			-
	40	3		40	3

PERSONNEL WORKFORCE

Job Title		Men	Women	<u>Total</u>	Total Numbers in each Grade (Women Numbers in brackets)
Personnel Officer		9 +	0 =	9	2x9, 1x10, 5x11, 1x13
Ass. Personnel Off	icer	5	2	7	2x7, 2x8, 1x9 (1x7)(1x8)
Personnel Assistan	it	2	8	10	1x4, 1x6 (4x3)(1x4)(2x5)(1x6)
Safety Adviser		5	0	5	4x5, 1x6
	Totals	21	10	31	

Qualifications	Men	Women	Grade	Men	Women
Professional Post Graduate 1st Class Hons.	6	3	JNC 13 12	1	
2nd Class Hons.		1	11	5	
3rd Class Hons.	1		10	1	
HND	2		9	3	
Pass Degree	2		8	2	1
HNC/TEC-H/BEC-H OND	4	1	7	2	1
	_		6	2	1
ONC/TEC/BEC	2		5	4	2
C&G-C/1/2/3 GCE 'A' Levels			4	1	1
GCT A FEASIS			3		4
GCE 'O' Levels	3	5	2		
Trade Certificate RS As			1		
CSE					
None	1				

Age (Years)	Men	Women	LOS (Years)	Men	Women
61-65			6-10	13	5
51-60	. 3	1	5	1	2.
41-50	5	1	4	1	
31-40	11	5	3		
21-30	2	3	2	6	2
16-20			T	6	3

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ESTATES, RECREATION AND CONSERVATION WORKFORCE

Job Title	Men	Women	<u>Total</u>	Total Numbers in each Grade
Estates Surveyor	5 +	0 =	5	5x10
Ass. Estates Surveyor	6	0	6	1x3, 1x5, 4x8
Recreation & Conservation Off	£5	0	5	1x6, 3x7, 1x8
		_		
Totals	16	0	16	

•

Qualifications	Men	Women	Grade	Men	Women
Professional Post Graduate 1st Class Hons.	9		JNC 13 12		
2nd Class Hons. 3rd Class Hons.	1 1		11 10	5	
HND Pass Degree HNC/TEC-H/BEC-H	1		9 8 7	5 3	
OND ONC/TEC/BEC			6 5	1 1	
C&G-C/1/2/3 GCE 'A' Levels	2		4 3	1	
GCE 'O' Levels Trade Certificate RSAs	1		2 1		
CSE None	1			·	

Age (Years)	Men	Women	LOS (Years)	Men	Women
61-65			6-10	14	
51-60	6		5	1	
41-50	2		4	1	
31-40	8		3	1	
21-30			2		
21-00			1		
16-20					

LEGAL WORKFORCE

Job Title		Men	Women	<u>Total</u>	Total Numbers in each Grade (Women Numbers in brackets)
Solicitor		4 +	0 =	4	4x11
Assistant Solici	tor	2	1	3	2x8 (1x8)
Legal Assistant		4	2	6	3x4, 1x7 (1x2)(1x4)
	Totals	10	3	 13	

Qualifications	Men	Women	Grade	Men	Women
Professional	6		JNC		
Post Graduate			13		
1st Class Hons.		1	12		
2nd Class Hons.	2	1	11	4	
3rd Class Hons.			10		
HND		•	9		
Pass Degree			8	2	1
HNC/TEC-H/BEC-H OND	2		7	1	
			6		
ONC/TEC/BEC C&G-C/1/2/3			5		
GCE 'A' Levels			4	3	1
GOL A LEVEIS			3		
GCE 'O' Levels			2		1
Trade Certificate			1		
RSAs		1			
CSE					

None

Age (Years)	Men	Women	LOS (Years)	Men	Women
		<u></u>	a a construction of the second se		
61-65			6-10	6	1
51-60	1		E		
41-50	3	1	5		•
	-	-	4	1	1
31-40	· 4	2	3	1	
21-30	0		2		
21=30	2		1	2	1
16-20				-	-

PUBLIC RELATIONS WORKFORCE

Job Title	Men	Women	Total	Total Numbers in each Grade (Men Numbers in brackets)
Public Relations Officer	3 +	4 =	7	3x8, 1x9 (1x7)(1x8)(1x9)
Ass. Public Relations Off.	3	3	6	3x5 (1x2)(2x5)
Totals	6	7	13	

Qualifications	Men	Women	Grade	Men	Women
Professional		1	JNC		
Post Graduate			13		
1st Class Hons.			12		
2nd Class Hons.		1	11		
3rd Class Hons.			10		
HND			9	1	1
Pass Degree			8	1	3
HNC/TEC-H/BEC-H		1	7	1	
OND			6		
ONC/TEC/BEC	1		5	2	3
C&G-C/1/2/3	-			-	9
GCE 'A' Levels	1	2	4		
	-	-	3	_	
GCE 'O' Levels	3	1	2	1	
Trade certificate RS As			1		
CSE					
None	1	1			
			LOS		

2

Age (Years)	Men	Women	(Years)	Men	Women
61-65			6-10	3	5
51-60 41-50	1	1	5	2	
31-40	3	2	4 3	1	1
21-30	1	4	2	-	
16-20			Ŧ		T

APPENDIX NO.2.

This section contains details about the 302 employees who occupy the posts, listed at Fig.18 that run Anglian Water on a day-by-day basis - they are sequenced in the same order.

The data relates to Occupation, Grade, Qualification level, Age and Length of Service.

SENIOR MANAGEMENT WORKFORCE - SHEET ONE

Title Men Women Authority Secretary 1 Chief Engineer - Capital 1 Chief Engineer - Policy 1 Chief Financial Administrator 1 Chief Information Officer 1 Chief Manpower Adviser 1 Chief Estates and Recreation Officer 1 Chief Executive 1 Chief Planner 1 Chief Scientist 1 Chief Solicitor 1 Chief Accountant 1 Chief Fisheries Adviser 1 1 Customer Accounts Manager Director 2 Development Manager (Computing) 1 Divisional General Manager 5 Divisional Technical Manager 5 Divisional Finance Manager 5 Divisional Operations Manager (Water) 4 Divisional Operations Manager (River) 5 Divisional Operations Manager (Sewage) 5 Head of Computer Services 1 Head of Management Services 1 Head of Performance 1 Middleware Manager (Computing) 1 New Works Engineer 6 Scientist 5

Total

0

61

SENIOR MANAGEMENT WORKFORCE SHEET TWO

Quals	Men	Women	Grades	Men	Women
Professional Post Graduate 2nd Class Hons 3rd Class Hons Pass Degree	51 2 3 1 2	·	1 2 3 4 5		
GCE 'A' levels GCE 'O' levels	1 1		6 7 8		
	61		9 10		
			11 12 13	13 1	
			JNC	47	
				61	

<u>Age(Years)</u>	Men	Women	LOS(Years)	Men	Women
31-40	17		1	1	
41-50	26		2	2	
51-60	16		3	2	
61-65	2		4	3	
			5		
			6-10	53	
	61				. <u></u>
				61	

PRINCIPAL ENGINEER

Quals Professional Post Graduate 1st Class Hons. 2nd Class Hons. HNC/TEC-H/BEC-H ONC/TEC/BEC	<u>Men</u> 52 3 1 2 4 1	<u>Women</u>	<u>Grades</u> 8 9 10 11 12	<u>Men</u> 1 21 24 7 10	<u>Women</u>
	63	0		63	0
<u>Age(Years)</u> 31-40 41-50 51-60 61-65	<u>Men</u> 19 32 10 2	<u>Women</u>	Los(Years) 1 2 3 4	<u>Men</u> 1 1	Women
	63	0	5 6 - 10	1 60	
	00	Ŭ	0-10		0
		OPERATION	IS ENGINEER		

Men <u>Quals</u> Women Grades Women Men Professional 11 8 1 2nd Class Hons. 3 9 7 3rd Class Hons. 7 1 10 ONC/TEC/BEC 1 11 1 _ 0 16 16 0 Age(Years) 31-40 Women Men LOS(Years) Men Women 11 5 1 41-50 4 6-10 15 51-60 1 _____ 16 0 _ 0 16

AREA MANAGER

<u>Quals</u> Professional	<u>Men</u> 31	Women	Grades 9	Men 4	Women
Pass Degree	1		10	15	
HNC/TEC-H/BEC-H	5		11	21	
GCE 'O' level	2		12	1	
None Given	2				
	—			41	0
	41	0			
Age(Years)	Men	Women	LOS(Years)	Men	Women
31-40	12		3	1	
41-50	18		4	2	
51-60	11		5	2	
			6–10	36	
	41	0			
				41	0

PRINCIPAL CHEMIST

- 1

<u>Quals</u> Professional Post Graduate	<u>Men</u> 4 1	Women	Grades 9 10	<u>Men</u> 1 4	Women
	<u> </u>	<u> </u>			
	5	0		5	0
Age(Years) 31-40	Men 2	Women	$\frac{\text{LOS(Years)}}{6-10}$	Men 5	Women
41-50	3	•			
				5	0
	5	0			

PRINCIPAL SCIENTIFIC OFFICER

Quals Professional Post Graduate 2nd Class Hons.	<u>Men</u> 7 1 2	Women	Grades 9 10	<u>Men</u> 7 3	Women
	10	0		10	0
<u>Age(Years)</u> 31-40 41-50 51-60	<u>Men</u> 4 5 1	<u>Women</u>	$\frac{\text{LOS(Years)}}{6-10}$	<u>Men</u> 10 10	<u>Women</u>
	10	0			

PRINCIPAL WATER QUALITY OFFICER

<u>Quals</u> Professional Post Graduate None Given	<u>Men</u> 6 2 1	Women	<u>Grades</u> 9 10 12	<u>Men</u> 2 3 4	Women
					
	9	0		9	0.
Age(Years) 31-40	Men 2	Women	$\frac{\text{LOS(Years})}{6-10}$	Men 9	Women
41-50	7				
				9	0
	9	0			

.

ASSISTANT CUSTOMER ACCOUNTS MANAGER

<u>Quals</u> Professional GCE 'O' level	<u>Men</u> 2 1	Women	Grades 10 11	<u>Men</u> 1 2	Women
	3	0		3	0
Age(Years) 31-40	Men 1	Women	$\frac{\text{LOS(Years)}}{6-10}$	Men 3	Women
41-50	1			<u> </u>	
51-60	3			3	0

PRINCIPAL FINANCE OFFICER

Quals	Men	Women	Grades	Men	Women
Professional	23	1	9	13	1
HNC/TEC-H/BEC-H	3		10	5	
GCE 'A' level	1		11		
GCE '0' level	1		12	10	
					
	28	1		. 28	1
Age(Years)	Men	Women	LOS(Years)	Men	Women
Age(Years) 21-30	Men	Women 1	LOS(Years) 1	Men 2	Women
	<u>Men</u> 17	Women 1	LOS(Years) 1 2	Men 2	<u>Women</u>
21-30		Women 1	1	Men 2	Women
21-30 31-40	17	<u>Women</u> 1	1 2	<u>Men</u> 2	Women
21-30 31-40 41-50	17 10	Women 1	1 2 3		<u>Women</u> 1
21-30 31-40 41-50	17 10	<u>Women</u> 1 1	1 2 3 4		<u>Women</u> 1

PRINCIPAL ADMINISTRATIVE OFFICER

28

1

Quals Professional Post Graduate HNC/TEC-H/BEC-H ONC/TEC/BEC GCE 'A' level None Given	Men 3 1 2 1 1 1 9	Women 0	<u>Grades</u> 9 10 11	<u>Men</u> 4 1 9	<u>Women</u>
<u>Age(Years)</u> 31-40 41-50 51-60	<u>Men</u> 3 3 9	Women 0	LOS(Years) 2 3 4 5 6-10	<u>Men</u> 1 7 	Women 0

PERSONNEL OFFICER

.

Quals Professional Pass Degree HNC/TEC-H/BEC-H GCE 'O' level	Men 5 2 1 1 9	Women 0	Grades 9 10 11 12 13	<u>Men</u> 2 1 5 1 	Women
<u>Age(Years)</u> 31-40 41-50 51-60	<u>Men</u> 6 1 2 9	Women O	LOS(Years) 1 2 3 4 5 6-10	<u>Men</u> 3 1 4 9	Women 0

ESTATES SURVEYOR

<u>Quals</u> Professional	Men 5	Women	$\frac{\text{Grades}}{10}$	Men 5	Women
	5	0		5	0
Age(Years) 31-40	$\frac{\text{Men}}{1}$	Women	$\frac{\text{LOS(Years)}}{6-10}$	Men 5	Women
41-50	1				
51-60	3		•	5	0
	5	0			

SOLICITOR

<u>Quals</u> Professional 2nd Class Hons.	$\frac{\text{Men}}{3}$	Women	$\frac{\text{Grades}}{11}$	Men 4	Women
ZHU CIASS HORS.	1			4	0
				4	0
	4	0			
Age(Years) 21-30 31-40 41-50	<u>Men</u> 1 2 1	Women	LOS(Years) 3 4 5	Men 1	Women
		<u> </u>	6-10	3	
	4	0			
				4	0

TECHNICAL SERVICES OFFICER

Quals Professional Pass Degree HNC/TEC-H/BEC-H Age(Years)	<u>Men</u> 1 <u>1</u> 5 <u>Men</u>	Women O Women	Grades 10 11 LOS(Years)	Men 2 3 5 Men	Women O Women
41–50 51–60	2 3 5	O SYSTEMS ENGINEER	4 5 6–10	1 4 5	0
<u>Quals</u> Professional HNC/TEC-H/BEC-H	<u>Men</u> 3 2 5	<u>Women</u> 	Grades 10	<u>Men</u> 5 5	Women 0
Age(Years) 31-40 41-50 51-60	<u>Men</u> 2 1 5	Women 0	LOS(Years) 6-10	<u>Men</u> 5 5	Women 0
		PLANNER			
<u>Quals</u> Professional Post Graduate 2nd Class Hons.	<u>Men</u> 8 3 <u>1</u> 12	<u>Women</u> 1 1	<u>Grades</u> 8 9 10 11 12	<u>Men</u> 2 5 <u>4</u> 12	Women 1
<u>Age(Years)</u> 31-40 41-50 51-60	<u>Men</u> 7 <u>1</u> 12	<u>Women</u> 1 1	LOS(Years) 1 2 3 4 5 6-10	Men 1 1 9 12	<u>Women</u> 11
	PRO	DJECT LEADER (COMPU	UTING)		
Quals Professional Post Graduate 2nd Class Hons. HND GCE 'A' level GCE 'O' level	<u>Men</u> 1 2 1 1 - 7	<u>Women</u>	Grades 10	Men 7 7	Women O
<u>Age (Years)</u> 31-40 41-50	<u>Men</u> 4 3 7	<u>Women</u> 	LOS(Years) 6-10	Men 7 7	Women 0

HQ SPECIALISTS WORKFORCE - SHEET ONE

Title	Men	Women
Civil Defence Officer	1	
Coordinator, Research and Laboratories	1	
Librarian		1
Insurance Officer	1	
Principal Economist	1	
Principal Productivity Officer	1	
Principal Recreation Officer	1	
Regional Fisheries Scientist	1	
Safety and Emergency Planning Officer	1	
Superannuation Officer	1	
	9	1

Total

10 —

HQ SPECIALISTS WORKFORCE - SHEET TWO

Quals	Men	Women	Grades	Men	Women
Professional Post Graduate GCE 'O' level None given	4 2 1 2 9	1	1 2 3 4 5 6 7 8 9 10 11 12 13	1 1 5 2	1
				9	1
Age (Yeens)	Men	Women	LOS (Vears)	Men	Women

<u>Age(Years)</u>	Men	Women	LOS(Years)	Men	Women
31-40	2	1	1	1	
41-50	4		2		
51-60	2		3		
61-65	1		4		
			5	1	
	<u></u>		6-10	7	1
	9	1			
				a	1

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APPENDIX NO.3

This section contains details of the 41 female employees who hold a Group One level Qualification i.e. have either Professional membership or a Post Graduate, 1st Class or 2nd Class Honours degree - or some combination of these.

The data relates to Occupation, Grade, Qualification level, Age and Length of Service.

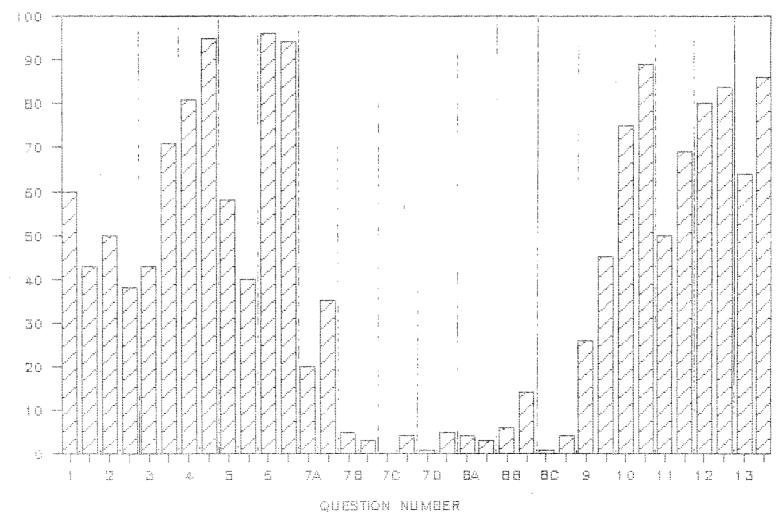
41 BEST-QUALIFIED WOMEN

Professional

Grade	Title	Age (<u>Years</u>)	LOS (<u>Years</u>)
9 9 8 8 7 6 5	Principal Finance Officer Senior Finance Officer Purchasing Officer Area Chemist Assistant Personnel Officer Public Relations Officer Hydrologist Assistant Engineer Personnel Assistant Personnel Assistant	30 33 38 31 37 41 33 33 28	5 7 1 9 6 9 10 8 10 5
4 2 Post (Assistant Chemist Finance Assistant Graduate Degree	31 41	4 6
8 8 7 6 6 5 1	Management Services Officer Planner Senior Engineer Assistant Planner Hydrologist Assistant Engineer Senior Chemist Laboratory Technician	30 31 34 28 33 27 30 34	3 6 5 5 2 6 10
<u>1st C</u> 4	Lass Hons. Degree Legal Assistant	36	6
2nd C	lass Hons. Degree		
9 8 7 7 6 5 5 5 4 4 4 4 2 2 1 1 1 1 1 1	Public Relations Officer Assistant Solicitor Assistant Personnel Officer Hydrogeologist Area Chemist Effluent Inspector Finance Assistant Assistant Management Services Officer Assistant Engineer Technician Technician Assistant Chemist Assistant Biologist Laboratory Technician Laboratory Technician Technician Technician Technician Income Assistant	30 32 30 32 25 28 25 24 27 27 26 24 25 25 38 23 45 23	4 1 6 9 1 1 1 1 3 5 7 1 2 1 6 1 5 1 1

APPENDIX NO. 4

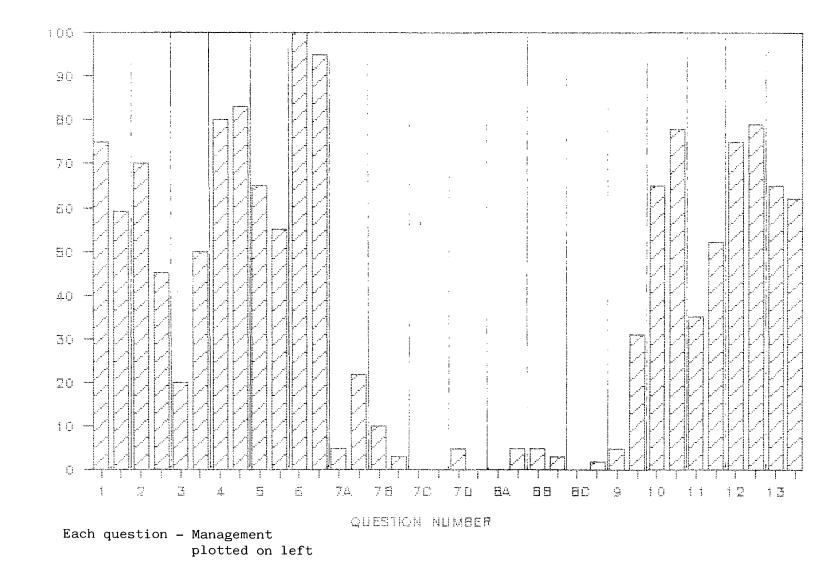
This section contains histograms indicating the response levels and answers given to Questions 1 - 13, 14 - 18, 19, 20 and 24 - 29. The histograms are compiled in such a way as to facilitate comparisons between peer groups and also between contrast groups.



CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'ALL MEN' VERSUS 'ALL WOMEN'

PERCENTAGE

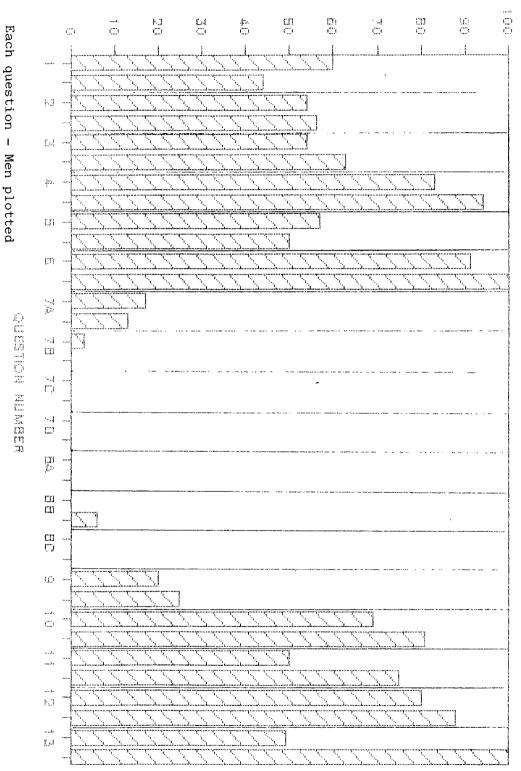
Each question - Men plotted on left



<u>CAREER/JOB AIMS</u> - 'TOP PRIORITY' + 'VERY IMPORTANT' 'MANAGEMENT' VERSUS 'NON-MANAGEMENT MEN'

PERCENTAGE

PERCENTAGE

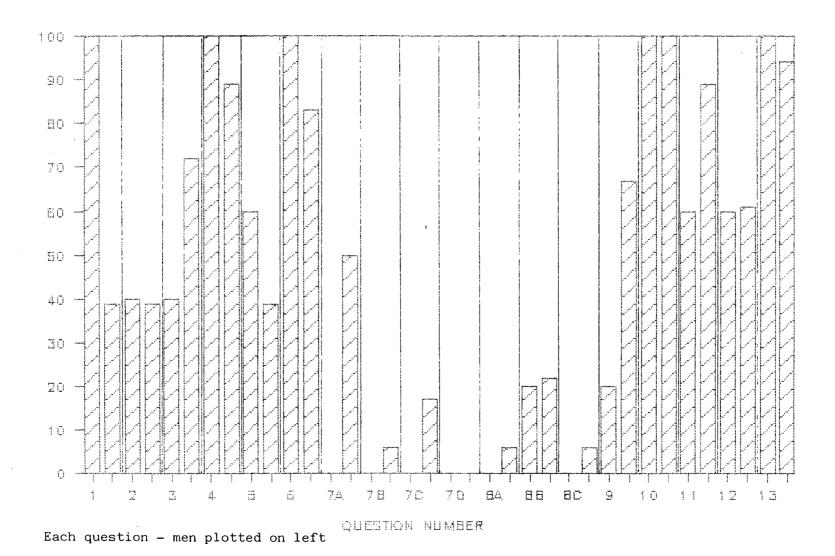


CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'SENIOR MEN' VERSUS 'SENIOR WOMEN'

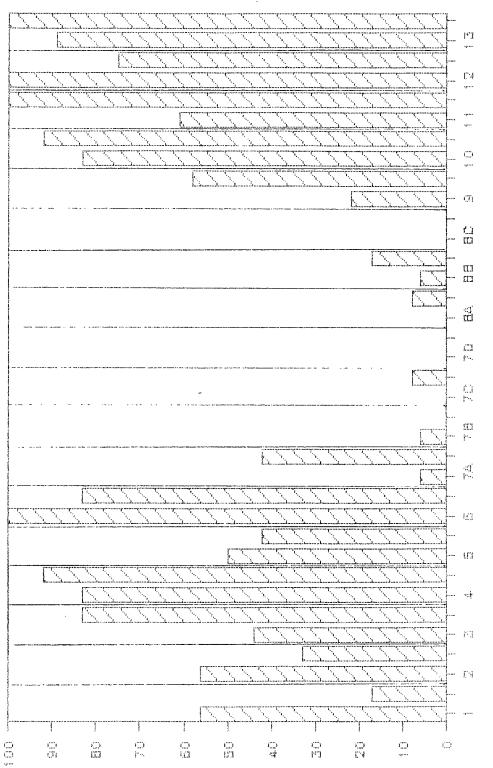
cu que

Men plotted on left





<u>CAREER/JOB AIMS</u> - 'TOP PRIORITY' + 'VERY IMPORTANT' 'JUNIOR MEN' VERSUS 'JUNIOR WOMEN'



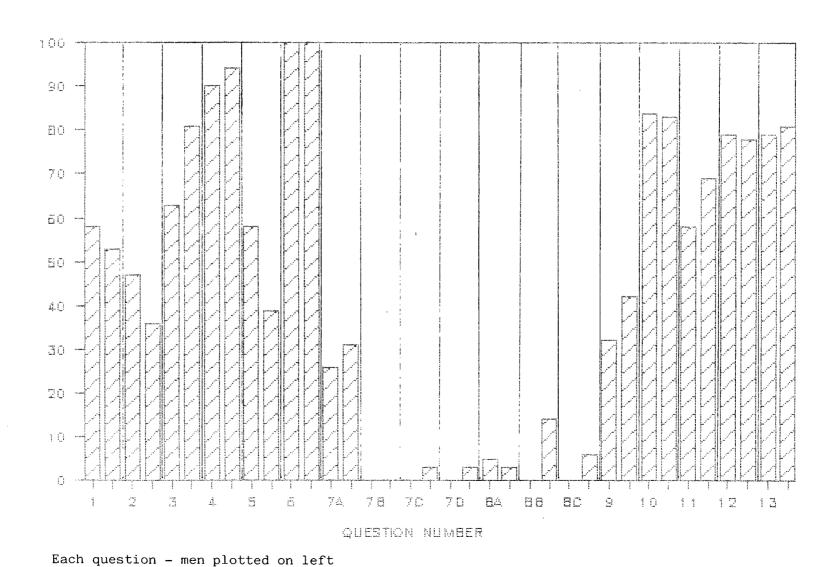
CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'OLDER MEN' VERSUS 'OLDER WOMEN'

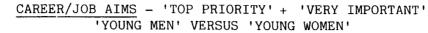
BOWLNBORB

Each question - men plotted on left

QUESTION NUMBER

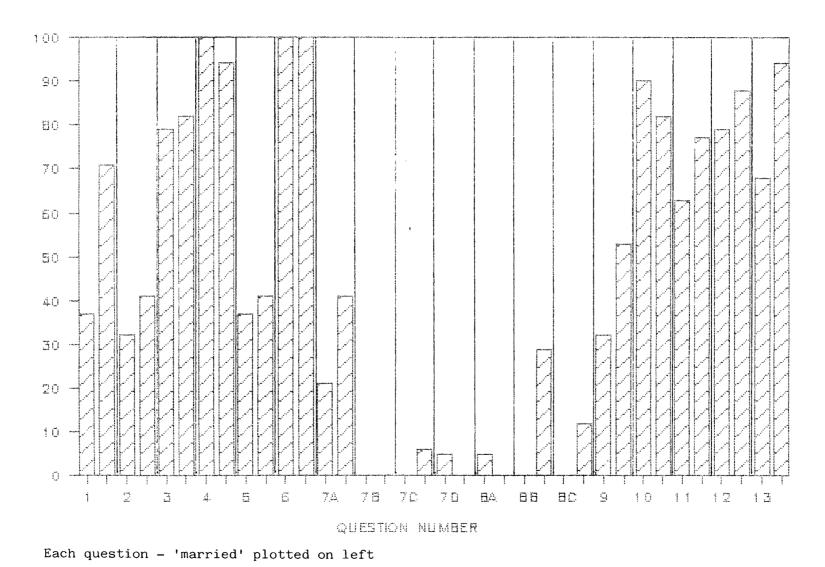
PERCENTAGE





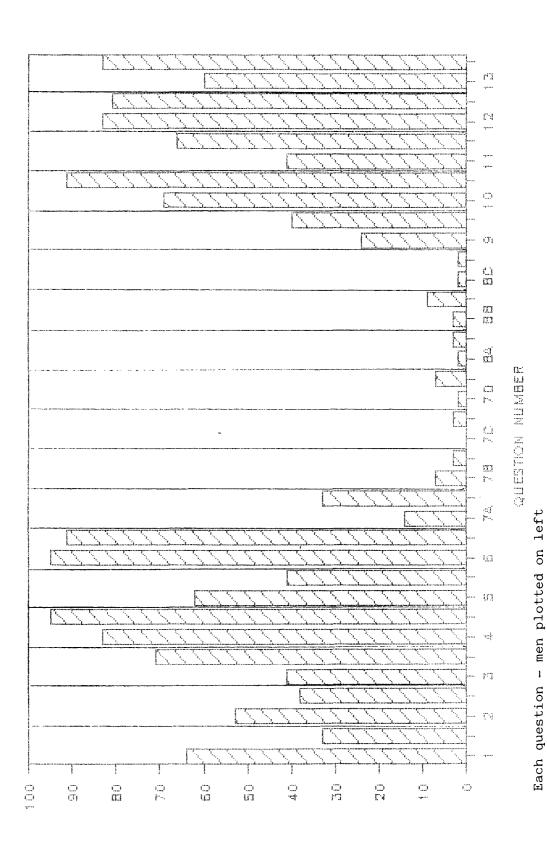
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PERCENTAGE



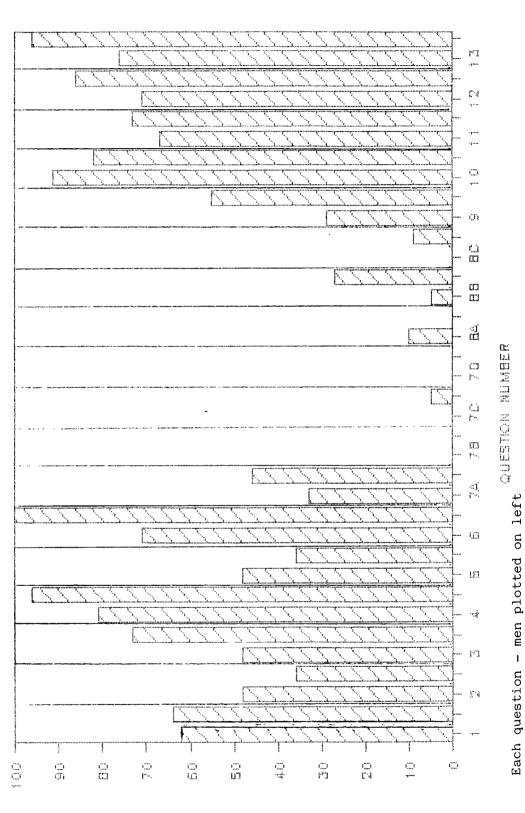
CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'YOUNG WOMEN - MARRIED' VERSUS 'YOUNG WOMEN - SINGLE' 100 C

CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'MARRIED MEN' VERSUS 'MARRIED WOMEN'

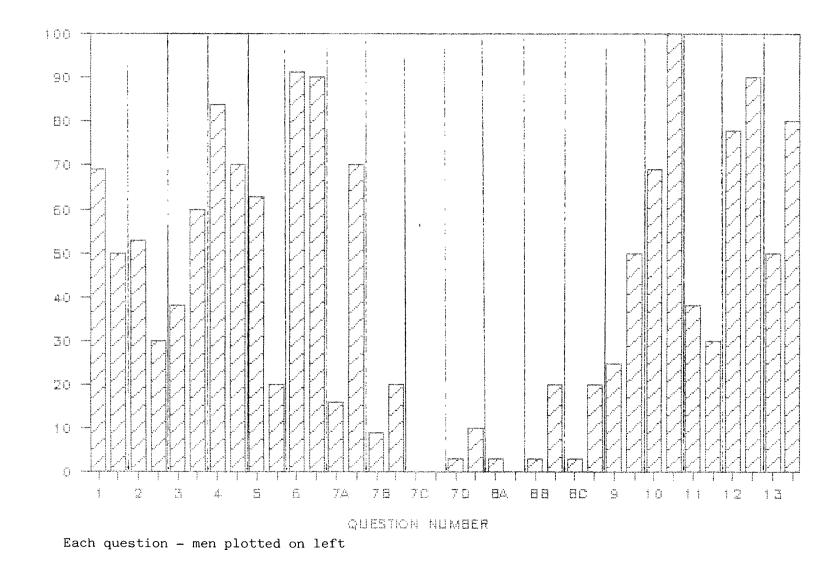


BERGENTAGE



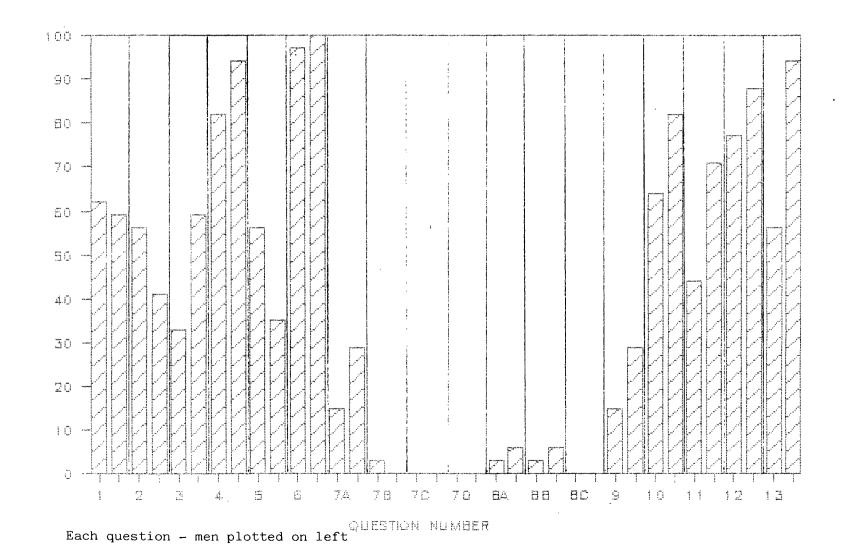


BERCENT/40E



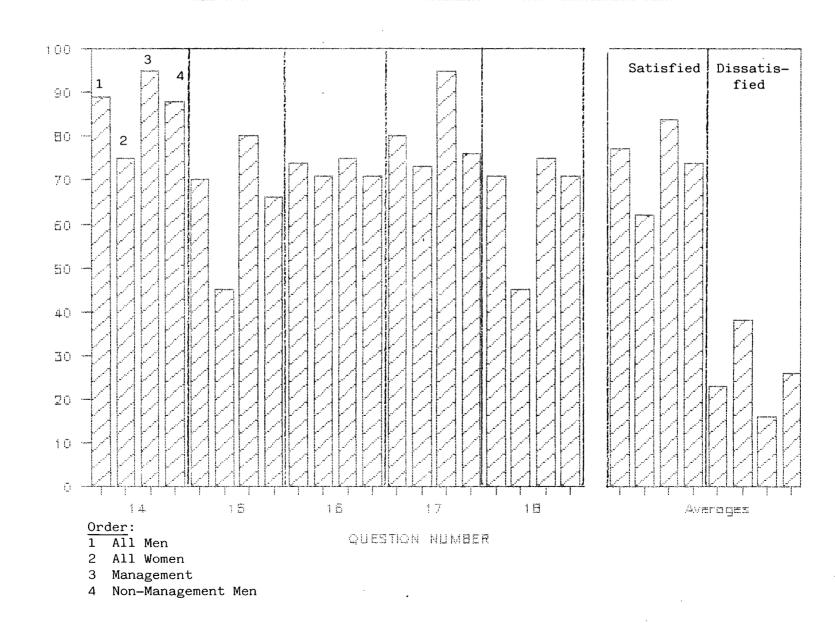
CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'FATHERS WITH YOUNG CHILDREN' VERSUS 'MOTHERS WITH YOUNG CHILDREN'

PERCENTIME

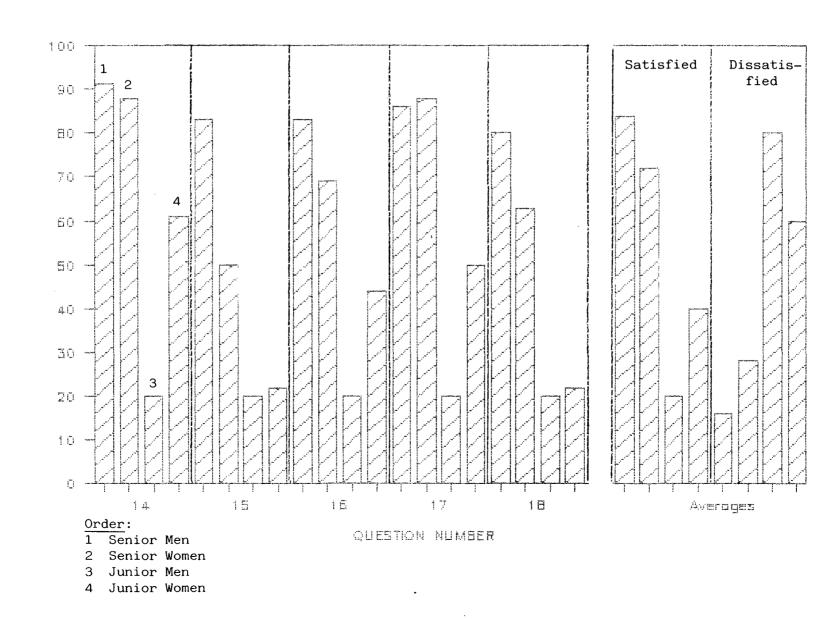


CAREER/JOB AIMS - 'TOP PRIORITY' + 'VERY IMPORTANT' 'PROFESSIONAL/GRADUATE MEN' VERSUS 'PROFESSIONAL/GRADUATE WOMEN'

PERCENTAGE

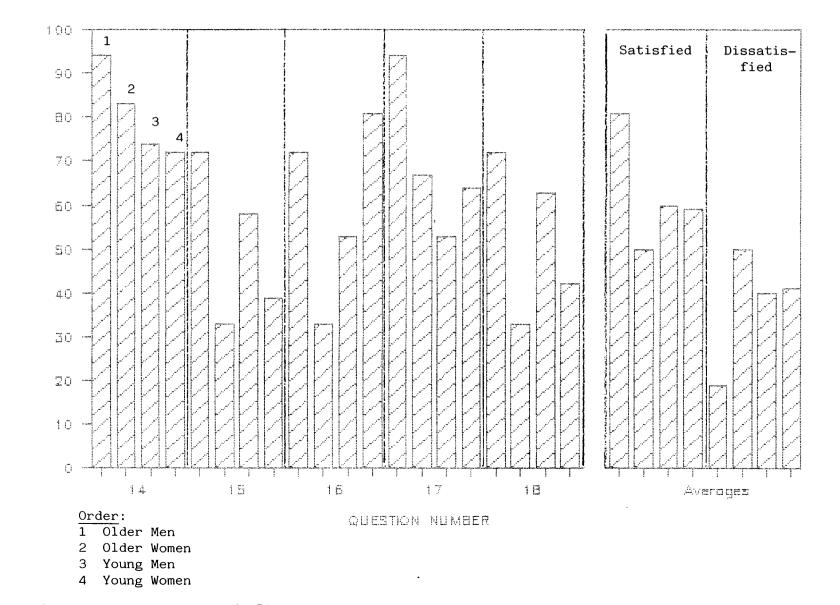


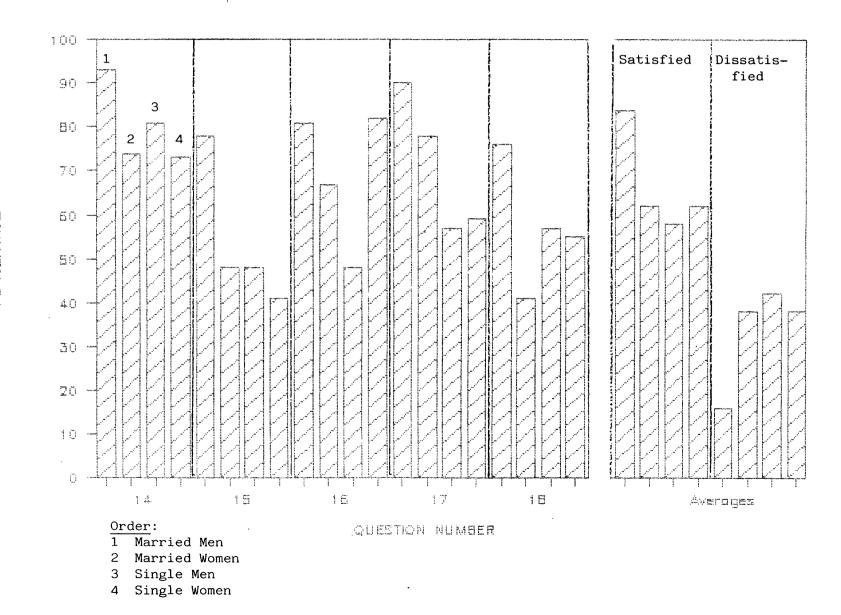
CAREER/JOB SATISFACTION - 'AIMS MET' + 'LARGELY MET' 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'



CAREER/JOB SATISFACTION - 'AIMS MET' + 'LARGELY MET' 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'

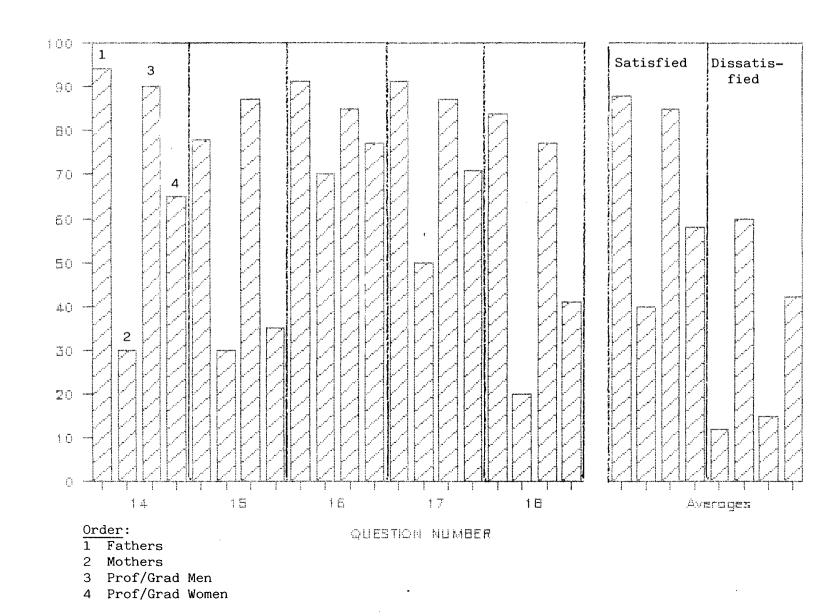
CAREER/JOB SATISFACTION - 'AIMS MET' + 'LARGELY MET' 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'





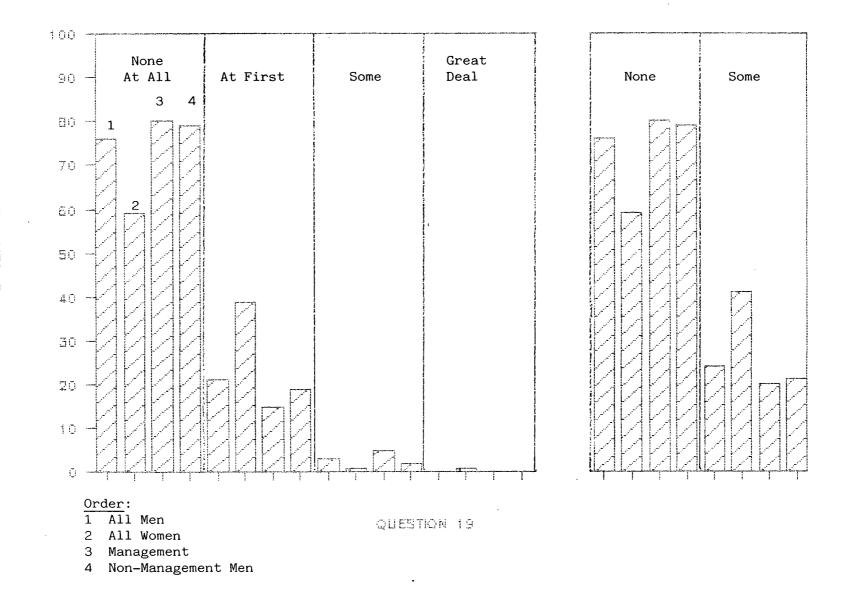
CAREER/JOB SATISFACTION - 'AIMS MET' + 'LARGELY MET' 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'

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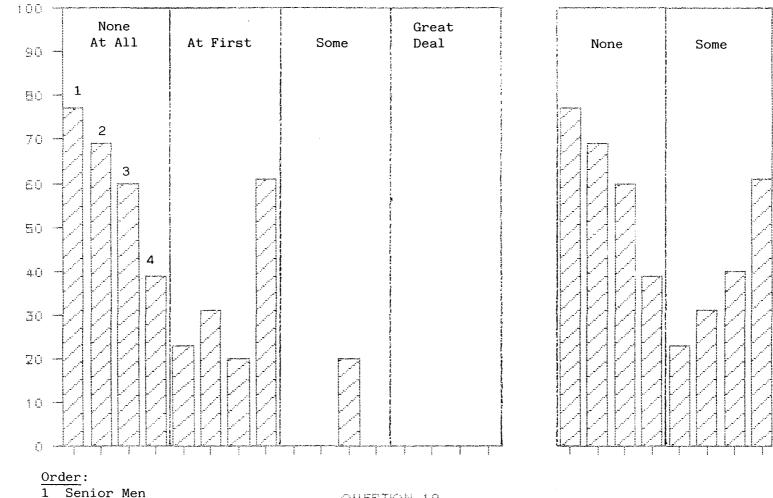
PERCENTAGE

CAREER/JOB SATISFACTION - 'AIMS MET' + 'LARGELY MET' 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'



DIFFICULTY CONTROLLING THE OPPOSITE SEX 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'

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DIFFICULTY CONTROLLING THE OPPOSITE SEX 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'

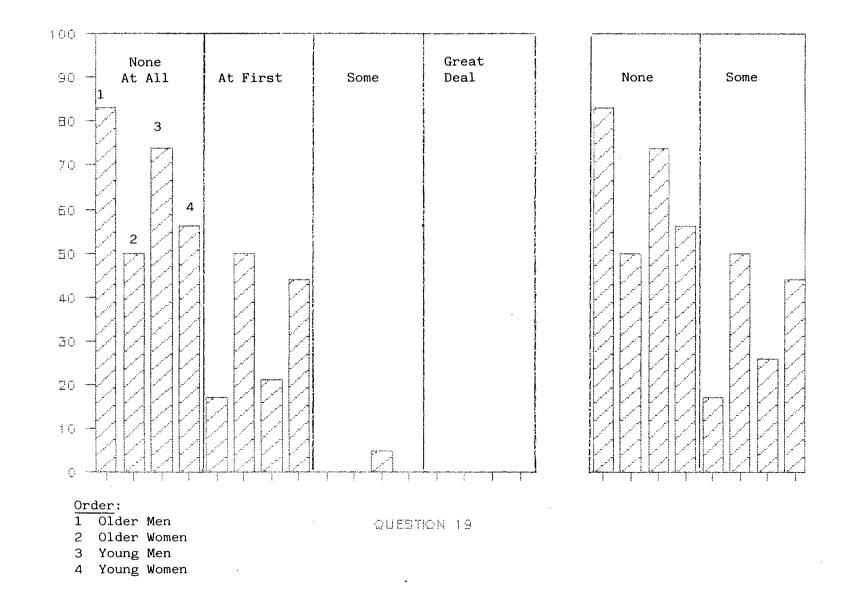
PERCENTAGE

2 Senior Women

Junior Men 3

Junior Women 4

QUESTION 19

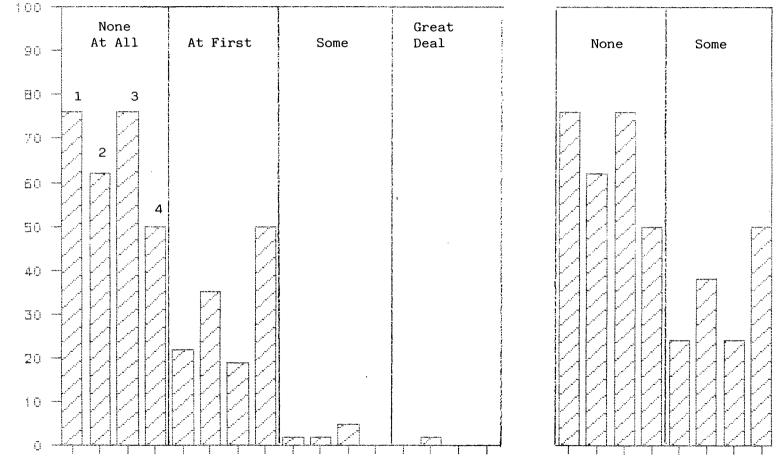


DIFFICULTY CONTROLLING THE OPPOSITE SEX 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'

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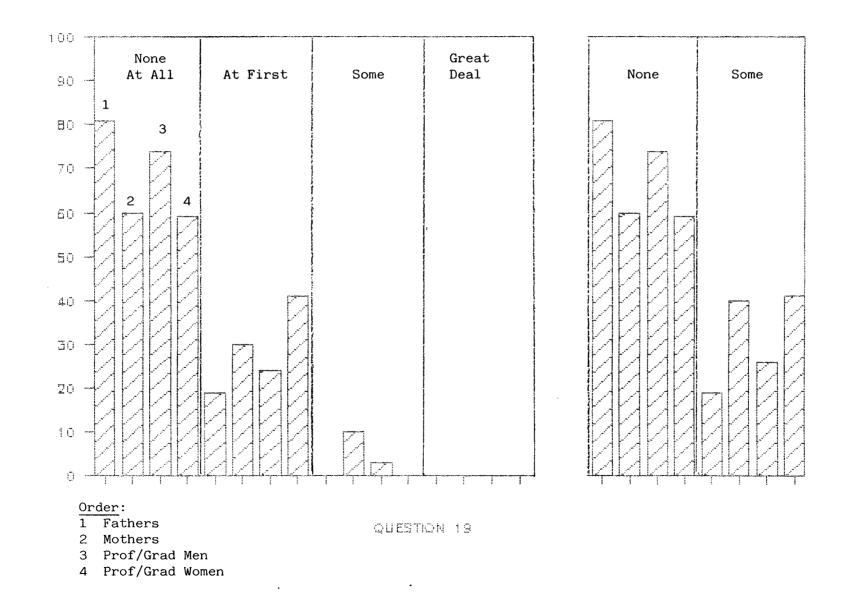


DIFFICULTY CONTROLLING THE OPPOSITE SEX 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'

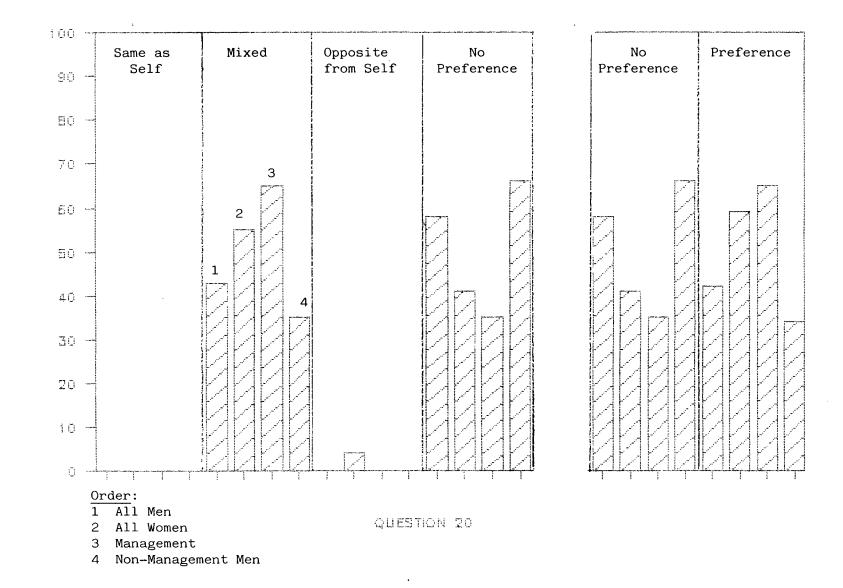
PERCENTAGE

- Order:
- 1 Married Men
- Married Women 2
- Single Men 3
- 4 Single Women

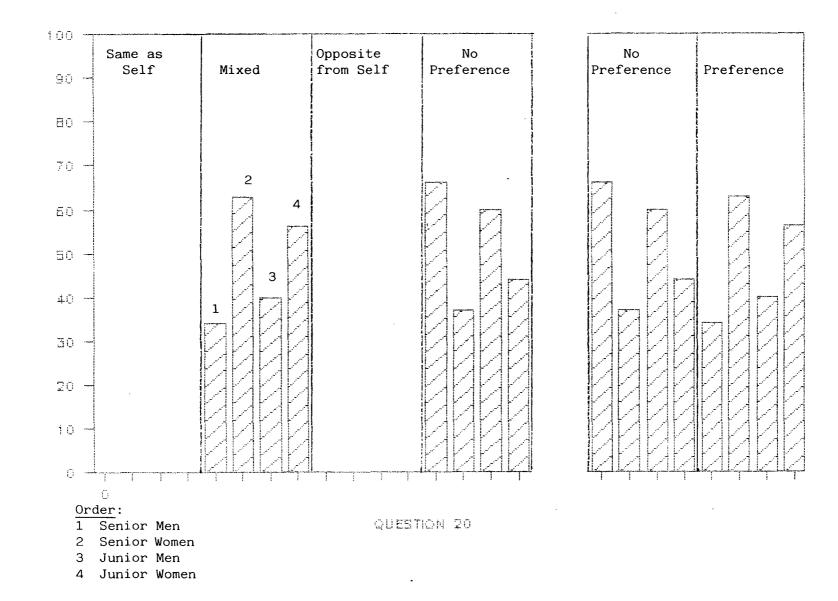
QUESTION 19



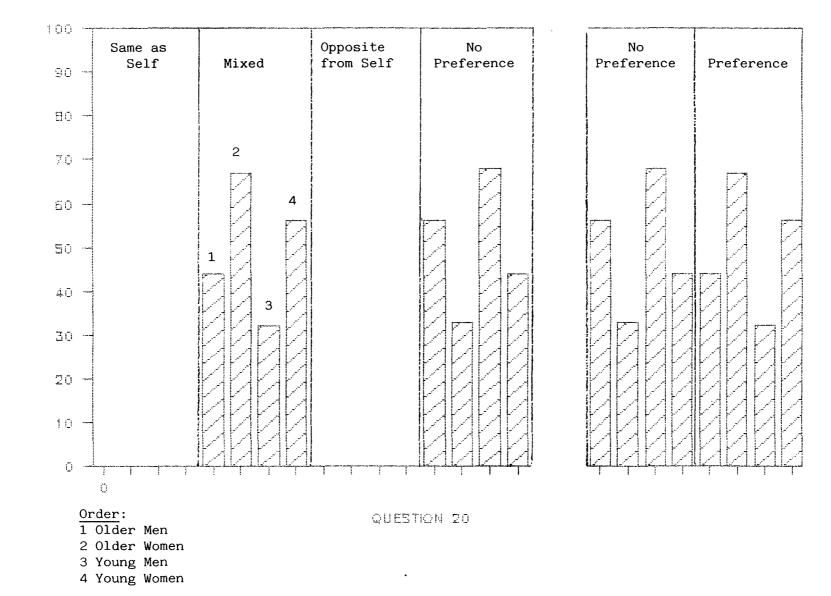
DIFFICULTY CONTROLLING THE OPPOSITE SEX 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'



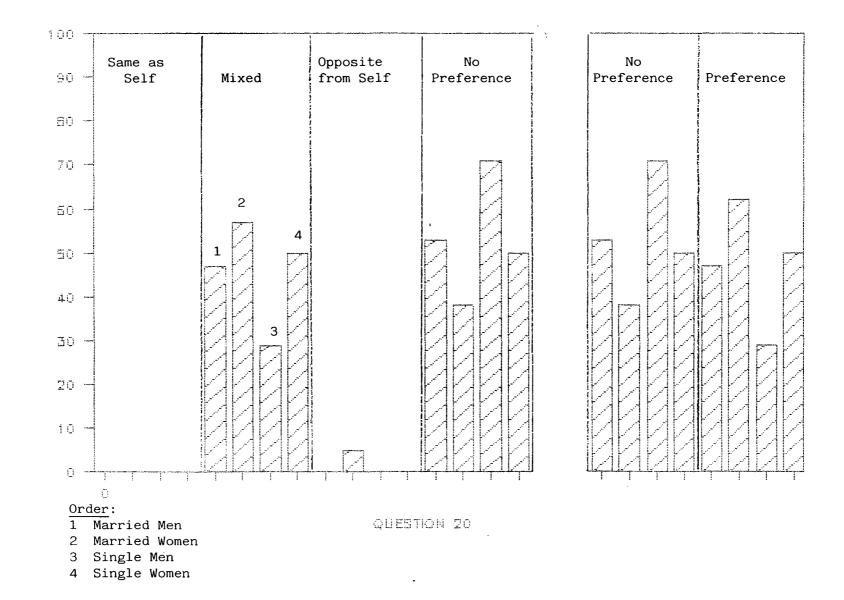
PREFERRED GENDER OF COLLEAGUES 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'



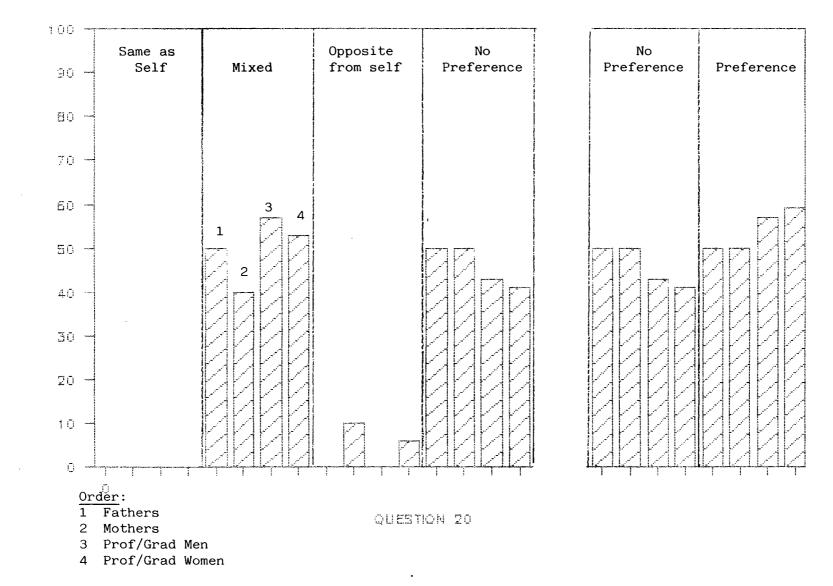
PREFERRED GENDER OF COLLEAGUES 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'



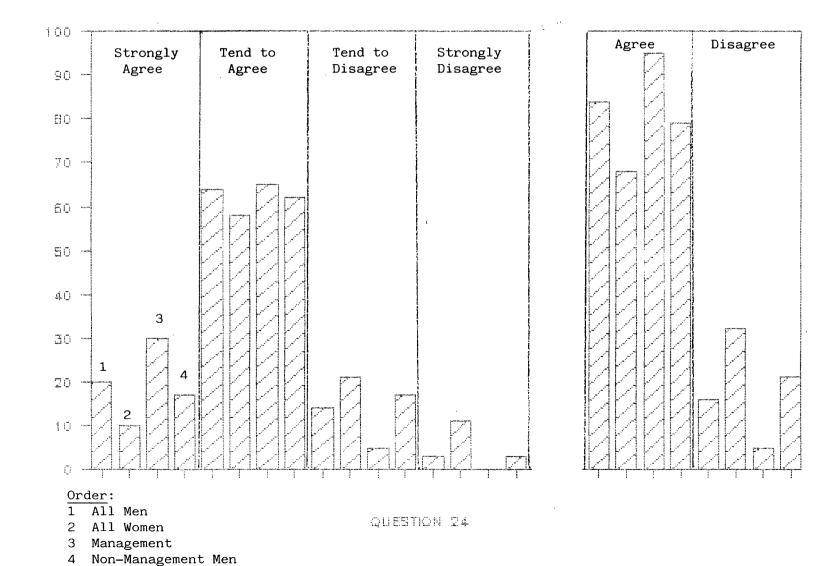
'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'



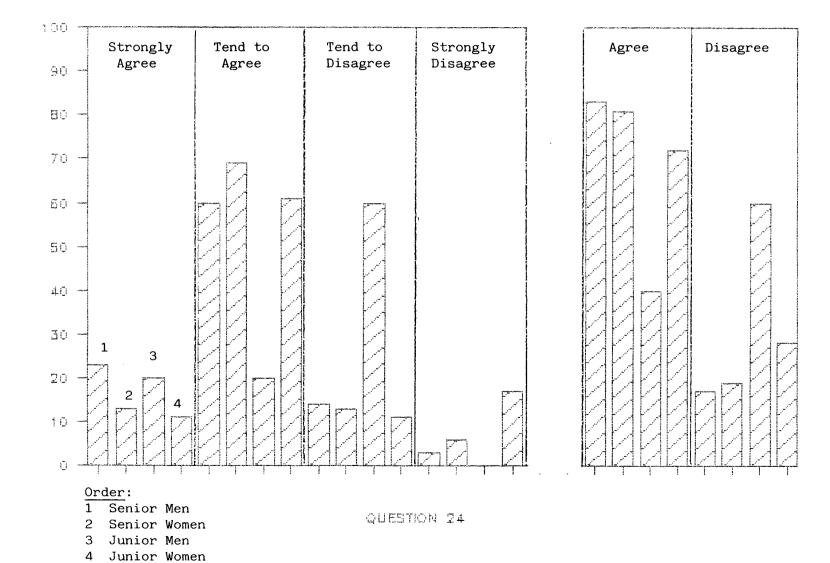
PREFERRED GENDER OF COLLEAGUES 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'



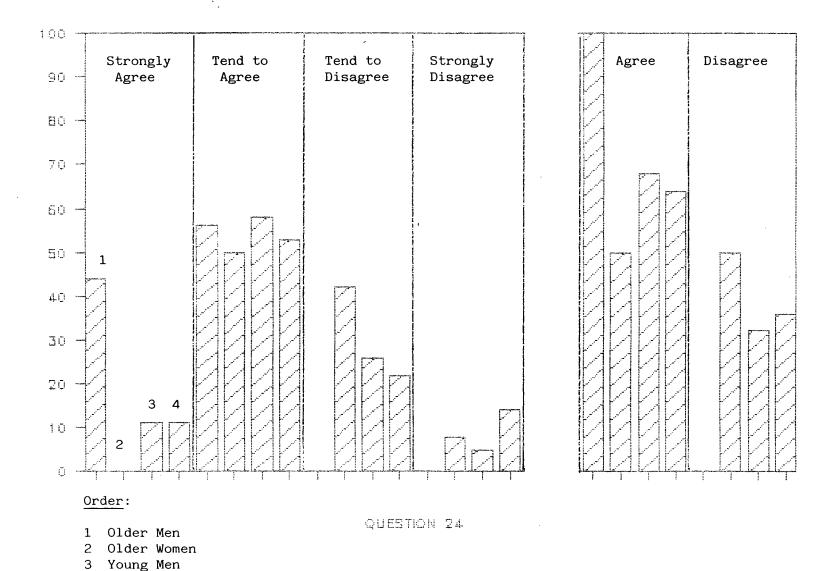
PREFERRED GENDER OF COLLEAGUES 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'



MEN PLACE MORE IMPORTANCE ON CAREER THAN DO WOMEN 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'



MEN PLACE MORE IMPORTANCE ON CAREER THAN DO WOMEN 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'



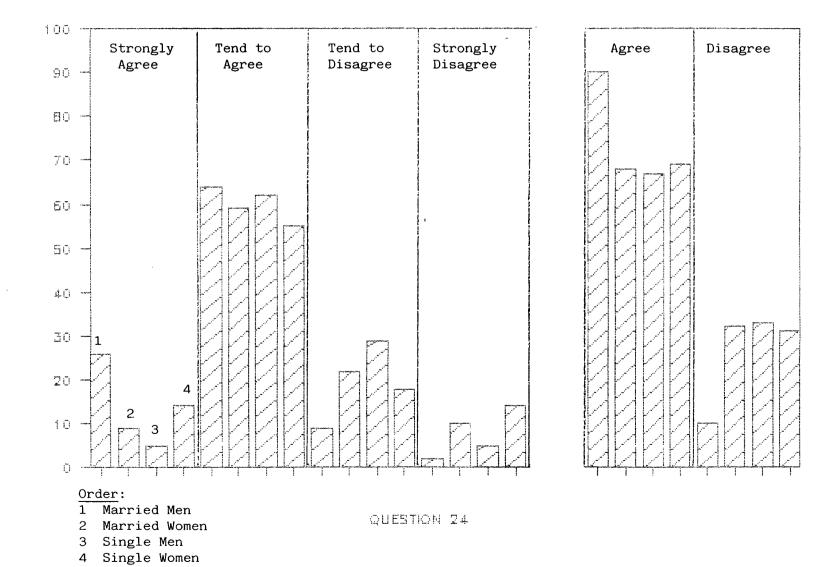
MEN PLACE MORE IMPORTANCE ON CAREER THAN DO WOMEN 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'

PERGENTIME

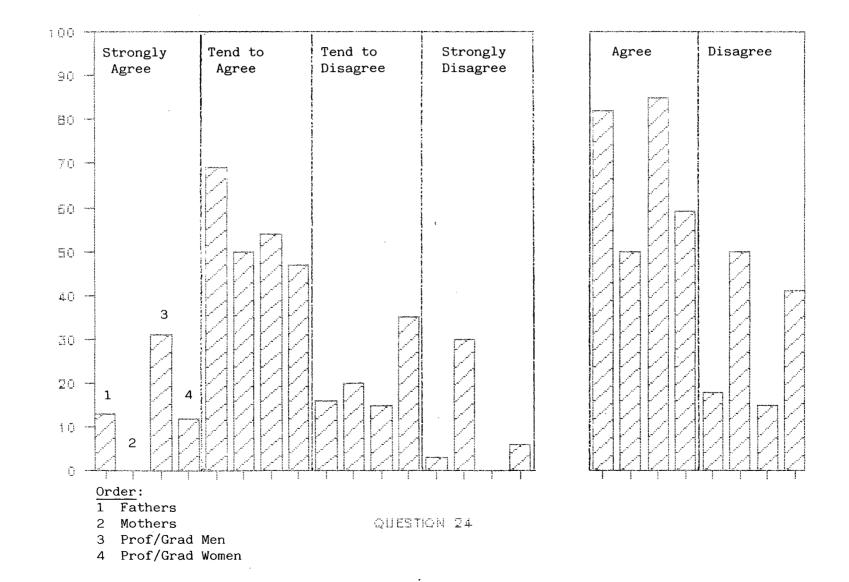
4 Young Women

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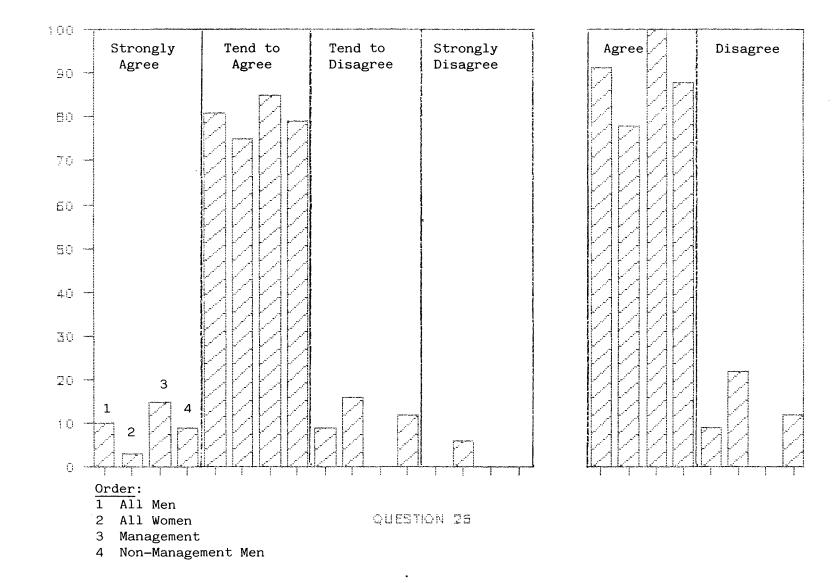
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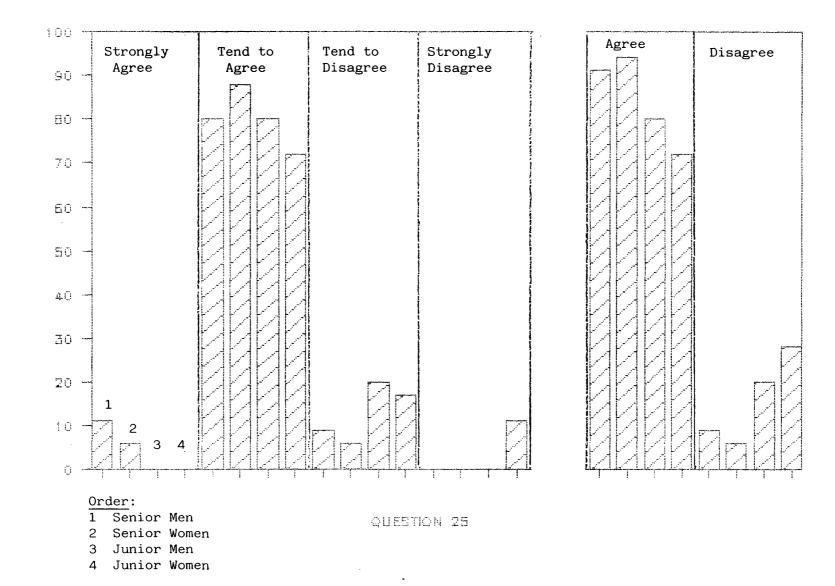
MEN PLACE MORE IMPORTANCE ON CAREER THAN DO WOMEN 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'



MEN PLACE MORE IMPORTANCE ON CAREER THAN DO WOMEN 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'

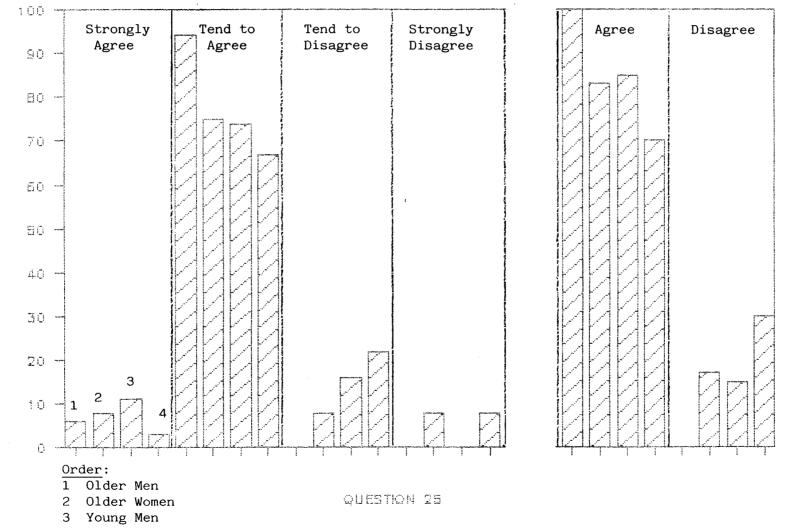


WOMEN PUT HOME AND FAMILY BEFORE CAREER 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'



WOMEN PUT HOME AND FAMILY BEFORE CAREER 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'

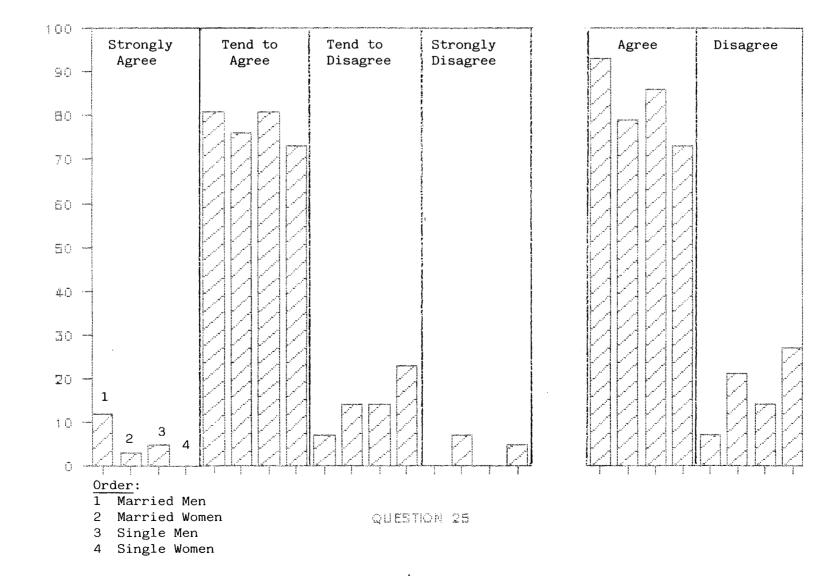
PERCENTIME



WOMEN PUT HOME AND FAMILY BEFORE CAREER 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'

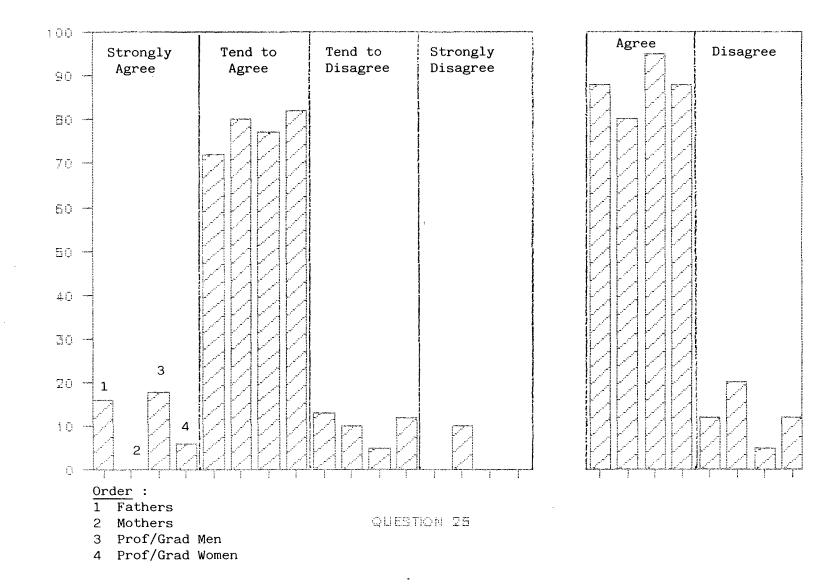
PERCENTAGE

4 Young Women

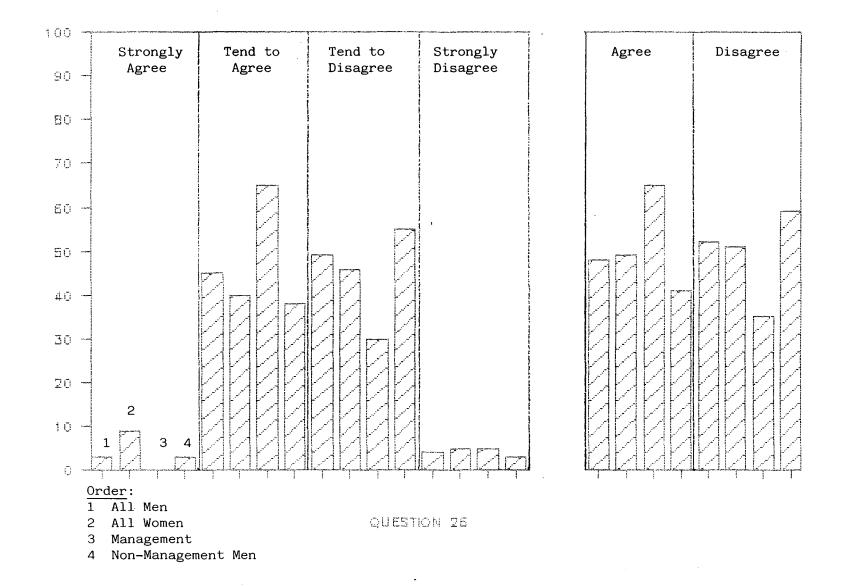


WOMEN PUT HOME AND FAMILY BEFORE CAREER 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'

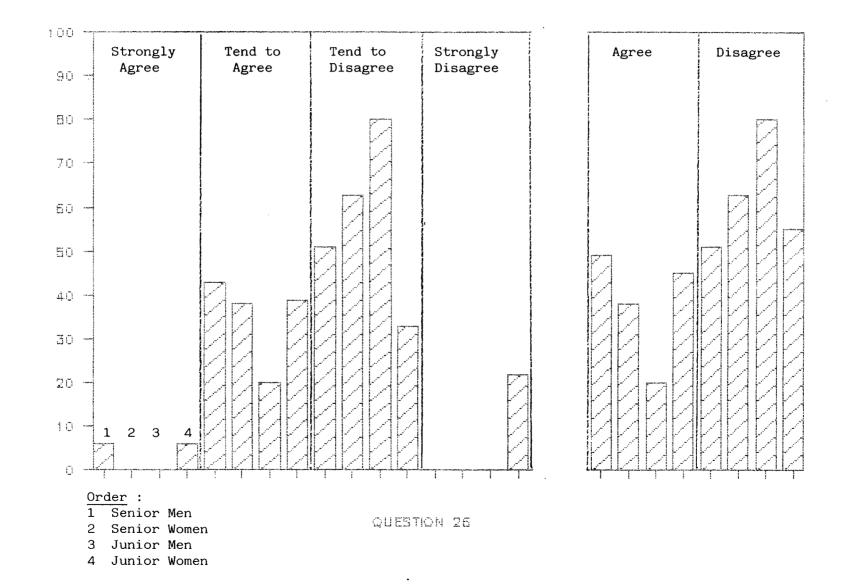
DERCENTAGE



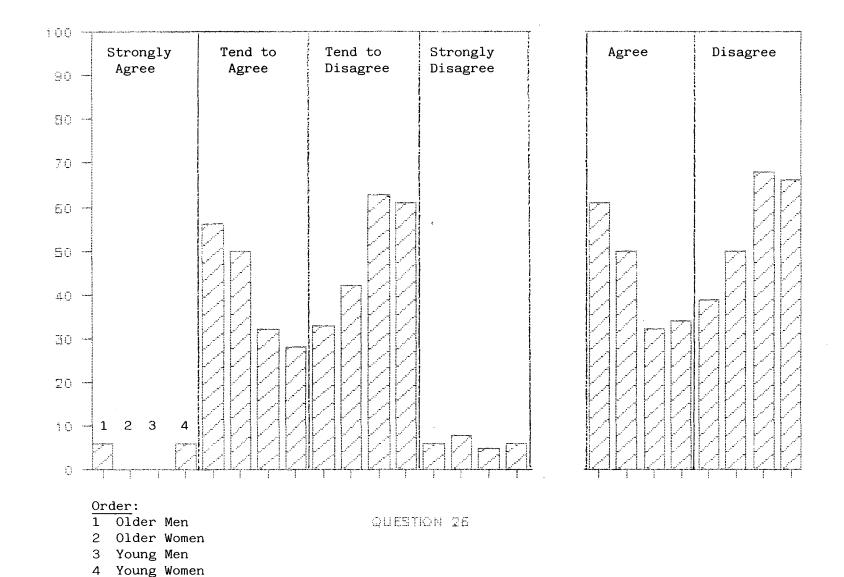
WOMEN PUT HOME AND FAMILY BEFORE CAREER 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'



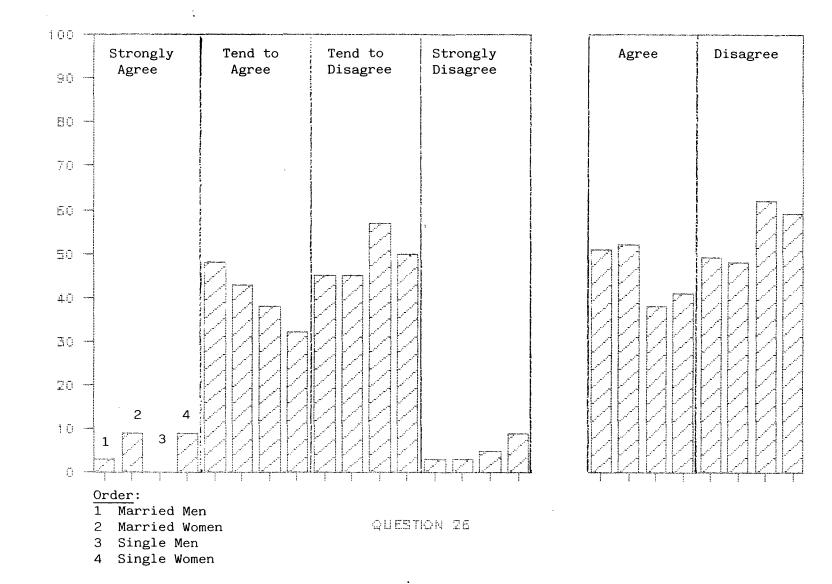
MEN PUT CAREER BEFORE HOME AND FAMILY 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN' ١.



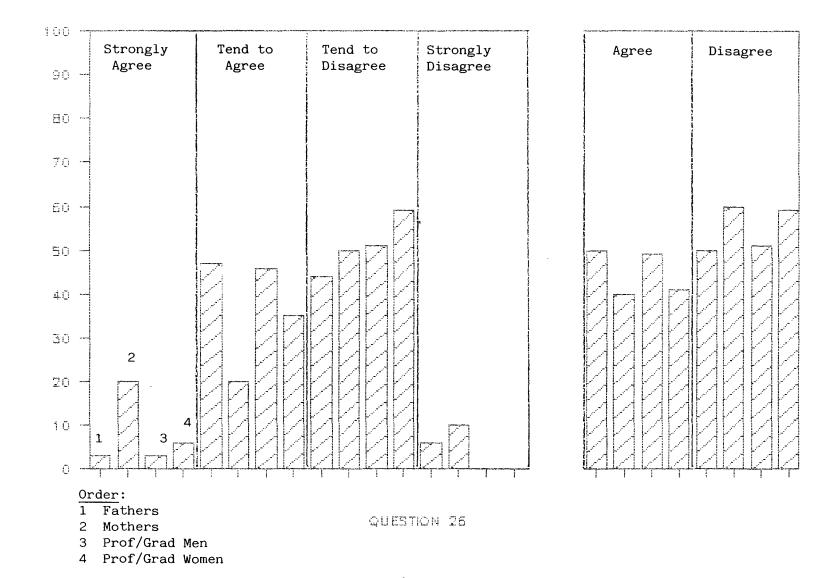
MEN PUT CAREER BEFORE HOME AND FAMILY 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'



MEN PUT CAREER BEFORE HOME AND FAMILY 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'



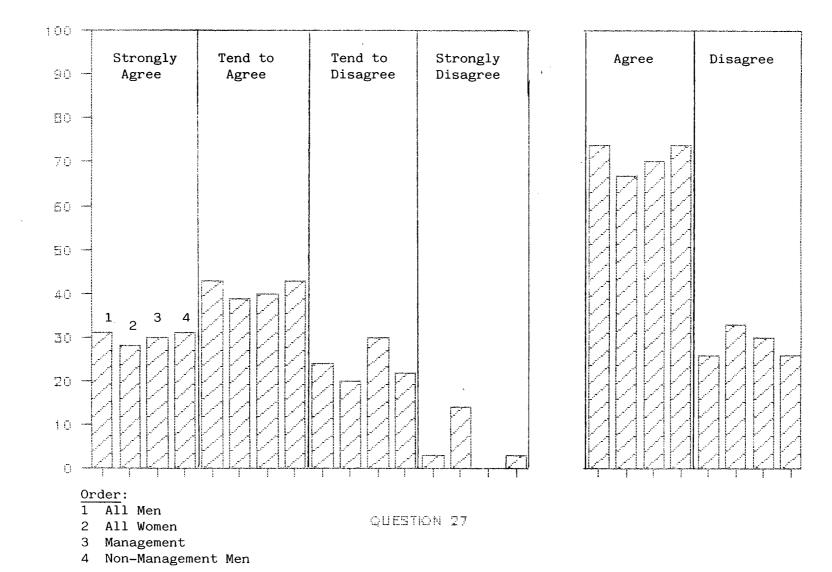
MEN PUT CAREER BEFORE HOME AND FAMILY 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'



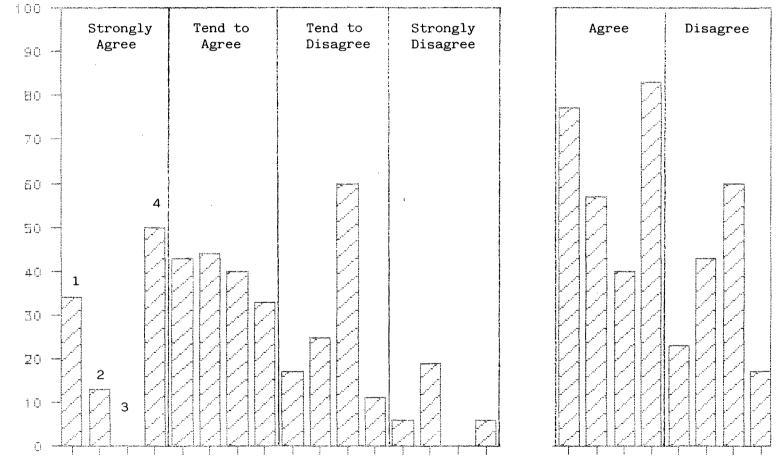
MEN PUT CAREER BEFORE HOME AND FAMILY 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'

PERCENTAGE

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A SATISFACTORY PARTNER IS LIFE'S TOP PRIORITY 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'

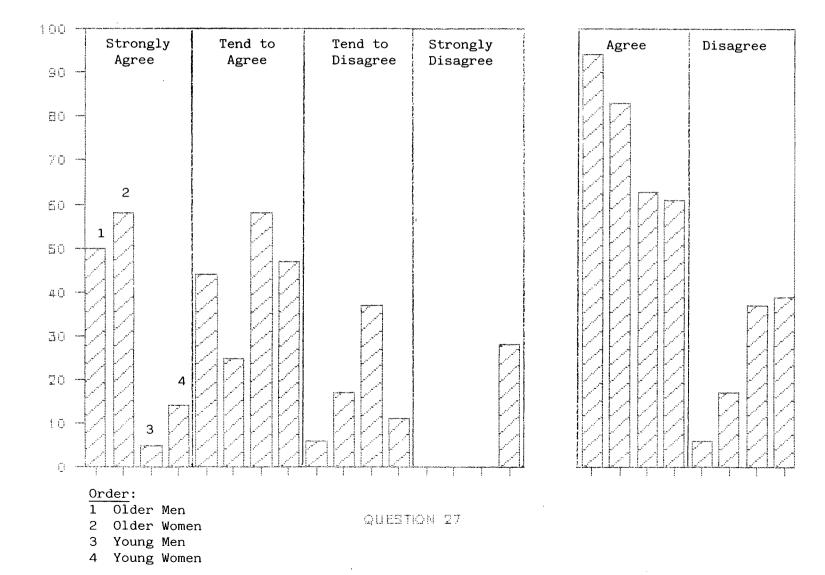


A SATISFACTORY PARTNER IS LIFE'S TOP PRIORITY 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'

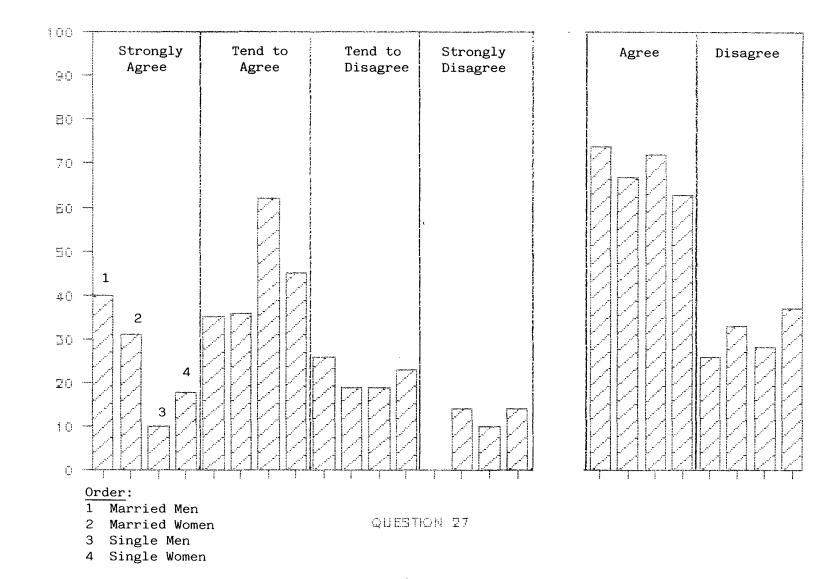
PERCENTIME

- Order:
- 1 Senior Men 2 Senior Women
- 3 Junior Men
- 4 Junior Women

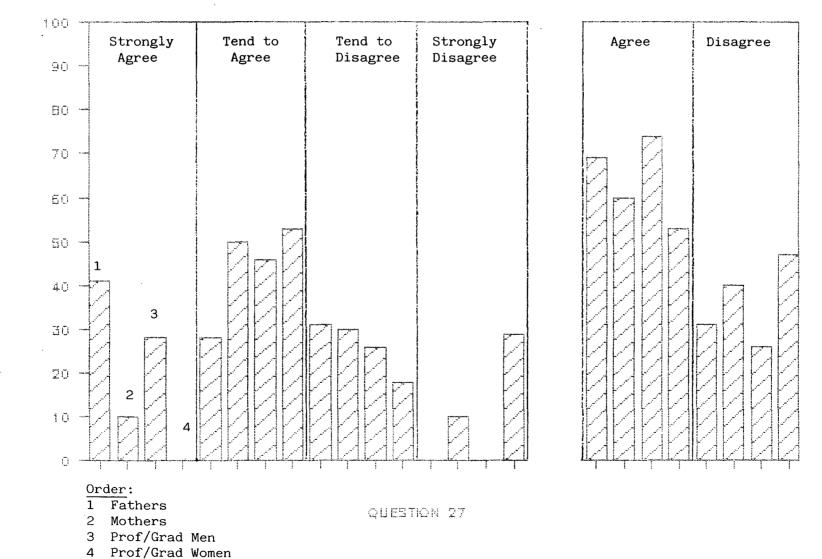
QUESTION 27



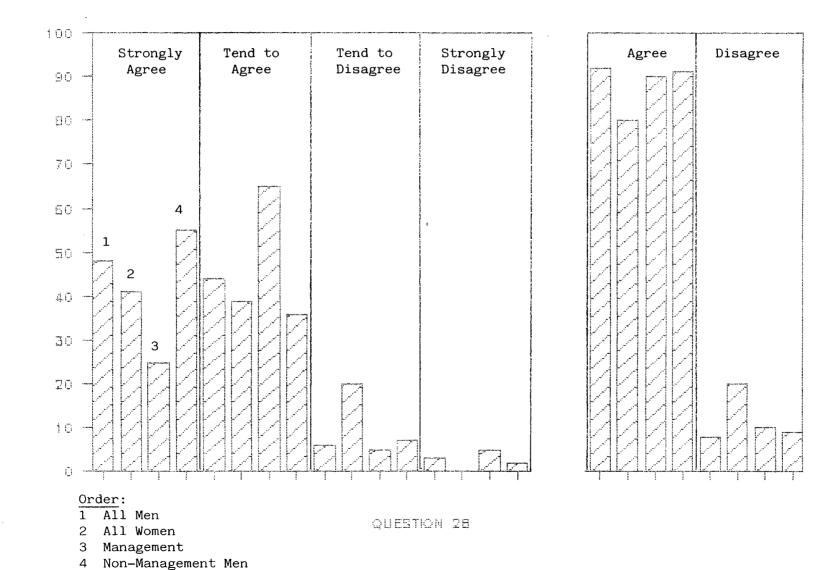
A SATISFACTORY PARTNER IS LIFE'S TOP PRIORITY 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'



A SATISFACTORY PARTNER IS LIFE'S TOP PRIORITY 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'



A SATISFACTORY PARTNER IS LIFE'S TOP PRIORITY 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'

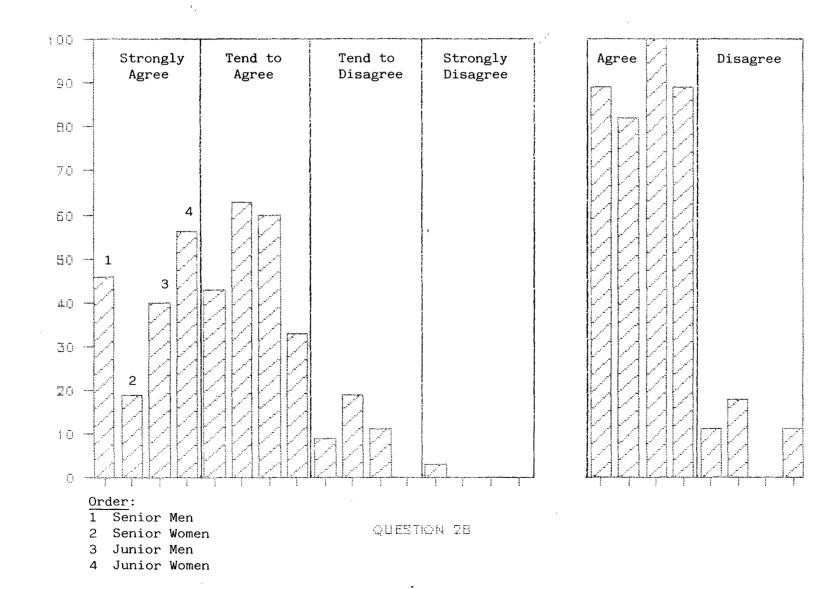


IT IS IMPORTANT TO HAVE A STRONG INTEREST OUTSIDE OF WORK

'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'

PERCENTIMOE

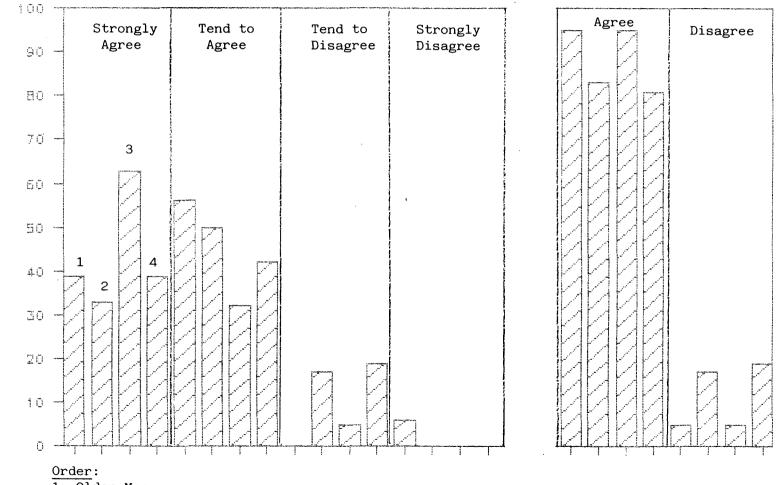
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IT IS IMPORTANT TO HAVE A STRONG INTEREST OUTSIDE OF WORK 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'

IT IS IMPORTANT TO HAVE A STRONG INTEREST OUTSIDE OF WORK

'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'

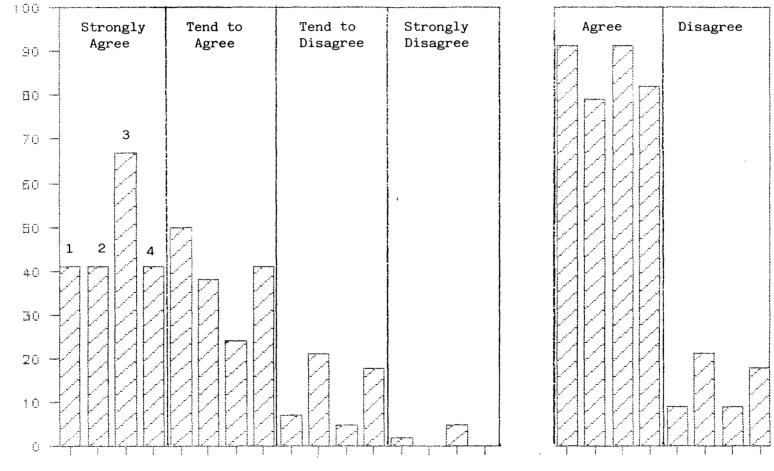


QUESTION 28

1 Older Men

PERCENTAGE

- 2 Older Women
- 3 Young Men
- 4 Young Women



IT IS IMPORTANT TO HAVE A STRONG INTEREST OUTSIDE OF WORK 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'

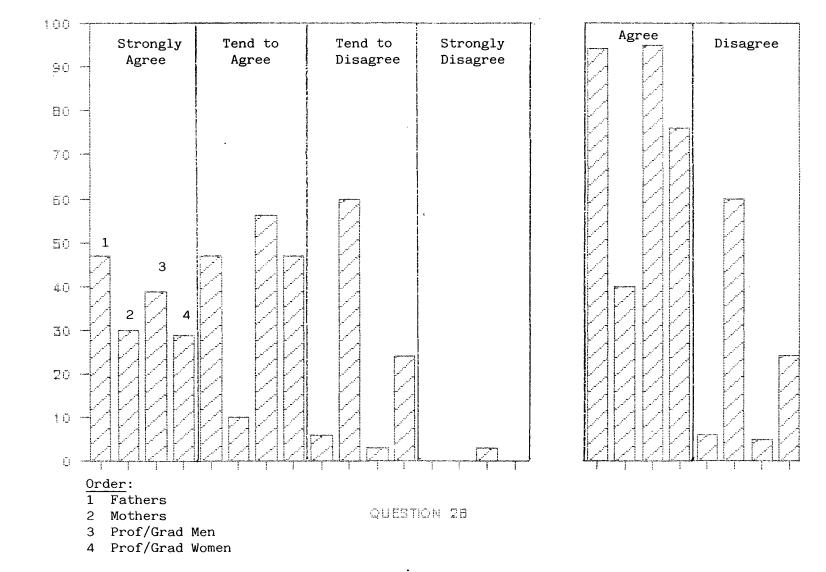


Order:

- 1 Married Men
- 2 Married Women
- 3 Single Men
- 4 Single Women

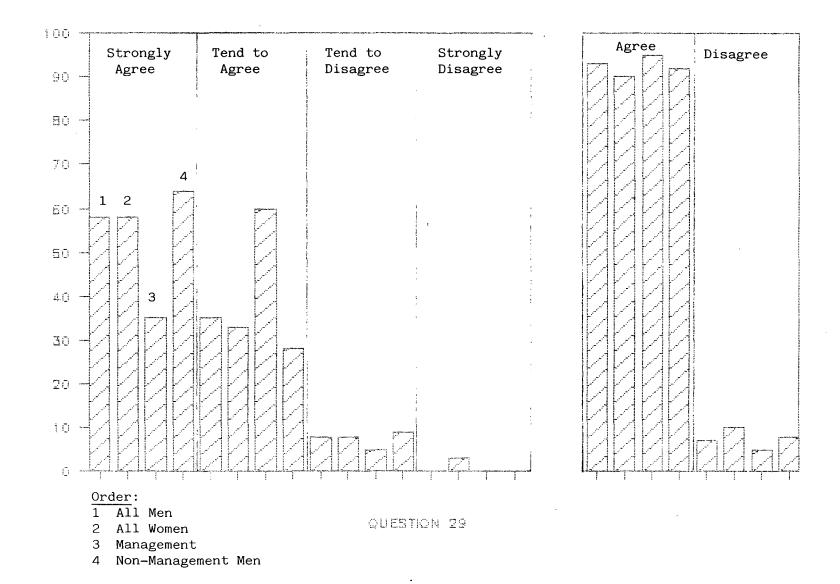
QUESTION 28

IT IS IMPORTANT TO HAVE A STRONG INTEREST OUTSIDE OF WORK 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'

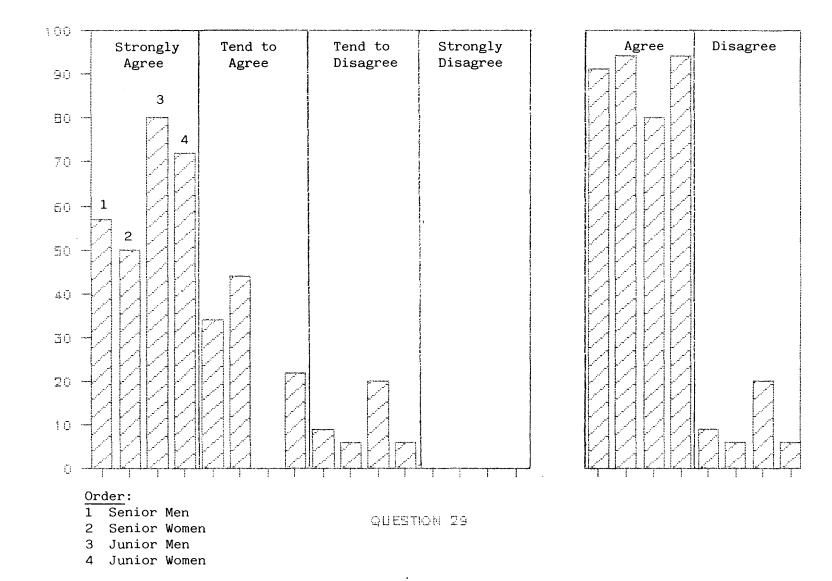


PERCENTAGE

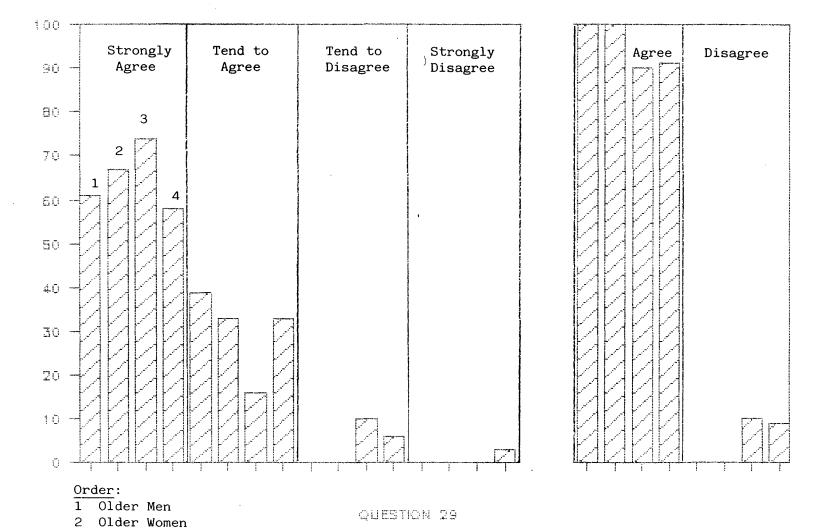
HAPPINESS IS THE BEST MEASURE OF SUCCESS 'ALL MEN' - 'ALL WOMEN' - 'MANAGEMENT' - 'NON-MANAGEMENT MEN'



PERCENTAGE



HAPPINESS IS THE BEST MEASURE OF SUCCESS 'SENIOR MEN' - 'SENIOR WOMEN' - 'JUNIOR MEN' - 'JUNIOR WOMEN'



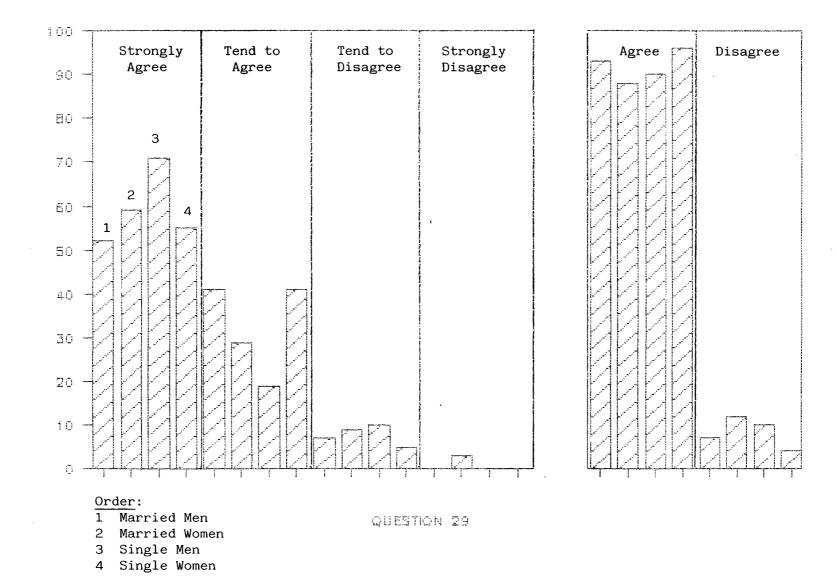
HAPPINESS IS THE BEST MEASURE OF SUCCESS 'OLDER MEN' - 'OLDER WOMEN' - 'YOUNG MEN' - 'YOUNG WOMEN'

PERCENTAGE

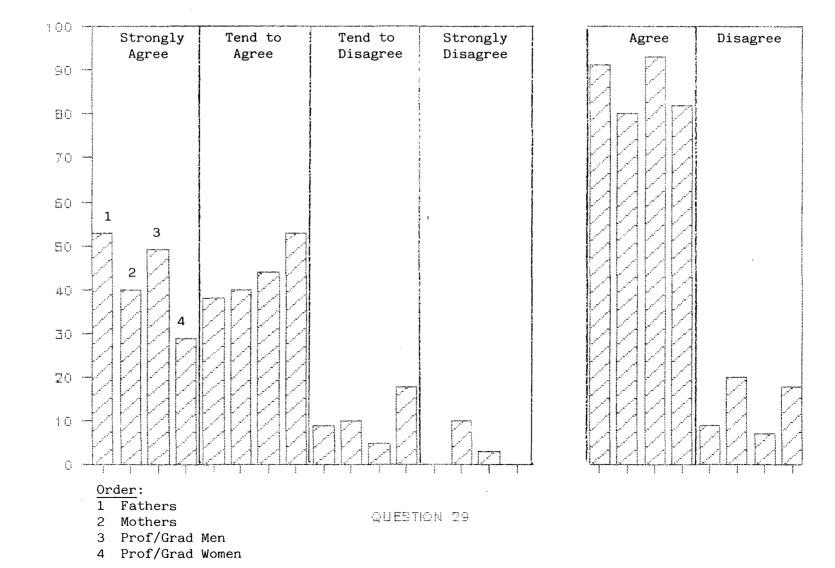
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Young Men Young Women ÷



HAPPINESS IS THE BEST MEASURE OF SUCCESS 'MARRIED MEN' - 'MARRIED WOMEN' - 'SINGLE MEN' - 'SINGLE WOMEN'



HAPPINESS IS THE BEST MEASURE OF SUCCESS 'FATHERS' - 'MOTHERS' - 'PROF/GRAD MEN' - 'PROF/GRAD WOMEN'

PERCENTIMGE

APPENDIX NO. 5

Statistical Confidence to be related to the responses from the sample of 80 male and 80 female employees drawn from a total popullation of 2328 men and 857 women.

Statistical Confidence to be placed in inferring that what the sample of 80 men and 80 women felt, is accurately representative of the views of all 2328 men and all 857 women in the organisation

There is a well-known technique for calculating the confidence with which one can extrapolate the results from a sample population to apply to the entire population. Additionally the associated range of likely variance of result can also be calculated.

This is derived from the standard error of p the <u>sample</u> estimate of the population value, and given by the formula :

Standard error of
$$p = \sqrt{\frac{p(1-p)}{n}}$$

This is appropriate because the sample size is relatively large enough to ensure that p is approximately normally distributed.

On this basis the 95% confidence interval for the population value is :

$$p + 1.96$$
 $\frac{p(1-p)}{n}$ to $p - 1.96$ $\frac{p(1-p)}{n}$

This piece of information can be utilised to calculate the likely range of variance, due to sampling, for any of the questions where answers are displayed from 'all men' and/or 'all women'; hence, for example, the first two lines on Fig. 41 and the first one of each set of histograms in Appendix 4.

Overleaf are shown three worked examples of the application of this technique.

Examples of applying the formula to the responses

This process can best be demonstrated by taking a case near each end of the range and also one in the middle. Hence :

(1) 77 out of 80 men regarded Interesting Work as either Top Priority or Very Important. This was 96.25% of them. (See Fig. 41)

The question arises as to whether 96.25% of all of the men, of whom there were 2328, would have given the same answer. If that had been so, then 2241 would have so done.

Using the formula provided shows that we can have 95% confidence that the actual number who regarded Interesting Work as either Top Priority or Very Interesting would have been between 2143 and 2328, i.e. at least 92.1% of all of the men.

If it had been 92.1% of women, then the figure would have been 789 of the 857.

(2) Turning to the other end of the scale, only 1 of the 80 men(i.e. 1.25%) regarded the opportunity to Work Different Hours atDifferent Times of the Year as either Top Priority or Very Important.

If the entire male population of 2328 had made a response on this issue, we can have 95% confidence that the actual number expressing the same view would have been between 0 and 86, i.e. at most 3.7% of all of the men. If it had been 3.7% of women, then the figure would have been 32 of the 857.

(3) Finally 40 out of the 80 men (i.e. 50%) regarded Working with People I Like as either Top Priority or Very Important.

If the entire male population of 2328 had made a response on this issue we can have 95% confidence that the actual number expressing the same view would have been between 908 and 1420, i.e. at least 39% and at most 61% of all of the men. If it had been 39% and 61% of women the figures would have been 334 and 523.

APPENDIX NO.6

This section contains details of the algorithm applied to the specific answers to Questions 14-17 inclusive to support a structured response to Question 18.

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PROSPECTS - ALGORITHM

The following table was applied, one rule at a time, until a categorisation was achieved. This was then used to examine and support the discursive style of written responses to Question 18.

Aspirations will be fully met

- 1. Left-hand column, response to Questions 14-17 inclusive.
- Left-hand column, response to any 3 from Questions 14-17 inclusive.
- 3. Left-hand column, response to Questions 14 and 15+, 2nd lefthand column, response to Question 17.
- 4. Left-hand column, response to Question 17 plus one other, lefthand column, response.

Aspirations might well be fully met

- Two left-hand column responses + two, 2nd left-hand column, responses - excepting as in 3 and 4 above.
- 2. Four, 2nd left-hand column, responses.
- 3. One, left-hand column response, + three, 2nd left-hand column, responses.
- 4. Three, 2nd left-hand column, responses +, 3rd left-hand column, response to Question 16.

Aspirations seem unlikely to be met

Every combination which does not come within the ambit of the other three sections.

Aspirations will not be met

- 1. Four, right-hand column, responses.
- Three, right-hand column, responses + one other in either of the 2 middle columns.
- 3. Four, 2nd from the right-hand column, responses.
- 4. One, right-hand column, response + three, 2nd from the righthand column, responses.

APPENDIX NO. 7

This section contains data showing the distribution of men and women through the white-collar grading structure as at 30 June 1987 i.e. 3 years on from the original data exercise.

DISTRIBUTION OF AW EMPLOYEES BY SEX THROUGH PAY-GRADES

The following data (30.6.87) is shown to the same format as the 1984 data at Fig. 27 so as to facilitate comparison.

Band Number	Pay Grade	No	0/	Na	0/
Number	Grade	<u>No</u> .	<u>%</u>	<u>No</u> .	<u>%</u>
4	JNC	104	4.9	_	_
	13	1	0.1	_	_
	12	15	0.7	1	0.1
	11	36	1.7	1	0.1
	10	87	4.0	1	0.1
					
	Sub-total	243	11.4	3	0.3
3	9	128	6.0	F	0.0
	8	204	9.6	5 21	0.6 2.6
	7	166	7.8	14	1.8
	/				1.0
	Sub-total	498	23.4	40	5.0
0	<u>_</u>				
2	6 5	290	13.6	12	1.5
	5	345	16.2	30	3.8
		<u> </u>			
	Sub-total	635	29.8	42	5.3
1	4	240	11 0	<u> </u>	
Ţ	3	240 299	11.3 14.1	66 80	8.3 10.0
	2	174	8.2	223	27.9
	1	37	1.7	346	43.3
	-				
	Sub-total	750	35.3	715	89.4
	Grand total	2126	100.0	800	100.0

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