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**The determinants of young women's intentions about education, career
development and family life.**

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The determinants of young women's intentions about education, career development and family life.

A questionnaire survey was conducted to investigate the factors that shape high-achieving young women's plans about further education, career development, having a child and combining work and motherhood. A sample of 92 grammar school girls aged 15 to 17 took part in the study. It was found that the education and career plans of these young women were influenced by their anticipated role as a mother and their perception of social pressure to give up work to care for their children. Despite strong intentions to have a career and gain further educational qualifications, the perceived acceptability of combining work with motherhood influenced the certainty with which they formed these plans. It is concluded that if women are to have equal opportunities to work and have careers, these issues should be explicitly addressed at an early stage in their schooling.

Key words: attitude, plans, work, career, family life, women.

The determinants of young women's intentions about education, career development and family life.

The aim of this study was to examine the factors that shape the plans of high achieving young women in relation to their education, career development, having children and combining work and motherhood. Recently it was reported that sex-stereotyping remains evident in subject choice (EOC, 2001a) and within professional occupations (EOC, 2001b). In addition, a report commissioned by The Women's Unit (Rake, 2000) drew attention to the fact that women continue to earn less than men over a lifetime and that this pay gap is partly attributable to the difficulty women experience when trying to combine work and motherhood. Rake pointed out that when women have children this often leads to a reduction in working hours or to a total break in employment. She also pointed out that women earn relatively less than men because women still tend to be concentrated in low-paid jobs, are less likely to gain promotion than men, and are less well rewarded when they do. These have been identified as factors that can contribute to a "lifecycle of inequality" (EOC, 2001c) for women. While women in mundane, boring, or low paid jobs may feel that it is undesirable or difficult to return to work once they have children, it is less clear why high achieving young women with a "brilliant educational biography" may go on to develop a "poor occupational biography" (Abele, 2000).

It has been suggested that the explanation for women's lower career achievement and earning power is that the majority of women prioritise their family role above their working role (Hakim, 1996). Implicit in this argument is the idea that career and earning differentials arise because of attitudes held by women who either have, or anticipate having, family commitments. There is

some evidence which supports this, suggesting that the occupational choices of young women, and men, are partially determined by the way they prioritise their work and family roles. Smithson (1999) interviewed 84 British men and women aged 18 to 30. She found that while many expressed egalitarian beliefs about gender roles, many also indicated that they had formed more traditionally gender specific-plans and expectations about their future lives. There were marked inconsistencies between what they thought was appropriate for people in general and their own personal plans. The young people explained these inconsistencies in terms of their individual choices being different from what they felt it was acceptable for others to do.

There is also evidence from international research that young adults may experience conflicts within their personal ideological systems about work and family roles. Burke (1994) looked at the values, career, and life expectations of Canadian university business students. He found that that men and women attached equal importance to work, marital, parental and home-care roles. However, when their own personal hopes and beliefs about work, family and parental responsibilities were examined, traditional ideas about the division of labour began to emerge. In another Canadian study, Davey (1998) looked at the way 54 female senior high school students evaluated career and family roles. She found that this sample placed a high and equivalent value on both career and family roles. She also found that even the women who indicated a marked preference to care full-time for their children had a strong image of themselves as a career woman. These two Canadian studies suggest that traditional and egalitarian beliefs may co-exist. The psychological literature suggests that people may hold ambivalent or conflicted attitudes (Kaplan, 1972) and that people may

hold positive and negative attitudes toward an entity simultaneously (Maio & Olson, 2000).

The occupational paths people follow are determined, in part, by earlier educational choices (EOC, 1997; Cabinet Office, 2000; Rake, 2000). In 1995, in England, 49% of girls aged 16 had five or more A-C grade GCSE's compared with 40% of boys. In 1995 39% of female 16 year olds entered full-time further education compared to 35% males (LFS, 1996). This was part of a general increase in the qualifications attained by 16 year olds over the preceding two decades, but the trend was more marked for girls than boys (EOC, 1997) and more recent data (EOC, 2001d) confirms that these trends continue. Since educational attainment influences women's access to the labour market (Rake, 2000), it might be expected that women's occupational achievements would have begun to show a concomitant increase. However, there remains a stereotyping of option and subject choices by girls and an under-representation of girls with higher-level vocational qualifications. For example, more men than women take mathematics, physical sciences and technology, while female students are concentrated in English, modern foreign languages and social studies (Roger & Duffield, 2000; EOC, 2001a). These choices feed into the segregation that is apparent between men and women in higher education (Roger & Duffield, 2000) and in their career and occupational choices (Cabinet Office, 2000; EOC, 1997; EOC 2001a).

Ministers in the Cabinet Office suggest that a partial solution to the problem might lie in helping young women to achieve their full academic potential and by giving careers advice "which does not make outdated assumptions" (Cabinet Office, 2000). This solution is premised on the idea that if young women are given the right advice they can avoid the loss of earnings

and promotion by making appropriate plans. However, in order that the advice might be effective it is important to look first at the psychological determinants that shape their plans about furthering their education and developing their work prospects. A review of the psychological literature highlighted several factors that might influence these plans. They include attitudes (Whitelaw, Milosevic & Daniels, 2000; Burke 1994; Davey 1998), perceived social pressure (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980; Roger & Duffield, 2000), the example set by their mothers (Tuck, Rolfe & Adair, 1994), and the anticipation of regret (Manstead, 2000). The potential for these factors to influence young women's educational and work plans is discussed below.

Whitelaw, Milosevic and Daniels (2000) examined the way in which attitudes determined academic performance. They found that attitudes towards working hard, getting good marks and producing a high standard of work impacted on school performance. Neither boys nor girls equated being clever with being popular. They suggested that girls may become aware of this negative side to academic achievement early in their school lives and may find ways to hide their abilities in order to remain popular.

Roger and Duffield (2000) explored the factors that shape the educational choices students make when considering science, engineering and technology. They found that the negative attitudes female students hold towards these subjects were shaped by factors which served to reinforce the idea that studying them is not in keeping with their female identity. They suggest that this process starts early in a child's life, pointing out that children in nursery and primary school already hold ideas about gender identity. This influences their behaviour and can lead to situations in which, for example, boys tend to use construction toys and to prevent girls from using them (Brown & Ross, 1991).

Roger and Duffield suggest that the reinforcement of this process continues throughout primary school years and beyond due to the low standard of teaching in these subjects and because such subjects are very often taught in a way which makes them more accessible to boys than to girls. Roger and Duffield found that later in their academic career, during the option choice process, female students are not positively encouraged to consider science engineering and technology. In addition they found that the support and guidance students received in their career choices was particularly weak and there was little encouragement given female students to consider the traditionally male dominated subjects.

The process Roger and Duffield (2000) describe is one in which girls are not encouraged, and may be positively discouraged from taking up traditionally male dominated subjects or career paths. Attitudes towards education and its subject matter do seem to shape girls' educational choices, achievements and ultimately their occupational direction. However, it may be that attitudes which are not directly linked to education, such as those about motherhood and the care of children, may also influence the choices they make.

Over the last two decades there has been a trend for more women to combine motherhood with paid employment (Court, 1995; LFS, 1998). It may be that this change in the employment pattern of mothers could influence the attitudes of young women who are currently considering their educational and occupational choices. The influence of mothers on the gender role attitudes of their children has been explored within psychoanalytic, social learning and cognitive-structural theories (e.g. Bandura, 1977; Arditti, Godwin, & Scanzoni, 1991; Ex & Janssens, 1998). According to these theories gender role attitudes of daughters may be influenced by their mother's expressed beliefs and

behaviour because daughters identify with their mother and seek to model themselves on her. In a study conducted in New Zealand, Tuck, Rolfe and Adair (1994) found a significant effect of maternal, but not paternal employment, on both male and female student's views. Students with working mothers held more egalitarian attitudes than students whose mothers were the primary caregivers, and female students held more egalitarian attitudes than male students. At the very least the increase in maternal employment may make young women aware of the options that are available to them.

In addition to mothers, other important peer and reference groups may influence young women's behaviour via their perceptions of what these reference groups want them to do. Fishbein and Ajzen (1975; Ajzen & Fishbein, 1980) called this a subjective norm. Subjective norms are perceived social pressure to behave in a certain way. They have been shown to be important when considering a range of behaviours, including carrying out schoolwork (Miller & Grush, 1984). Young women may also be aware that the behaviour of those around them indicates a mixed message: Although mothers are increasingly likely to work outside the home, they are still the ones who perform most of the domestic tasks within the home (Gershuny, 1999).

An awareness of the choices available and conflicting messages about which role to prioritise, may lead women to consider the positive and negative outcomes of the options that are open to them. Weighing the pros and cons of different behavioural outcomes opens the way to another factor which may shape a student's plans – the anticipation of regret (Zeelenburg, 1996). The power of anticipated regret to shape decisions appears to be based on a tendency for people to take into account the regret they might experience if they chose one option over another (Zeelenberg, 1996). Anticipated regret may

influence students' education and career plans if they view those plans as a choice between being a mother and having a career. Manstead (2000) has linked the power of anticipated regret to influence intention formation to the adherence to a personal code of conduct. He suggested that people would anticipate feeling regret if they intend to act in a way which goes against their personal moral code. Parker, Manstead and Stradling (1995) found that moral norms and anticipated regret helped to explain the intention to commit three types of driving violations. Motherhood is a value-laden role, surrounded by many social norms about how a mother should act (Maitlin, 1987). It seems intuitively likely that ideas about the care of children and providing for oneself and one's family are likely to carry a strong moral compunction, and might therefore lead to anticipated regret if women feel they have to choose between these roles.

In summary, in Britain today greater numbers of women are gaining more, and higher, educational qualifications than they were two decades ago (EOC, 2001a,c,d; 1997). Also, during the last two decades mothers of pre-school children have shown an increasing tendency to return to work (Court, 1995). Recent research has shown that young people tend to place a high value on both work and family roles, but often plan to take up traditional gender specific roles (Smithson, 1999). The educational achievements of girls have been increasing over the last two decades, but this does not seem to have impacted on their occupational attainments. This raises the question of why high achieving young women should continue to under achieve in their working life (Abele, 2000). The attitudes that play a role in this apparent inconsistency are worthy of further investigation.

The present questionnaire study examined the attitudes and plans of high achieving young women aged between 15 – 17, a critical career-planning phase in their lives. The questionnaire was designed to explore attitudes and plans relating to education, work, career development and motherhood. In addition, information was collected about whether their own mothers had worked before or after they started school. Attitudes were investigated at a personally referenced level in order to overcome the discrepancies between personal and ideological beliefs described by Smithson (1999). Attitudes were investigated in relation to role of worker and mother and the combination of both roles. Perceived social pressure and anticipation of regret were also examined. Respondents were asked to indicate their plans for the future concerning furthering their education, developing a career, having children and combining the roles of worker and mother. Following Kaplan (1972) and Maio and Olson (2000) scales were created for both positive and negative attitudes towards work and childcare.

Hypotheses

It was hypothesised that plans for education and having a career would be predicted by attitudes to both work and motherhood.

Following Manstead (2000), it was hypothesised that students would be less likely to plan to combine work and motherhood if they anticipated that doing so would lead them to experience regret. It was hypothesised that they would be more likely to plan to combine work and motherhood if they anticipated that they would regret leaving paid employment.

Following Tuck, Rolfe and Adair (1994) it was hypothesised that students would be more likely to plan to combine work and motherhood if their mothers had worked during their childhood.

Following the literature on subjective norms (Fishbein & Ajzen 1975; Ajzen & Fishbein 1980) it was further hypothesised that perceived social pressure give up work to care for a child would be a negative predictor of plans to combine work and motherhood.

Method

Design

A questionnaire survey was used to assess young women's plans and attitudes about work, developing a career, motherhood and combining the roles of worker and mother.

Participants

As the purpose of the present study was to examine intentions in high ability/high achieving girls, a sample of 92 female school students was drawn from a selective grammar school for girls in Kent where an average of 95% of each year group is expected to go on to some form of further education. The provided a targeted sample of high achieving young women, rather than a random sample. At the time of the survey the students had reached the end of their fifth year. Their ages ranged from 15 to 17 with a mean age of 16. All students who were asked to take part consented – therefore there was a 100% response rate for this study.

Measures

All items – apart from those relating to factual or demographic details-were responded to on a seven-point scale from one “absolutely disagree” to seven “absolutely agree”. The items were summarised into a number of scales, factor analysed using the principal components technique and varimax rotation to check for unidimensionality and to confirm scale structure.

Plans

Respondents were asked to rate how certain they were that they would gain further educational qualifications, have a career, have children and combine work and motherhood. They were categorised depending on whether they were certain or uncertain about these plans.

Attitude Scales

Role identity as a mother. Two items: "Being a mother will be important to me"; "It will be important to me to be a competent mother" (Cronbach's alpha = .60, M = 6.23, SD = 0.99).

Mother role enhancement. Two items: "Having a child will enhance my personal development"; "My role as a mother will be important for my emotional well-being" (Cronbach's alpha = .81, M = 5.29, SD = 1.16).

Role identity as a worker. Two items: "Paid work outside the home will be important to me"; "It will be important to me to be a competent worker" (Cronbach's alpha = .71, M = 5.95, SD = 1.07).

Worker role enhancement. Two items: "Being a worker will enhance my personal development"; "My role as a worker will be important for my emotional well-being" (Cronbach's alpha = .84, M = 5.25, SD = 1.12).

Combine work and motherhood a positive thing. Two items: “It will be important to me to combine work and motherhood successfully”; “There will be advantages for me in combining work and motherhood” (Cronbach’s alpha = .73, M = 5.70, SD = 1.27).

Positive attitudes towards staying at home full-time and doing no paid work. Three items: “Remaining at home with my child full-time and doing no paid work would make me happy/fulfilled/rewarded” (Cronbach’s alpha = .93, M = 4.17, SD = 1.67).

Negative attitudes towards staying at home full-time and doing no paid work. Four items: “Remaining at home with my child full-time and doing no paid work will make me bored/socially isolated/exhausted/stressed” (Cronbach’s alpha = .80, M = 4.40, SD = 1.16).

Positive attitudes towards work. Four items: “Being a worker will make me happy/fulfilled/successful/rewarded” (Cronbach’s alpha = .89, M = 6.27, SD = 0.71).

Negative attitudes towards work. Four items: “Being a worker will be emotionally draining/stressful/exhausting/socially isolating” (Cronbach’s alpha = .75, M = 3.81, SD = 1.08).

Positive attitudes towards combining full-time work and motherhood. Three items: “Combining full-time work and motherhood will make me feel happy/fulfilled/rewarded” (Cronbach’s alpha = .88, M = 4.68, SD = 1.54).

Negative attitudes towards combining full-time work and motherhood. Three items: “Combining full-time work and motherhood will make me feel exhausted/emotionally drained/stressed” (Cronbach’s alpha = .87, M = 5.40, SD = 1.22).

Positive attitudes towards combining part-time work and motherhood.

Three items: Combining part-time work and motherhood will make me feel happy/fulfilled/rewarded' (Cronbach's alpha = .93, M = 5.43, SD = 1.28).

Negative attitudes towards combining part-time work and motherhood.

Three items: Combining part-time work and motherhood will make me feel exhausted/emotionally drained/stressed' (Cronbach's alpha = .85, M = 4.50, SD = 1.14).

Perceived social pressure to stop work to care for child. Six items assessed respondents' beliefs about the expectations of potential partner, mother, father, close friends, future work colleagues and employer that they should stop work to look after their child (Cronbach's alpha = .90, M = 3.45, SD = 1.33).

Anticipated regret. Two separate items: "I expect I would regret it if I returned to work after my child was born" (N = 92, M = 3.67, SD = 1.86); "I expect I would regret it if I left my job to care for my child" (N = 92, M = 4.25, SD = 1.71).

Mothers' working patterns. Respondents were asked whether their own mothers had worked before and after respondents had started school.

Demographic details. Age, nationality, details of their parents' occupation.

Procedure

Respondents completed the questionnaires during a General Studies period in their school timetable. The questionnaire was presented to them as a survey of their views and opinions about work, motherhood and combining the two roles.

Results

Future Plans

Students' future plans were measured using four items. These are shown in Table I alongside the mean, standard deviation and range of each item. Their intentions were skewed in a positive direction. The range of all responses was on or above the mid-point. Therefore, for the purpose of the regression analyses each intention was formed into a dichotomous variable. One category incorporated all respondents who had circled 7 - "absolutely agree". A second category incorporated all the rest of the respondents who had indicated less than absolute agreement.

Table I about here

Dichotomous Logistic Regression

Analysis using dichotomous logistic regression was performed to determine whether young women who were certain or uncertain about their plans for the future could be distinguished in terms of the items and scales described in the materials section. The exact number of cases in the following analyses varies because of outliers and randomly distributed missing data. In the tables which follow positive beta weights indicate that the variable is positively associated with the outcome. Negative beta weights indicate that the variable is negatively associated with the outcome. In all the analyses which follow predicted probability was for membership of the certain category. All attitude scales were entered in each analysis.

Plan to Gain Further Educational Qualifications

The final model (see Table II) accounted for 24.3% of the variance according to the Nagelkerke R² statistic. It was significantly different from the constant only model (χ^2 (2, N = 90)= 15.28 $p < .001$). This model was able to predict the education certain category with 94.37% accuracy (n = 71) and the education uncertain category with 10.53% accuracy (n = 19). The overall predictive accuracy was 76.67%.

The more strongly respondents agreed with positive attitudes towards work the more likely they were to be certain that they would gain further educational qualifications. The odds ratio of 2.86 suggests that students were over two times more likely to be certain about their education plans for every unit change of this predictor.

Perceived social pressure to give up work in order to care for their child was negatively associated with education plans. The more strongly respondents agreed with the idea that important others would want them to stop work to care for their children the more likely they were to be uncertain about their plan to gain further educational qualifications. The odds ratio suggests that the likelihood of the students being certain about their education plans changed by a factor of .5 for every one unit change in this predictor variable.

Table II about here

Plan to Have a Career.

Students were more likely to be certain about their plan to have a career if they had high levels of *role identity as a worker* and with *negative attitudes towards work*. The odds ratios suggest that in each case students were approximately two and a half times more likely to be certain about their career

plans for every unit change in this predictor. The final model (Table III) accounted for 48% of the variance. The predictive accuracy was 97.40% for the career certain category ($n = 77$) and 41.67 % for the career uncertain category ($n = 12$), giving an overall predictive accuracy of 89.89%. This model was significantly different from the constant only model ($\chi^2 (3, N = 89) = 26.99 p < .001$).

Table III about here

Plan to Have Children.

This model (Table IV) showed a significant model fit based on three variables ($\chi^2 (3, N = 88) = 34.953 p < .001$). The Nagelkerke R² statistic showed that this model accounted for 44% of the variance. This model achieved an overall predictive accuracy of 76.14% (child certain = 83.67%, $n = 49$; child uncertain = 66.67%, $n = 39$).

The odds ratios indicate that the strongest predictor was *mother role enhancement*. Students were over three times more likely to be certain that they would have a child for every unit change in this predictor. *Positive attitudes towards combining part-time work and motherhood* was the next strongest predictor. The more strongly they agreed with positive attitudes towards combining part-time work and motherhood, the more likely they were to plan to have a child. In addition, the more strongly students agreed with the statement *I would regret it if I left work to care for my child* the less likely they were be certain that they would have a child.

Table IV about here

Plan to Combine Work and Motherhood.

The final model (Table V) was significantly different from the constant only model (χ^2 (3, N = 87) = 32.36 $p < .001$). The Nagelkerke R² statistic suggested that it accounted for 41.5% of the variance, with an overall predictive accuracy of 72.41% (combine certain, n = 41, predictive accuracy 68.29%, combine uncertain, n = 46, predictive accuracy 76.09%).

The odds ratios indicate that the variable concerned with mothers' pre-school work pattern had the greatest impact. Students were more likely to plan to combine work and motherhood if their mothers had worked before the student had started school (odds ratio = 3.30). The remaining two predictors each had a similar impact on the outcome category; *mother role enhancement*, odds ratio = 2.65 and *combining work and motherhood is a positive thing*, odds ratio = 2.25). The more strongly they agreed with these ideas the more likely they were to plan to combine work and motherhood.

Table V about here

Discussion

Education Plans

Students' plans to gain further educational qualifications were influenced by their attitudes about work. The more positively they viewed the impact of work on their lives the more likely they were to plan to gain further educational qualifications. This seems to indicate that they acknowledge a link between academic achievement and success in their working lives.

More surprisingly, perceived social pressure to give up work to care for their child was also a significant predictor of their plans to gain further educational qualifications. The more they felt that other people thought they should become a full-time mother, the more likely they were to be uncertain about their plan to gain further educational qualifications. This indicates that relatively early in their academic career young women's plans about their education are being shaped by their perceptions of their potential role as a mother. It also shows that young women's perceptions of how important reference groups want them to behave as a mother, may shape their educational choices. The choices they make about their education will in turn shape the course of their future working lives. Thus, beliefs held at a relatively early stage in young women's lives, long before they actually become mothers, are determining plans that will have far-reaching implications for their future working lives.

Career Plans

The finding that plans to have a career were predicted by both the perceived personal importance of work and by negative attitudes toward work may seem contradictory. However, these findings may be explained by a distinction made between work and career. Nicolson (1996) argued that only higher-level, professional occupations are associated with having a "career". These jobs carry with them a sense of high status, progression and achievement and are often distinguished by relatively higher salaries and other bonuses. Further, that such high status, professional types of employment retain the vestiges of being thought of as primarily a male activity. In contrast work may be thought of as referring to any sort of paid activity and may be

marked by a lower sense of commitment on the part of the worker and lower financial remuneration. Thus it may be that it was the negative associations about mundane *work*, which caused this scale to be predictive of intention to have a *career*. However, the more they agreed that actually being a worker and being a competent worker would be important to them, the more likely they were to plan to have a career. This result is echoes those of Anderson (1993) who found that women in professional or managerial posts, that is, those who were developing a career, tended to view their career as important and central to their lives.

Child Plans

In this sample, just over half the students indicated that they certainly planned to have a child at some point in the future. Of the three scales in the final model one – *role enhancement as a mother* - emerged as clearly the strongest predictor. This indicates that those students who definitely intend to have a child value motherhood as something that is important for their personal development and their emotional well-being. Anticipated regret was a predictor of plans to have a child. The less they felt they would regret leaving their job to care for a child the more likely they were to plan to have a child. This suggests that young women are aware of the tension between occupational success and motherhood. The third predictor – positive attitudes towards combining part-time work and motherhood – suggests that they anticipate reaching a compromise between motherhood and work. The more strongly they endorsed positive ideas about combining part-time work and motherhood the more likely they were to be certain that they would have a child. It is perhaps notable that *positive attitudes towards combining full-time work and motherhood* was not a significant

predictor of certainty about plans to have a child. It is widely acknowledged that part-time workers are often viewed as being less committed to their working role (e.g. Hakim, 1996, 2000). In seeking to combine part-time work and motherhood students may be unaware of the difficulties part-time workers face in developing a career.

Overall, students' plans to have children seem to be influenced by the positive value they place on motherhood; they see the role as being linked to their personal development and wellbeing. At the same time their plans to have children are also influenced by the idea that combining motherhood with part-time work would be a positive thing to do.

Plans to Combine Motherhood and Work

The strongest predictor of intention to combine work with motherhood was whether the students' own mothers had worked prior to their starting school. This may be because their mothers acted as a positive role model, or it may simply be that seeing their mothers work made them more aware that this was an option after having children. Having a mother who worked once children were of school age was not a significant factor. This finding illuminates those of Tuck, Rolfe and Adair (1994) and indicates that young women who have personal experience of non-maternal childcare in the preschool years feel that this would be a suitable option for their own children.

Young women were more likely to plan to combine work and motherhood the more strongly they believed that being a mother would enhance their own personal development, and be beneficial for their emotional well-being. Positive attitudes toward combining work and motherhood were also a strong predictor. The more they agreed that there would be advantages in combining work and

motherhood and the more highly they rated the personal importance to them of achieving this life-style the more likely they were to plan to adopt it.

Conclusion

This study has shown that the education and career plans of this sample of high ability young women aged 15-17 are influenced by their anticipated role as a mother and their perception of social pressure to give up work to care for their children. Despite strong intentions to have a career and gain further educational qualifications, intention to have a child and the perceived acceptability of combining work with motherhood influenced the certainty with which they formed education and career plans. These findings may help to explain the ongoing under-representation of women in senior positions, science and technology, and in public life (e.g. Bebbington, 2001; Fawcett, 2001). Despite one of the highest female employment rates in the European Union (69%, Bower, 2000) women in the UK still comprise fewer than one in twenty directors and overall only 18% of managers were women (The Women's Unit, 2000). Only 7% of biosciences professors and 2% of engineering professors are women (Glover, 2001). Recent surveys show that 83% of women believe that commitment to family responsibilities hinders women's advancement in the workplace (Opportunity Now, 2000) and government statistics continue to show that employment rates are highest amongst women who do not have children (Bower, 2000).

The present study shows that high ability girls are making plans, not just about their careers but also about their anticipated caring roles as mothers. It is therefore more likely that they will choose academic subjects and job opportunities which they think will enable them to combine motherhood with

work. Feminised professions such as nursing and teaching provide girls with examples of how this might be possible. Male-dominated professions, such as those in science and technology do not. In the past it has been suggested that girls are not attracted to science and technology subjects because they tend to be regarded as male-dominated subjects that are not compatible with female identity (e.g. Roger & Duffield, 2000). One interpretation of our findings is that an important aspect of this identity is motherhood. Another is that young women are actually making pragmatic choices about the kind of career which will enable them to combine motherhood with a career. Young women still appear to feel that they should, or may have to, reduce or give up work in order to care for children. Recent findings show that this is still a realistic perception, in a longitudinal study of over 400 first-time mothers Houston and Marks (2000) found that over 78% reduced their working hours or gave up work in order to care for their baby. Moreover those mothers who continued to work full-time took primary responsibility for the organisation of childcare.

If women are to have equal opportunities to work and have careers in all areas of professional life, ways in which family life may be combined with work should be addressed at an early stage in their schooling. This is consistent with recent government initiatives in relation to work-life balance which stress that work life balance is for everyone not just mothers. The campaign for work life balance offers guidance to employers treats both parents as equal carers of children and suggests ways in which people can work, not less, but ‘smarter’ in order to meet the demands and benefits of life outside work (Department of Trade and Industry, 2001).

Our findings suggest that careers guidance also needs to address work-life balance issues, in particular how paid employment and career development

might be successfully combined with parenthood for both men and women. Employers and policy makers also need to address whether the world of work and particular occupations are in fact compatible with responsibility for the care of children. In doing so it is necessary to also address the issues that surround making work compatible with a parenting role, whatever the sex of the parent. This would involve addressing the beliefs implicit in societal norms about the mothering role that it is the mother who is chiefly responsible for parenting, particularly in the early years of a child's life.

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Table I: Student's plans for the future (N = 92).

Table II: Logistic regression of students' plans to gain further educational qualifications as a function of attitudes to work and motherhood (N = 90).

Table III: Logistic regression of plans to have a career as a function of attitudes to work and motherhood (N = 89).

Table IV: Logistic regression of plans to have a child as a function of attitudes to work and motherhood (N = 88).

Table V: Logistic regression of plans to combine work and motherhood as a function of attitudes to work and motherhood (N = 85).

Table I

Future Plans	Mean (SD)	% Absolutely Agree	% Certain	Less
In the future I plan to gain further Educational qualifications	6.66 (.76)	79.1		20.9
In the future I plan to have a career	6.78 (.74)	85.7		14.3
In the future I plan to have children	5.91 (1.54)	54.9		45.1
In the future I plan to combine paid work and motherhood	5.65 (1.69)	45.1		54.9

Table II

Variable	B Weight	Wald test z-ratio	Odds Ratio	95% C Lower	95% C Upper
Positive attitudes ¹ work	1.05	6.38*	2.86	1.27	6.45
Social pressure ²	-.70	9.00**	.50	.31	.78

¹ Positive attitudes towards work, ² Perceived social pressure to give up work to care for a child

*p < .05. **p < .01.

Table III

Variable	B Weight	Wald test z-ratio	Odds Ratio	95% C Lower	95% C Upper
Negative work ¹	1.01	7.67**	2.76	1.34	5.65
Worker identity ²	0.95	8.75**	2.59	1.37	4.87

¹**Negative expectations about work** ²**Work / competent worker important to you**
 * $p < .05$. ** $p < .01$.

Table IV

Variable	B Weight	Wald test z-ratio	Odds Ratio	95% C Lower	95% C Upper
Mother enhancement ¹	1.23	15.74**	3.41	1.86	6.25
Positive part time Work & m'hood ³	.61	5.66*	1.84	1.11	3.05
Regret if I left my job ²	-.47	6.63**	.63	.44	.89

¹ Being a mother would enhance personal development / emotion² I would regret it if I left my job to care for my child³ Positive expectations about part time work and motherhood. *p < .05. **p < .01.

Table V

Variable	B Weight	Wald test z-ratio	Odds Ratio	95% C Lower	95% C Upper
Mothers pre-school work pattern	1.19	3.85*	3.30	1.00	10.85
Mother enhancement ¹	.98	11.11**	2.65	1.49	4.71
Combine work & motherhood pos. ²	.81	8.76**	2.25	1.31	3.84

¹**Being a mother would enhance personal development / emotion.**

²**Combine work and motherhood a positive thing.**

*p < .05. **p < .01.