

# Student attitudes to university education

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*Through pilot work using focus groups and in-depth interviews, students constructed a 32 item questionnaire on university education which was administered for over 1000 full-time British undergraduates along with a shortened personality scale in early 2003. The items factored into five interpretable factors which concerned such things as the value of degrees, the reputation of higher educational institutions and the consequences of tuition fees. The personality of participants, more than their age, sex, social class or subjects studies was related to their attitudes.*

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Various changes in higher education in Great Britain over the past decade have provoked considerable public and academic debate (Halsey, 1982; Furnham 2002). The 'upgrading' of the former polytechnics and certain colleges of higher education into universities was a major step. More young people now go to university than ever before and study for degrees in disciplines and professions not hitherto found at university. Hence there is passionate and continuous debate and discussion around what people expect from a university education (Barfield, 2002; Stassen, 1998).

A number of topics seem to dominate the debate. First, how many young people should go to university. Present figures suggest 43 per cent while government targets are 50 per cent. Twenty years ago it was less than 20 per cent. Current debate concerns whether these targets lower standards, and the individual and societal benefits and costs for such moves. An even 'hotter' topic concerns how should university education be paid for? Options include general taxation, a graduate tax, 'top-up' fees or complete self-financing. Needless to say this controversial issues touches politico-economic views of students, their parents as well as the general tax payer.

Related to this issue are the vexed questions of whether all universities and all degrees are of the same quality. This is patently not true and is reflected in different fees for different disciplines as well as

in government based audits of teaching and research. However, certain politicians have been eager to assume for funding purposes that new and old, technical and general, big and small universities are equivalent in the quality and quantity of research they do and teaching they deliver. Similarly there remains controversy over whether all subjects are suitable for a university degree. Thus some argue that subjects like aromatherapy, airline catering or European tourism have insufficient content for an academic degree.

Young people, their parents, politicians, academics and others that take part in these debates, and while the journals and the media often contain academic, parental and political discussions, the attitudes and opinions of young people are frequently under-represented. Hence this study was designed to explore current student attitudes. Further it was designed to see if these attitudes and beliefs were systematically linked to the student's personality, demography and what degree they were studying for.

## **Method**

In total there were 1033 participants from a prestigious, highly selective university, of which 50.3 per cent were male. They ranged in age from 17 to 57 but 76 per cent were aged 19, 20 or 21 years. A conscious effort was made to obtain mature students, where possible. In all 88.4 per cent were on a degree course. A quarter (26.9 per cent) had done science A Levels and 43.8 per cent were studying science subjects at A Level. A third (34.5 per cent) had studied arts or humanities at A Level and 40.4 per cent were studying for an undergraduate degree in these areas. They were asked to indicate which broad category their main subject was, using the UCAS classification system and the results are given in Table 1.

Asked about their parents 40.2 per cent said their fathers were social class A, 29.4 per cent were social class B and 17.9 per cent social class C. On the other hand, their mothers were classified more as B (40.2 per cent) but class A was 20.6 per cent and C 27.8 per cent.

Participants were asked to complete a four page questionnaire about attitudes towards university education. The first page had various background demographic questions as well as a statement about early school education and that of their parents. On the final page they completed a shortened version of the big 5 which has been shown to provide satisfactory psychometric data.

Six groups of twelve students took part in the first phase using focus group techniques. Group A (half of the 12) developed questions for

**TABLE 1**  
*Key marketing units within the universities*

| Subject of study   | Frequency   | Percent      |
|--------------------|-------------|--------------|
| Medical science    | 132         | 12.8         |
| Biological science | 127         | 12.3         |
| Physical science   | 94          | 9.1          |
| Mathematics        | 52          | 5.0          |
| Engineering        | 54          | 5.2          |
| Architecture       | 18          | 1.7          |
| Social studies     | 118         | 11.4         |
| Business           | 83          | 8.0          |
| Media studies      | 25          | 2.4          |
| Languages          | 58          | 5.6          |
| Humanities         | 188         | 18.2         |
| Creative arts      | 62          | 6.0          |
| Education          | 12          | 1.2          |
| <b>Total</b>       | <b>1023</b> | <b>99.0</b>  |
| Missing            | 10          | 1.0          |
| <b>Total</b>       | <b>1033</b> | <b>100.0</b> |

Group B and vice versa. Then facilitators from each group organised a focus/discussion group with the other. Thus 12 groups were run. Each group then carried out in-depth interviews with informative respondents, a total of 16 people being interviewed. Discussions were transcribed and clear attitude statements extracted. The broad topic covered issues such as how many people should go to university; how university education should be paid for; whether all universities/degrees are of the same quality; whether all subjects are suitable for university degree education. The result was a 32-item questionnaire (see Table 2). Each of the students was then required to administer this questionnaire to 12 fellow students who had not taken part in the study stratified by socio-economic status and by arts/science subjects.

## Results

Table 1 shows that various items showed a strong positive agreement response (3,7,16,18,19,20,21,24,27,30). On the other hand, various items showed the respondents fairly equally split in terms of the positivity and negativity of their response (2,4,5,11). Respondents were strongly against letting fees reflect university reputation (10) but very convinced that social and life skills are gained at university (24).

**TABLE 2**  
*Results for the full sample*

|   | Definitely<br>No | Probably<br>No | Probably<br>Yes | Definitely<br>Yes |
|---|------------------|----------------|-----------------|-------------------|
| 1. Do you feel full time university education is flexible enough to accommodate mature students?  | 6.0              | 21.6           | 53.5            | 18.9              |
| 2. Do you think that non-traditional degrees (e.g. Aromatherapy) reduce the value of degrees in more traditional subjects (e.g. Maths)? | 18.7             | 34.2           | 30.0            | 17.1              |
| 3. Is attaining a good mark in a degree more heavily influenced by the student's effort than by teaching quality?                       | 3.5              | 20.0           | 50.9            | 25.6              |
| 4. Do you think people learn more life skills at university than they would in other areas of life?                                     | 10.5             | 36.6           | 36.7            | 16.2              |
| 5. Should applicants from disadvantaged backgrounds receive a more favourable treatment when considered for entry to university?        | 13.4             | 34.6           | 38.6            | 13.4              |
| 6. Should a degree be chosen with a job in mind?  | 9.7              | 32.9           | 44.3            | 13.2              |
| 7. Are the social aspects of university equally important as academic development?  | 5.0              | 16.7           | 39.6            | 38.7              |
| 8. Do you think individual universities should have the right to set their own tuition fees?  | 39.0             | 30.5           | 23.0            | 7.5               |
| 9. Do you think university degrees are becoming less valuable?  | 13.1             | 32.7           | 40.2            | 14.1              |
| 10. Do you think students should pay more for a more prestigious university?  | 42.8             | 32.9           | 18.5            | 5.8               |
| 11. Is university choice more important than the choice of course?  | 16.4             | 39.2           | 33.6            | 10.8              |
| 12. Should intelligence tests be used to reduce the number of individuals at university?  | 31.2             | 37.1           | 25.0            | 6.7               |
| 13. Were family expectations the most important factor in your decision to go to university?  | 34.9             | 33.8           | 22.0            | 9.3               |
| 14. Does a vocational degree have more value than an academic degree?   | 20.2             | 52.4           | 22.4            | 5.1               |
| 15. Are school leavers too young to benefit fully from a University education?  | 20.3             | 41.9           | 30.1            | 7.8               |
| 16. Do you think that your University education will be of benefit to society?  | 4.2              | 17.2           | 41.0            | 37.7              |

|   |      |      |      |      |
|---|------|------|------|------|
| 1. Do you think that there is enough freedom to achieve what you are aiming for in terms of learning in UK universities?                                  | 5.5  | 22.4 | 52.5 | 19.5 |
| 2. Do you think highly ranked universities have more demanding courses in general?  | 3.0  | 17.7 | 47.3 | 31.9 |
| 3. Do you see higher education as the route to getting a highly paid job?   | 4.4  | 14.7 | 47.0 | 34.0 |
| 4. Did you choose a university course that suits your personal interest rather than vocational purposes?  | 6.5  | 22.3 | 38.4 | 32.7 |
| 5. Has a university degree become convention rather than a personal choice?   | 6.4  | 32.5 | 47.6 | 13.5 |
| 6. After leaving secondary education, is three years 'on-the-job' training more valuable than a three-year degree?  | 14.0 | 49.1 | 31.6 | 5.3  |
| 7. Does making university more accessible compromise the value of degree subjects available?  | 10.8 | 38.9 | 40.4 | 9.9  |
| 8. Are the social and life skills gained at university important?   | 2.2  | 8.3  | 37.5 | 52.1 |
| 9. Do you think that the experience of university life is essential to the development of your social skills?   | 7.9  | 25.6 | 36.6 | 29.8 |
| 10. Do you think that apprenticeship courses are just as valuable as degree courses, considering all career options?                                      | 6.8  | 28.5 | 46.7 | 18.0 |
| 11. Do you think that the reputation of the university is important in choosing whether to attend it?   | 4.6  | 13.4 | 44.0 | 37.9 |
| 12. Do you think that social pressure influenced your decision to attend university?  | 20.2 | 27.8 | 40.3 | 11.7 |
| 13. Do you feel that people use university as a stop-gap, between leaving school and getting a full-time job?   | 7.7  | 28.2 | 47.3 | 16.8 |
| 14. Do you feel that traditional degrees (e.g. English and maths) have equal value to those that are more contemporary (e.g. Psychology & media) degrees? | 9.2  | 26.0 | 38.8 | 25.9 |
| 15. Should the government aim to get 50% of school leavers into higher education?   | 12.8 | 26.8 | 41.2 | 19.2 |
| 16. Did family and friends influence your decision to study at university?  | 16.3 | 23.8 | 43.0 | 16.9 |

TABLE 3  
Factor Analytic (VARIMAX) Rotation of the 32 items

| <b>Factor 1</b> | <b>'Extra-academic'</b>   | <b>Eigenvalue 2.73</b> | <b>Variance 8.55%</b> |
|-----------------|---|------------------------|-----------------------|
| 25              | University experience increases social skills                   | .73                    |                       |
| 7               | Social aspects as important as academic                         | .65                    |                       |
| 24              | Social life skills important                                    | .64                    |                       |
| 16              | Benefit society   | .39                    |                       |
| <b>Factor 2</b> | <b>'Family and friends influence'</b>                           | <b>Eigenvalue 2.52</b> | <b>Variance 7.89%</b> |
| 32              | Family and Friends influence decision                           | .80                    |                       |
| 28              | Social pressures to attend                                      | .78                    |                       |
| 13              | Family expectation  | .62                    |                       |
| <b>Factor 3</b> | <b>'Reputation'</b>   | <b>Eigenvalue 1.80</b> | <b>Variance 5.62%</b> |
| 18              | Highly ranked universities: more demanding                      | .68                    |                       |
| 27              | University reputation   | .60                    |                       |
| 19              | Education leads to better job                                   | .57                    |                       |
| 11              | University choice vs course choice                              | .54                    |                       |
| <b>Factor 4</b> | <b>'Degree value'</b>   | <b>Eigenvalue 1.61</b> | <b>Variance 5.02%</b> |
| 9               | Degrees less valuable   | .66                    |                       |
| 2               | Non-traditional degrees less valuable                           | .56                    |                       |
| 23              | University accessibility compromises degree                     | .54                    |                       |
| 31              | Government to get 50% to university                             | -.36                   |                       |
| <b>Factor 5</b> | <b>'Tuition fees'</b>   | <b>Eigenvalue 1.50</b> | <b>Variance 4.68%</b> |
| 8               | Set own fees  | .82                    |                       |
| 10              | Pay more at prestigious university                              | .81                    |                       |
| 12              | Intelligence tests  | .43                    |                       |
| <b>Factor 6</b> | <b>'Practical training'</b>                                     | <b>Eigenvalue 1.27</b> | <b>Variance 3.97%</b> |
| 26              | Apprenticeship course valuable                                  | .74                    |                       |
| 22              | On-the-job training university                                  | .54                    |                       |
| 4               | Life skills at university                                       | -.46                   |                       |
| 30              | Do you feel that trad degrees are equal to more contemp degrees | .34                    |                       |

n order to explore the underlying structure of the attitudes reflected in the 32 items a VARIMAX factor analysis was computed (See Table 3). This revealed six factors (with Eigenvalues > 1.00) accounting for around 40 per cent of the variance. *Factor 1* contained items that stressed the extra-academic nature of university life name that social/life skills were also developed which no doubt benefits society as a whole. *Factor 2* was clearly concerned with others (family/friends) expectations that they should attend university. *Factor 3* is concerned with the reputation of a course and college and its subsequent effects on employment prospects.

*Factor 4* contains attitudinal statements that reflect changes in the value of having a degree. *Factor 5* is primarily about tuition fees and selection that maintains the exclusivity of certain universities. *Factor 6* has four items loading on it all concerned with the extent to which practical life skills can be acquired at university.

TABLE 4  
*Correlations of the factor scores with the big 5*

|          | Sex  | Age    | Education | N     | E    | O    | A      | C     |
|----------|------|--------|-----------|-------|------|------|--------|-------|
| factor 1 | .00  | .12**  | .10**     | .01   | .00  | .00  | .14**  | .01   |
| factor 2 | .02  | -.10** | .10**     | .10** | -.04 | -.04 | -.07*  | -.01  |
| factor 3 | .00  | .00    | .10**     | -.02  | .04  | .04  | .10**  | .13** |
| factor 4 | -.05 | .02    | .05       | .01   | -.04 | -.04 | -.08*  | .00   |
| factor 5 | -.08 | .01    | -.02      | .06   | -.10 | -.10 | -.21** | .07** |
| factor 6 | -.09 | .08*   | .00       | .02   | -.05 | -.05 | .00    | .00   |

Notes: \*\*\* p<.001 \*\*p<.01 \*p<.05

N – introvert, E – extravert, O – openness, A – agreeableness, C – conscientious

Table 4 shows correlations between three demographic factors (sex, age and education), the big 5 personality traits and the six attitudinal factors. There were few sex differences though females seemed less concerned with tuition fees than males. Older participants seemed less in agreement with factors 1 and 2: that university offers life/social skills and parents only influence decision. However, older participants did agree more with factor 6 that the work skills obtained at university are very useful. Previous education – that is the age of school leaving – was positively related with the first three factors. The later participants left school the more they valued a university's reputation, were appreciative of extra-academic activities and were influenced by family and friends.

The five personality factors were correlated with the attitude factor. Openness showed no significant correlations and neuroticism only one (neurotics had been more influenced by family/friends pressure).

Extraverts, not surprisingly valued social aspects of university life more than introverts. They were also more concerned with reputation than introverts. Conscientious participants stressed reputation and accepted higher fees than less conscientious participants. Agreeableness was significantly correlated with five of the six factors. Agreeable people believed in the value of social activities and university reputation, tended not to be influenced by family in their choices, were against tuition fees and did not believe non-traditional degrees were less valuable.

TABLE 5  
*Regressions with factor scores as dependent variables and big 5, sex and age, parental SES and education as predictors*

| Variables       | Factor 1 |          | Factor 2 |         | Factor 3 |        | Factor 4 |        | Factor 5 |        | Factor 6 |        |
|-----------------|----------|----------|----------|---------|----------|--------|----------|--------|----------|--------|----------|--------|
|                 | Beta     | t        | Beta     | t       | Beta     | t      | Beta     | t      | Beta     | t      | Beta     | t      |
| N               | .12      | 3.33***  | .01      | 0.31    | .06      | 1.68   | .00      | -0.17  | .05      | 1.36   | .04      | 1.12   |
| E               | -.06     | -1.71    | .14      | 3.71*** | .09      | 2.35** | -.02     | -0.53  | .11      | 2.78** | .04      | 0.91   |
| O               | -.03     | 1.04     | -.03     | -0.88   | -.02     | -0.50  | .03      | 0.67   | -.06     | -1.58  | -.03     | 0.89   |
| A               | -.27     | -7.21*** | .00      | 0.07    | .00      | 0.24   | .11      | 2.83** | -.13     | 3.19** | -.01     | 0.27   |
| C               | .02      | 0.49     | .13      | 3.51*** | -.09     | -2.23  | -.04     | -1.63  | .01      | 0.25   | -.04     | 1.05   |
| Sex             | -.05     | -1.31    | .00      | 0.11    | .01      | 0.27   | .00      | 0.07   | -.07     | -1.74  | -.02     | 0.42   |
| Age             | .05      | 1.36     | -.06     | -1.63   | -.01     | -2.18* | .06      | 1.49   | .00      | 0.07   | -.01     | 0.21   |
| Science studied | .00      | 0.16     | -.12     | 2.84**  | .03      | 0.72   | -.04     | -0.90  | -.02     | -0.38  | .08      | 1.92*  |
| Arts studied    | .02      | 0.30     | .01      | 0.39    | .02      | 0.40   | .07      | 1.59   | .03      | 0.79   | -.11     | 2.61** |
| Fathers SES     | .02      | 0.32     | -.08     | -1.91   | .02      | 0.51   | .00      | -0.16  | .00      | 0.15   | -.00     | 0.02   |
| Mothers SES     | .00      | 0.01     | -.08     | -1.84   | .04      | 1.02   | .03      | 0.67   | .04      | 0.7    | .01      | 0.32   |
| F(11,733)       | 8.88***  |          | 5.54***  |         | 2.43**   |        | 1.97*    |        | 2.59**   |        | 2.24*    |        |
| Adj R square    | .11      |          | .07      |         | .03      |        | .01      |        | .03      |        | .02      |        |

Note \*\*\*p<.001 \*\*p<.01 \*p<.05

In order to see what individual differences and personality variables best predicted the attitude factors. Table 5 shows that all were significant but accounted for relatively little of the variance. Results showed that less agreeable, more neurotic, students valued the extra-curricula aspects of university life. The second regression showed that conscientious, extraverted, science students admitted to family and friends influencing their university based decisions. The third regression indicated that young extraverts placed a high value on university reputation. The fourth regression indicated that more agreeable students tended to rate non-traditional degrees highly. The fifth regression indicated that less agreeable extraverts were more happy with the concept of tuition fees. The final regression indicated that science, but not arts, students valued the practical training aspect of university life.

## Discussion

Overall the 32 questions in this study appear to tap current opinion and debate on the topic. On many questions, opinion was clearly divided such as the highly politically charged question (5) of whether potential



students from disadvantaged background should receive, in effect, positive discrimination. Respondents were equally divided on issues such as what one learns at university (4) or whether the choice of course or university are in fact more important.

Other questions showed around a two-thirds majority either in favour or against. Thus three-quarters believed student effort more than teacher quality determined final marks; but around three-quarters did not believe a vocational degree was more valuable than an academic degree.

The questions that elicited strongest agreement and disagreement were respectively (24) which suggested social/life skills gained at university are extremely important and (10) that students should not have to pay higher fees for courses at more prestigious universities.

The factor analysis was an empirical, 'bottom-up' attempt to examine the structure underlying these attitudes. It showed six interpretable factors. The participants certainly agreed with the theme of the first factor which suggested that university life not only teaches academic/analytic skills but also social/life skills.

The second factor concerned who influenced student's choice of going to university, while the third factor concerned the choice of which university. It seems the reputation of the university, rather than history, size, location or structure was the primary determinant of choice. This of course poses the important question as to how reputations are formed, maintained and destroyed.

The fourth factor confronts the fundamental question about the current value of degrees. Considering the fees, living costs, and opportunity cost, the decision to go to university for an under- or post-graduate degree is clearly an economic one. Most of the respondents in this study were parent and state supported, though a number would inevitably graduate with a substantial bank over-draft. These worries no doubt affect responses of participants to the items loading on the fifth factor. They seemed essentially opposed to market forces determining fee structures.

The final factor consisted of four items that related to the value of degrees. Participants were mixed in their views, believing in both traditional courses and the value of apprenticeship schemes.

The study attempted to ascertain what personal factors determined these attitudes. They revealed, perhaps surprisingly, that participants' sex, age or social class impacted on the attitudes. Apart from sex there was, however, a significant restriction of range of age and social class as the vast majority of these students were aged 19-22 years old and came from middle class backgrounds. However, the regression data do

suggest that personality, particularly the traits of extraversion and agreeableness, as well as their studied subject do systematically and logically relate to attitude. Disagreeable, neurotics tended to endorse factor 1 (extra-academic) more than agreeable, stable individuals. Students who were conscientious, extraverts, studying science indicated that they had been strongly influenced by others when considering their chosen courses. Younger extraverts seemed more influenced by the reputation of a university compared to older introverts.

Agreeableness was associated with factor 4 but accounted for very little of the variance. The same is true of factor 5 (tuition fees), where two traits of extraversion and agreeableness were implicated. The results from the final factor are worthy of note. Science students agreed but arts students disagreed with the notion that practical, apprenticeship courses are valuable. This may be very important to their choices in the first place.

Overall the results suggest that personality is modestly related to these attitudes, though they are no doubt shaped more powerfully by other factors. This study was conducted at a prestigious, top five, highly selective university. There are around one hundred universities currently in Britain. Students at universities independently judged to be from the bottom of the agreed rank-ordered list no doubt have very different attitudes to education. They are much more likely to drop out, be older and favour less conventional courses.

Choice of university and course is shaped by attitudes to higher education which in turn are shaped by their experience at university. The fact that university education is currently highly politically charged means that it is important to know what young people believe about higher education.

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## **References**

- Barfield, F (2002). 'Students perceptions of being graded as a group in the college classroom,' *Perceptual and Motor Skills*, 95, 1267-1277.
- Fox, R, McManus, I C and Winder, B (2001). 'The shortened study process questionnaire', *British Journal of Educational Psychology*, 71, 511-530.
- Furnham, A (2002). 'Losing your faculties', *Higher Education Review*, 34, 43-50.
- Harsley, A (1982) 'The decline of the donnish dominion,' *Oxford Review of Education*, 8, 215-229.
- Stasson, M (1998) 'General Education: Students' Perspectives.' *Assessment Bulletin*, 3, 1-4.