THE INFLUENCES AND MOTIVATIONS ON WHICH STUDENTS BASE THEIR CHOICE OF CAREER

Bromley H. Kniveton Department of Social Sciences, Loughborough University, Loughborough, Leicestershire. LE11 3TU

Biographical note:
Dr Bromley Kniveton is a Senior Lecturer in Social Psychology with a particular interest in education and training processes.

ABSTRACT
The aim of the study was to examine the influences and motivations, on which students base their choice of career. 348 young people aged 14-18 years, completed a questionnaire and took part in an interview concerning their choice of career. It was found the greatest influence on their choice of career was their parents, followed by that of their teachers. There was evidence of gender differences, with same sex parental influences. Although seeking further education was the most popular next step for most respondents, marriage was more important to females than to males. Overall motivation to work was found primarily to involve money, and liking for the job. Very low on the list were long term goals, such as personal development, career advancement, and pensions. Most noticeably, the students considered status was derived from possessions, rather than employment. It was suggested, a consequence of this was that employers options to motivate workers were very limited. It was hoped, the profile of career influences and motives, would be helpful for teachers with responsibility for careers guidance.

Teachers, with responsibility for careers guidance, are operating in a rapidly changing society. It is the aim of this study is to provide a current profile of the influences and motives, related to student career choices. According to Alberts et al (2003), choice of career is one of the major areas of concern for young people nearing the end of their schooling. The influences are complex for, Ginzberg et al. (1951) argue, the choice of career is also influenced by the young person's conceptualisation of his or her abilities and preferences, and the pursuit of a match between these and job requirements. This in turn, is influenced by the young person's gender, and place in the family. The interaction between these forces has previously been demonstrated in studies concerning the selection of specific careers, such as nursing (Law and Arthur 2003), but, in the present study, a far more widespread impact will be examined.

The task of choosing a career is not static, but part of the developmental process. According to Ginzberg et al (1951), the initial fantasy stage of early to mid-childhood, is followed, through the early teenage years by the tentative stage, when individuals begin to think about their interests, capacities and values. In the realistic stage, of late adolescence, which is the subject of this paper, the individual shifts from a focus on subjective needs and interests, to an appraisal of what the world has to offer. Once selected, even a single career choice can, however, according to Ranson (2003), involve at least three different career paths. These include stable employment with one employer, mobility between employers and self-employment. It is important to be aware, that any choice made may be reflected in a number of different paths, once the career has been commenced.

Both the school and the family can provide information and guidance, either directly, or indirectly, to influence a young persons choice of career. School teachers can identify aptitudes and abilities, and encourage students to take certain subject options, or take part in work experience, or employment visits. Small and McClean (2002), reported on the very strong influence parents can have by providing an example. They also offer appropriate support for certain occupational choices, which tend to follow their own. There are many other influences from within the family. For example, Dunn, Slomkowski and Bearsall (1994), highlight the impact of siblings who can have an influence in competition to that of parents and teachers. This can last until, as young adults, the siblings adopt their separate lives. The link between birth order and occupation has a long history. According to Spraggs (2002), in wealthy families primogeniture traditionally provided for the eldest son to inherit the family estate. The second son would often join the church, and maybe the third, the military. Younger sons with no prospects would, on occasions, turn to crime, for generally, if they were caught and displayed contrition, due to their social status they would be pardoned. More recently, there is evidence of differences in marriage patterns and career prospects based on birth order. Wall (1996), for instance, found evidence that with some occupations, the eldest rather than a younger son, would be more likely to follow the occupation of the father. There is no similar effect with girls.

The young person's own gender can be a factor in career choice. Creed and Patton (2003) reported with adolescents, females matured earlier than boys in their career attitudes. They also found females reaction to early working experiences, was more mature than that of males. In addition, with girls, according to Spitze and Logan (1990), career choice can be influenced by many aspects of family life, often involving caring responsibilities, which do not impact so much on boys. Wilgosh (2002), reported on the impact of gender stereotyping on academic attainment in certain subjects, and how popular images in the media influenced career choice. Adolescent girls for example, became focussed on appearance and popularity, and tended to avoid science-related careers. Miller et al (2002) found, females were far less likely to enter science based occupations than males, and emphasised the need for teachers to direct their attentions towards changing the attitudes of girls. Heckert et al (2002), noted female college students, more than males, in their criterion for choice of career put more emphasis on factors such as working conditions, facilities for child rearing, career certainty and working hours. Small and McClean (2002) also noted a gender difference in career choice, with males more likely to want to run their own businesses than females. Further Noon and Blyton (1997) argue, females more than males, desire intrinsic rather than extrinsic rewards from their employment. According to Bailyn (2003), there is ample evidence, that despite employment law, organisations are more responsive to males than females.

There are many other characteristics, which to varying degrees have been thought to relate to career choice. Holland (1985), for example, identified personal characteristics which could be linked with career choice, arguing that people, knowing their own interests and abilities, would actively search out an appropriate career. He promoted his idea describing six main orientations, which were not intended to be mutually exclusive. These were: 'Realistic', linked with preference to outdoor and physical work, with little interpersonal demands. 'Investigative', linked with thought and creativity, with minimum social demands. 'Artistic', disliking structure, and requiring intense involvement. 'Social', linked with communication, helping others. 'Enterprising', linked with power, needing management behaviours. Finally, 'Conventional', linked with high structure, self-control, and low interpersonal demands. As with most attempts to categorise this approach has been criticised and modified by other researchers, the most notable being Schein (1993). For the purpose of this study, however, the attraction of Holland's model is that it provides a means for students to express career preferences, without a great deal of knowledge about individual jobs.

An assumption Holland makes is that individuals have free choices. This is frequently not the case. Indeed, while some people may consider they have a real choice, others may not see choice of a career as being under their own control. They feel, what is referred to by Peterson, Maier and Seligmen (1993), as 'learned helplessness'. The extent to which young people feel they have control over their own affairs is, therefore, considered in the present study.

This study, taking into account the variables of birth order and gender, is concerned to explore the relative impact of a number of influences such as school teachers, and parents, on career choice. In addition it explores student's motivations when considering their careers.

METHOD

Participants:

The sample of 384 young people comprised 174 males and 174 females, of whom 174 were first born and 174 last born. The age range was 14 - 18 years, with a mean of 16.70 years and standard deviation of 1.07 year. As only 4.4 per cent of the sample were from minority ethnic groups this was not factored in to the analysis as a variable. Following Kniveton (1986), only families with two or three siblings were included. This provided a control for inter-sibling spacing, such that no child should be more than seven years older than any other child, in the same family. This ensured siblings either were, at the time of the interview, or had at the same time, spent a period of time together in the family environment. With a greater inter-sibling spacing they may never have lived together in the same household. All were still living with two parents. The students were drawn from eight schools, all of which were co-educational. The institutions included urban and rural locations, all grouped around the mid point of the OFSTED ratings according to league tables. The questionnaires and interviews were conducted individually in those institutions.

The Questionnaire and Interview schedule:

The questionnaire/interview schedule, were designed to cover a number of aspects of the background to career choice. In order for the questionnaire to be administered individually to students in a single class session questionnaire items had to be kept to a minimum. The format of the questionnaire was as follows:

An Initial series of questions concerned factors such as birth order, family etc

Question 1. *When you leave school/college what are you hoping to do?*

One choice to be made from the four responses indicated in table III.

Question 2. *Have you an actual job in mind?* (If so) *What is it?*

Question 3. *Who was most influential in helping you select the job/follow the career path you are aiming for?*

The response options are shown in table I. Students were asked to rank them in the order of influence.

After this section of the questionnaire an opportunity was provided for the students to expand on their responses. The trigger comment by the researcher was:

> *Can you tell me a little about why you have put the items in the order of priority you have?*

Question 4. Orientation to work. This followed Holland's (1985) theory, which linked orientation characteristics with six career pathways. The statements used were derived from his Self Directed Search Instrument and are shown as follows in italics:

> *I like to do things which involve physical effort* (category realistic)
>
> *I like to do things which require me to put a lot of thought into them and think things through* (category investigative)
>
> *I like to do things which are artistic and let me express myself relatively freely* (category artistic)
>
> *I like to do things which involve me working with other people (category social)*
>
> *I like to be in charge of other people* (category enterprising)
>
> *I like to do things which follow a routine and where I can work on my own much of the time.* (category conventional).

Responses to each of the above involved selection of options on a Likert scale as follows:

> *Most of the time, some of the time, occasionally, very rarely.*

The validity of these scales was tested by comparing the maximum scored anchor with the job/career mentioned in question 2 above. 43 per cent of the sample responded to question 2. The job titles they gave were categorised into the six anchors by two Human Resources specialists, and these categories produced a .93 correlation with the appropriate statements. This was an acceptable level of validity for the six statements.

Question 5. As learned helplessness tends to be specific to situations this was measured by means of four statements related to employment prospects adapted from the Locus of Control Inventory (Robinson, Shaver and Wrightsman 1993). In a pilot study with a sample of thirty the statements used were compared to the full scale producing a acceptable level of reliability with $r = .78$.

No matter how hard you try some people just don't like you
I do not expect it will take me very long to find a job when I leave school/college/further education.
Whether I get a job when I have finished at school/college will depend on how hard I try.
If I do not get a job when I leave, it will be because there are too few jobs available

Responses to each of the above involved selection of options on a Likert scale as follows:

Strongly agree, agree, disagree, strongly disagree.

Question 6. *Put the following in order of importance you feel they will be to you when you come to look for a job.*
The response options are shown in table IX. Students were asked to rank them in the order of importance.
After the last section of the questionnaire an opportunity was provided for the students to expand on their responses.
The trigger comment by the researcher was:

Can you tell me a little about why you have put the items in the order of priority you have?

Analysis:

In each case, the data was examined first from the point of view of the whole sample, and then the sample was subdivided in terms of birth order, and gender.

RESULTS
Who influences the student's selection of career?

In table I, parents are shown to have a greater influence than teachers. If the rankings for both parents are combined and those for both teachers are combined, the result is even clearer.

Table I

Showing rank order of responses to the question 'Who was most influential in helping you select the job/follow the career path you are aiming for?'

Mean scores, standard deviations in brackets. N= 348

Mother	2.24(1.45)
Father	2.21(1.51)
School teacher	1.46(1.41)
Careers teacher	1.24(1.40)
Other	.86(1.50)
An adolescent friend	.82(1.28)
Brother	.39(0.99)
Sister	.33(.85)

Table II shows the same sex parent is the most influential, followed by the opposite sex parent. With birth order, the eldest child is more influenced by the father, the youngest by the mother. The teacher comes third and fourth in the list in all cases. Noticeably the eldest child is significantly more influenced than the youngest child by the mother (t=3.19. df. 346. P< .002), and father (t= 3.69. df. 346. P< .002), and the youngest child is significantly more influenced than the eldest by a brother (t=5.54 df. 346. P<.000), and sister (t=5.14 df. 346. P<.000).

What sort of career lifestyle the student's want?

The importance of employment was examined in relation to two other major aspects of life. Namely further/higher education, and marriage. As can be seen in Table III, the greatest number want to engage in further training, then employment, then marriage and employment, and finally marriage without employment. There is an interesting gender difference. Males more than females want to get a job, but females more than males want to get married in addition to having a job, or further education. Marriage is a higher priority for females than males. No women and very few men, however, want to get married without having either further education, or a job.

4

Table II

Showing rank order of responses to the question 'Who was most influential in helping you select the job/follow the career path you are aiming for? for subgroups of the sample. Mean scores, standard deviations in brackets.

Male n=174	Female n=174	Youngest n=174	Eldest n=174
Father 2.52 (1.46)	Mother 2.47 (1.42)	Mother 1.99 (1.48)	Father 2.51 (1.43)
Mother 2.01 (1.44)	Father 1.90 (1.49)	Father 1.92 (1.52)	Mother 2.48 (1.38)
Teacher 1.31 (1.40)	Teacher 1.61 (1.40)	Teacher 1.43 1.50)	Teacher 1.49 (1.31)
Careers teacher 1.26 (1.35)	Careers teacher 1.23 (1.44)	Careers teacher 1.24 (1.47)	Careers teacher 1.25 (1.32)
Other .91 9 (1.54)	Other .81 (1.47)	Adoles. Friend .84 (1.34)	Other .90 (1.56)
Adoles. Friend .89 (1.31)	Adoles. Friend .76 (1.24)	Other .82 (1.45)	Adoles. Friend .80 (1.21)
Brother .40 (1.02)	Sister .40 (.92)	Brother .67 (1.26)	Brother .11 (.45)
Sister .25 (.78)	Brother .38 (.95)	Sister .56 (1.09)	Sister .10 (.40)

Table III

Showing hoped for destinations when leaving school. High score more popular.

Gender comparisons. Standard deviations in brackets

Option	Male N=174	Female N=174	t	d.f.	prob
Further/higher education/training	0.70(0.46)	0.71(0.45)	0.47	346	.641
Get a job	0.21(0.41)	0.10(0.31)	2.69	346	.008*
Get married as well as above	0.09(0.29)	0.18(0.39)	2.5	346	.013*
Get married rather than above	0.06(0.07)	0.00(0.00)	1.00	346	.318

As can be seen in table IV, there is a birth order effect, with the eldest preferring further/higher education and the youngest, employment and/or marriage.

Table IV

Showing hoped for destinations when leaving school. High score more popular.

Birth order comparisons. Mean scores, standard deviations in brackets

Option	Youngest N=174	Eldest N=174	t	d.f.	prob
Further education/training	0.61(0.49)	0.79(0.41)	3.82	346	.000
Get a job	0.19(0.40)	0.11(0.32)	2.08	346	.038
Get married as well as above	0.18(0.39)	0.09(0.29)	2.5	346	.013

Get married rather than above	0.06(0.07) 0.00(0.00)	1.00 346 .31

The highest education level attained by the parents was taken into account, and when the forty per cent. of the sample, who only attained qualifications from school (n=135), were compared with those who attained a university degree (n=213), there was no significant difference in the further education option (school only mean .70, university mean .70, t=.16, df. 346. P<.88). There were also no significant differences for the other options.

In the interview the most frequent comments were on the lines *'you get a better job with a degree'* and *'all my friends are going to university, it will be great fun'*.

What is the student's orientation to work?

Following from Holland's (1985) model, which linked certain characteristics with certain career pathways, a difference shown in table V, is between males and females. The males place realistic/physical at the top of their list, and females place it at the bottom. With females, the artistic orientation is far higher on the list then with males.

Table V

Showing scores for Holland's six orientations to work. High score more popular.

Gender comparisons

Male n=174	Female n=174	
Realistic- outdoor, physical 3.15	Social	3.36
Social enjoy contact with people 3.11	Investigative	3.08
Investigative-abstract thought, physical sciences 2.84	Artistic	2.82
Enterprising to dominate others, action rather than thought 2.76	Enterprising	2.78
Conventional likes rules, routine 2.51	Conventional	2.60
Artistic –uses imagination, dislikes rules 2.41	Realistic	2.54

With regard to birth order, table VI indicates the youngest place realistic/physical far higher on the list, than do the eldest.

Table VI

Showing scores for Holland's six orientations to work. High score more popular.

Birth order comparisons

Youngest n=174		Eldest n=174	
Social	3.23	Social	3.25
Realistic	2.86	Investigative	3.10
Investigative	2.83	Enterprising	2.89
Enterprising	2.67	Realistic	2.83
Artistic	2.64	Conventional	2.67
Conventional	2.44	Artistic	2.57

How much say the student's feel they have in their selection of a job?

In terms of 'Learned helplessness', which in this context, refers to the extent the young people feel they have control over their own lives, table VII shows there to be no difference between the subgroups, divided either on the basis of gender, or on birth order.

Table VII

Showing Learned helplessness in terms of the extent the students feel they have control over their own lives.

Mean score, standard deviation in brackets high score more control		t- score	df	sig
Male	Female	1.03	346	.301
11.52 (1.91)	11.72 (1.71)			
Youngest	Eldest	1.15	346	.224
11.51 (1.82)	11.74 (1.81)			

Table VIII displays the differences between those who feel they are in control, and those who do not, in relation to Holland's six categories. The two subgroups are determined by whether they score above or below the mid-point on the scale for 'learned helplessness'. Significant differences between the two subgroups only emerge for two of the six categories. . Those who tend to feel in control are more orientated towards 'Investigative', which is, linked to thought, creativity and with minimum social demands, and 'Enterprising', which is linked to power and management behaviours.

Table VIII

Showing scores between those who feel in control, and those who feel more helpless, in relation to Holland's six categories.

Mean score, standard deviation in brackets high score more in control In control helpless (n=185) (n=163)	t- score df 346 sig	
Investigative – abstract thought, physical sciences 3.07 (0.92) 2.83 (0.80)	2.58	.01*
Enterprising – to dominate others, action rather than thought 3.01 (0.88) 2.50 (0.98)	5.16	.000*
Conventional likes rules, routine 2.63 (0.90) 2.47 (0.88)	1.73	.08
Artistic –uses imagination, dislikes rules 2.53 (1.08) 2.71 (1.07)	1.53	.13
Social enjoy contact with people 3.30 (0.83) 3.17 (0.90)	1.47	.14
Realistic- outdoor, physical 2.82 (1.01) 2.87 (1.03)	0.45	.65

What are the student's reasons for selecting a particular job?

Table IX shows the ranking of motivations for selecting a job are fairly similar for males and females. The two main factors are money, which males prioritise, and enjoying the work itself, which females prioritise. These two primary reasons are followed by doing something you are good at, then instrinsic motivations (Watson 2001 p. 119), to feel self satisfied and to achieve something. It is noticeable that the things which are at the bottom of the scale are to do with working conditions, pensions and working with colleagues. Another gender difference is the relatively higher ranking of helping others, recorded by females.

Table IX

Table showing the rank order of importance of motivational factors. N=348

Male	Female	Youngest	Eldest
Money 2.10 (1.61)	Enjoy the work itself 2.03 (1.63)	Enjoy the work itself 1.96 (1.65)	Enjoy the work itself 1.82 (1.65)
Enjoy the work itself (1.75 (1.66)	Money 1.47 (1.56)	Money 1.79 (1.66)	Money 1.78 (1.59)
Do something you are good at 1.20 (1.45)	Do something you are good at 1.25 (1.45)	Do something you are good at 1.29 (1.49)	Do something you are good at 1.16 (1.48)
To feel self satisfied 0.95 (1.31)	To feel self-satisfied 1.14 (1.48)	To feel self-satisfied 1.15 (1.43)	To achieve something 0.97 (1.35)
To achieve something 0.92 (1.34)	To achieve something 0.94 (1.34)	To achieve something 0.89 (1.32)	To feel self satisfied 0.94 (1.36)
Do something useful 0.61 (1.22)	Help others 0.79 91.36)	Do something useful 0.59 (1.20)	Do something useful 0.78 (1.32)
Status 0.59 (1.20)	Do something useful 0.76 (1.30)	Help others 0.43 (1.09)	Help others 0.59 (1.22)
Security 0.36 (0.92)	Status 0.30 (0.86)	Status 0.39 (0.98)	Status 0.51 (1.12)
Working conditions/hours 0.33 (0.82)	Mixing with others 0.28 (0.73)	Security 0.32 (0.85)	Security 0.32 (0.85)
Advancement 0.29 (0.82)	Security 0.28 (0.77)	Advancement 0.27 (0.79)	Working conditions/hours 0.28 (0.87)
Help others 0.22 (0.82)	Advancement 0.20 (0.70)	Mixing with others 0.26 (0.71)	Advancement 0.22 (0.74)
Mixing with others 0.19 (0.58)	Working conditions/hours 0.18 (0.71)	Working conditions/hours 0.23 (0.65)	Mixing with others 0.21 (0.60)
Pension 0.18 (0.65)	To improve self-esteem 0.14 (0.54)	Pension (0.14 (0.56)	Good boss 0.15 (0.56)
Good boss 0.15 (0.55)	Good boss 0.13 (0.48)	To improve self-esteem 0.14 (0.58)	Pension 0.14 (0.55)
To improve self-esteem 0.11 (0.54)	Pension 0.10 (0.43)	Good boss 0.13 (0.47)	To improve self-esteem 0.11 (0.50)

Responses to the request to say more about their order of priority were given by 67 per cent. of the sample. The following are fairly representative: *'You have to earn a lot to get a good car, that matters'; 'The job is not important, so long as you like it, it's how good you can look with your friends that matters'; 'People judge you on what you have got,'* and *'It's too early to worry about pensions, anyway the government will give you one'.*

DISCUSSION

The general profile of student's orientation to their careers, resulting from the findings of this study, will to many careers teachers, be predictable. Some aspects of the student's orientation may be less obvious. The influence of school teachers on career choice is far less than that of parents. This current finding supports Wintre et al (1988), who reported, in things like career choice parents still had a role to play even though there had been a general decline in the importance of parents about many aspects of adolescents' lives. The results of the present study go further than a recent study by Small and McClean (2002), which merely reported on the very specific link between male children and entrepreneurial parents. The parental influence

is particularly interesting when it is considered in relation to individual characteristics, such as gender and birth order. The gender effect is marked, with the same sex parent having a greater influence. It should be noted, in the interview discussions the students reported that guidance given appeared to be largely, although not always, based on traditional gender stereotyping. It is also interesting to note how the profile of influence changes with birth order. Younger children are more influenced by their elder siblings than their parents.

In spite of the fact that forty percent. of the sample came from homes where the parents educational level was limited to secondary school. By far the most frequently expressed expectation is for some kind of further/higher education. In the interviews it became clear, the reasons for this had little to do with the intrinsic value of education. It was rather to do with pressure from peers, and school, and a lack of interest in work itself. Assumptions were frequently made about the advantages of education, as a means of gaining employment, and to the social attractions of university. There was little evidence of a consideration of the appropriateness of further/higher education for career choice. This is perhaps something which careers teachers should take into account in their interactions with students.

Marriage was significantly more important to females than to males. It is particularly interesting that, having a family without a job, was low on the list of preferred options for females. Almost everyone expected to work. There was no evidence in the interview discussions of the 'alternative career option' open to single females. This involves having a child and being supported by benefits.

Looking at Holland's occupational orientations, regardless of gender, it is clear the top ranking is 'social', which involves enjoying contact with people, and the bottom 'conventional', which incorporates a liking for rules and the exercise of self-control and low interpersonal contact. This could create a difficulty if one looks at job opportunities currently available. One has to ask, whether these young people have a realistic appreciation of what career opportunities are available to them. In the working environment the characteristics which are the most, and least liked, tend to occur in the same job. Those which involve interpersonal contact, more and more demand a strict standardisation of behaviour. The whole concept of 'emotional labour' involves this link between working with people and having highly structured behavioural responses imposed by management. The most obvious examples are in the service and leisure industries. In supermarkets, call centres, McDonalds and Disney, according to Bryman (1999), verbal scripts, physical reactions, and emotional expressions are orchestrated according to a careful formula. This combines the interpersonal interaction, ranked so highly by the young people in this study, with the structure of the conventional orientation, which is regarded less positively. There are many examples of professions, which have developed in this way during recent years. These include, teaching, medicine and sales. This really raises the question as to how far these young people have a realistic view of what careers involve.

The primary 'motivations to work' are instant gratification such as money and liking for the job, then altruistic rewards, then the use of a job to provide 'status' and finally, more long term goals, including pension provision. In the interviews the importance of money was discussed, and it was very clear the majority of the sample considered it to be of value for what it would enable them to buy. They considered they would gain status from their possession of 'designer products', rather than from any job itself. The importance of working colleagues was minimal, and the students indicated they expected their friends would come from their interest activities, rather than work.

Recruitment problems currently experienced in occupations, such as nursing and teaching, could possibly be a result of the emphasis on money, and the low ranking of altruism as a motivator. The implication for the endemic recruitment problems in these and similar occupations is clear, either change the motivational perspective towards careers and employment generally, or increase the pay of jobs where there is a shortage of recruits.

In conclusion, the profile presented in this study concerns a range of factors which orientate students in their career choice. These findings indicate a number of areas where the careers teacher can help students understand more fully what to take into account, when they come to make their decisions. Perhaps the implications of the link between same sex parental influence and gender stereotyping, for example, could usefully be discussed with parents at school open evenings. Findings concerning motivation to work emphasise, the young people in this study are primarily concerned with the instant gratification of money, and liking for the job. Long term motivations such as career development, self esteem and pensions have a low ranking in order of importance. The interviews indicated, there is very little recognition that employment has a role to play in establishing an individual's place in society. This is a change from the view in the middle of the twentieth century, when the Registrar-General's (1960) Classification of Occupations implied a clear link between occupation and status. Perhaps the 'de-skilling' of many jobs, the limitations of the power of unions, the virtual elimination of apprenticeships, and increased job mobility, have influenced the perspective young people have of jobs. The narrowing of perception of the rewards to be gained from working, means employers have very few ways in which they can motivate their employees. It is hoped this study will have provided teachers, with responsibility for careers guidance, a useful profile of the perceptions young people hold towards their career expectations.

References:

Alberts, C. Mbalo, N.F. and Ackermann, C.J. (2003) Adolescents' perceptions of the relevance of domains of identity formation: South African cross-cultural study. *Journal of Youth and Adolescence*. 32. 3. 169-184

Bailyn, L. (2003) Academic careers and gender equity: Lessons learned from MIT
Gender Work and Organisation. 10. 2. 137-153

Bryman, A. (1999) The Disneyization of society. *Sociological Review*. 47. 25-47.

Creed, P.A. and Patton, W. (2003) Differences in career attitude and career knowledge for high school students with and without paid work experience. *International journal for Educational and Vocational Guidance*. 3. 21-33

Dunn, J. Slomkowski, C. and Bearsall, L. (1994) Sibling relationships from the preschool period through middle childhood and early adolescence. *Developmental Psychology*. 30. 315-324

Ginzberg, E. Ginsburg, S.W. Axelrad, S and Herma, J.R. (1951) *Occupational choice: an approach to a general theory*. New York: Columbia University Press.

Heckert, T.M. Droste, H.E. Adams, P.J. Friffin, C.M. Roberts, L.L. Mue, Wallis, H.A. (2002) Gender differences in anticipated salary: Role of salary estimates for others job characteristics, career paths, and job inputs. *Sex Roles*. 47. 3-4. 139-151

Holland, J.L. (1985) *Making vocational choices*. 2nd edit. Englewood Cliffs. NJ: Prentice Hall.

Kniveton, B.H. (1986) Peer modelling of classroom violence and family structure: an experimental study. *Educational Studies* 12. 1. 87-94

Miller, L. Lietz, P Kotte, D. (2002) On decreasing gender differences and attitudinal changes: factors influencing Australian and English pupils' choice of a career in science. *Psychology, Evolution and Gender*. 4. 1. 69-92.

Noon, M and Blyton, P, (1997). *The Realities of work*. Hampshire: Palgrave.

Peterson, C. Maier,S.F. and Seligmen, M.E. (1993) *Learned helplessness: A theory for the age of personal control.* New York: Oxford University Press.

Ranson, G. (2003) Beyond 'gender differences': A Canadian study of women's and men's careers in engineering. *Gender and Work Organization.* 10. 1. 22-41.

Registrar-General (1960) *Classification of Occupations.* London: H.M.S.O.

Robinson, J.P. Shaver, P.R. and Wrightsman, L.S. (1993) *Measures of personality and social psychological attitudes.* Vol 1. New York: Academic Press.

Schein, E.H. (1993) *Career Anchors: Discovering your real values.* London: Pfeiffer & Co.

Small, J. and McClean, M. (2002) Factors impacting on the choice of entrepreneurship as a career by Barbadian youth: a preliminary assessment. *Journal of Eastern Caribbean Studies.* 27. 4, 30-54.

Spraggs, G. (2002) *Outlaws and highwaymen.* London:Pimlico.

Spitze, C. and Logan, J.R. (1990) Helping as a component of parent-adult child relations. *Research on Ageing* 14. 291-312
.
Wall, R. (1996) Marriage, residence, and occupational choices of senior and junior siblings in the English past. *The History of the Family* 3. 259-271.

Watson, T.J. (2001) *Sociology, work and industry* 3rd Edit. Routledge: London and New York.

Wiglosh, L. (2002) Examining gender images, Expectations and competence as perceived impediments to personal, academic and career development. *International Journal for the Advancement of Counselling* 24.4 239-260

Wintre, M. Hicks, R. McVey, G. and Fox, J. (1988) Age and sex differences in choice of consultant for various types of problems. *Child Development* 59. 1046-55